

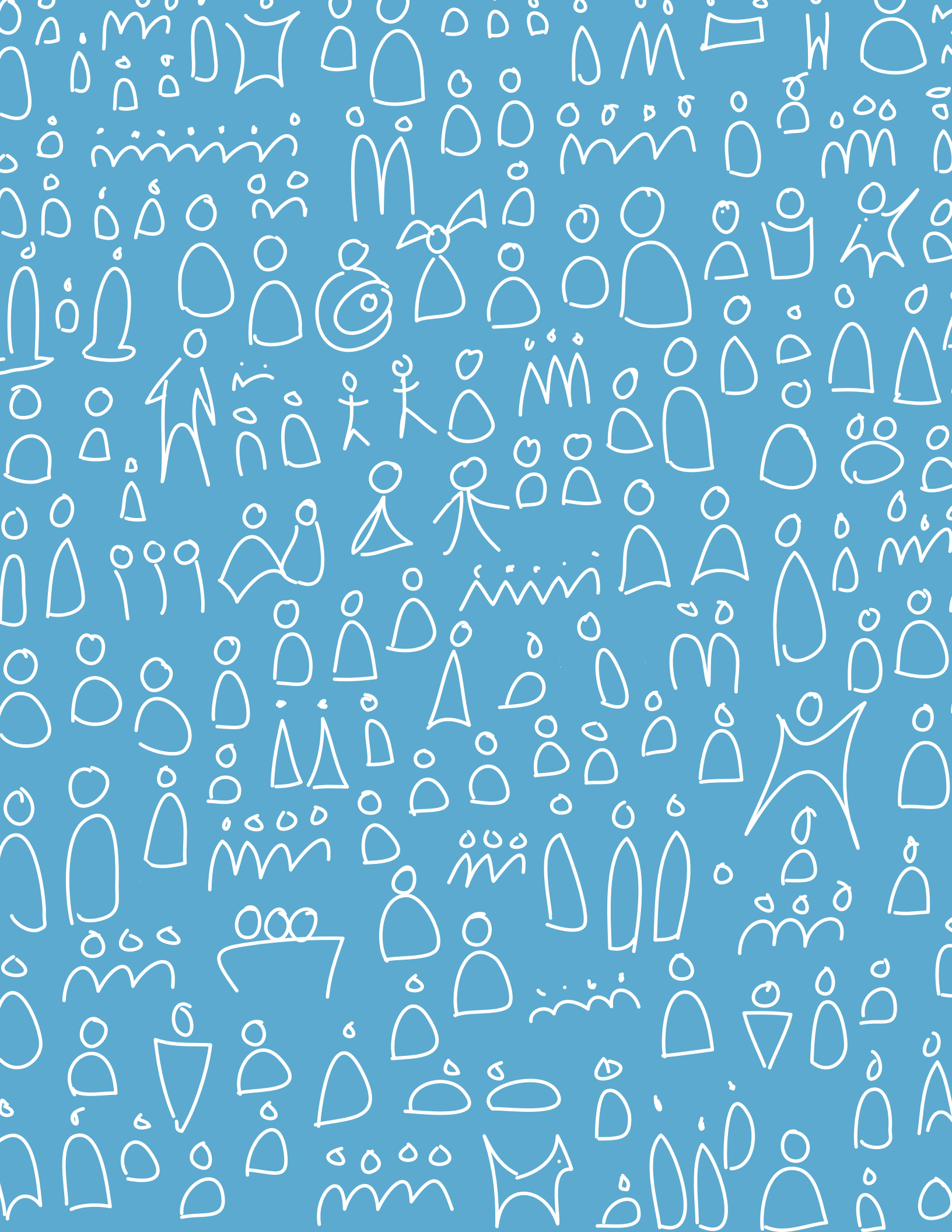
FRANCINE GEMPERLE



Handbook of People Research

Deriving Value by Asking Questions

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Handbook of People Research

Deriving Value by Asking Questions

FRANCINE GEMPERLE

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**You don't know
enough about
people.**



Introduction

You don't know enough about people.

It's not just you: most professionals whose work is dependent on people, as customers or constituents, don't know enough about them. People grow and change constantly, affected by both the cultures they create and the global systems they inhabit. And it's these ever-changing people—not data or tech or design—who control financial decisions for their households and companies. If you have an offering and people are its audience, then you need to understand people better. People Research is the way for those in creative, technical and business fields to understand people and use that understanding to drive better outcomes. To conduct People Research is to leverage the work and expertise of the humanities to drive innovation and value across industries.

The Data Backs This Up

Several leading industry organizations have proven the value of People Research as part of a design process. The UK's Design Council identified that design-led businesses outperform the FTSE by 200%¹; this data has held true for over a decade. Not to be outdone by the Brits, the US-based Design Management Institute's Design Value Index tracked the performance of design-led companies at 200% over the S&P 500². Design leaders at companies on both of these lists cite user experience teams and research as key components of the work. In 2010 the International Standards Organization ratified what had existed in draft form for a decade: ISO Standard 9241, Part 210, "Human-Centered Design for Interactive Systems"³. This document stipulates, among only a few key components of human-centered design, that "users are involved throughout design and development." That understanding people is an imperative for innovation is not news, but exactly how to understand people is an ongoing challenge we all face. Whether in a technology startup, a toy company or a social policy organization—a better understanding of people will inform better decisions, better design and better offerings.

Obstacles to People Research

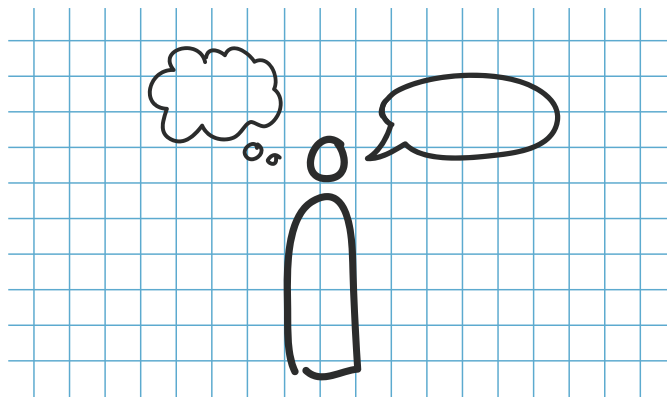
Being people-focused in our work seems pretty straightforward, but myriad factors challenge a human-centered orientation. Limits on time and money or over-prioritization of technology can make People Research seem extraneous, costing precious resources that are needed elsewhere. As you embark on People Research, be prepared to constantly explain (and re-explain) why this research is important. People control money; if we don't have a product people want, we don't have a business. We need to constantly work to understand our people and fold that understanding back into the development of our offerings.

Many organizations have been slow to commit to People Research because it requires a **major mindset shift from knowing to asking**. To do People Research, you must begin by admitting what you don't know about people and identifying what you need to know. Then—once you've developed an inquiry, leveraged some basic tools and engaged with people—you will gain deep insights and identify new opportunities, setting direction for the future.



Is This Book for You?

This book is for anyone interested in making People Research a part of their work. I work with graduate students determined to make the world a better place. Their projects range from policy innovations to product development, entertainment experiences to digital transformations. I compiled the ideas in this book to synthesize what I've learned in over 20 years of People Research. The knowledge presented here has a foundation in my hundreds of collaborations with expert researchers in academia, industry and consulting work.



This book is a guide to successful People Research, a basic framework for informing design through conducting meaningful research with stakeholders. When you do research well, you can derive maximum value from the effort and leverage it to make the right things, in ways that serve people.

You will learn what goes into planning to do research—first and foremost, defining what you hope to gain from the research effort. These chapters will help you lay the groundwork for starting People Research with your team.

We'll cover the ins and outs of engaging with people to conduct research and collecting the data you need.

You'll learn efficient ways to review the data you gather, and to identify themes and patterns through analysis.

We'll deal with reporting the research outcomes to a larger audience, a key final step to extend the life of your work.

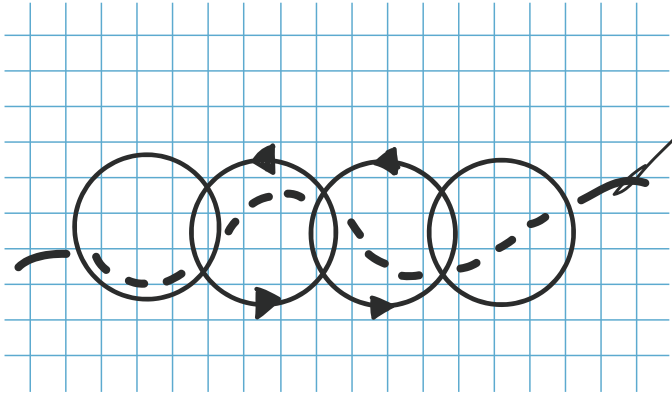
Everyone—regardless of the size of your project or organization—can undertake high-quality, high-value People Research, within budget, and targeted to specific organizational needs. The approach in this book can be scaled up to a months-long embedded contextual inquiry at multiple locations or down to just an afternoon of usability testing. The aim here is to make People Research truly accessible to everyone.

Final Stray Thoughts

A couple of notes before beginning. First: “Research” is a large and encompassing term, applied in a vast array of disciplines to the process of *finding out*. This text focuses primarily on guiding makers in finding out about people. Much of the research described here intends to deliver value by fueling innovation. It tends to function practically, quickly and iteratively. In this way it can differ from journalistic or scientific research and should not be subjected to all of the standards applied to research in those fields. That said, we should always seek to ground our research in the latest understandings. With this in mind, I encourage teams to conduct literature reviews, leverage past research and develop hypotheses as part of the planning process.

Second: This book does not describe a stepwise People Research process, and People Research is not simply one phase in some other process. Most organizations operate according to some making/re-making process, whether fixed or emergent from the work. Think of **People Research as an ever-present thread throughout that process**—a back-and-forth that can inform every stage of your organization’s life.

If you’re looking for a process that integrates with your People Research efforts, take a look at the Double Diamond and Ball and Knechts’ handy template⁴ for getting it started.



Third: Attention to detail is critical to People Research's delivery of value. To help you focus on the important details, I've listed common failure modes at the end of this book; take a look on page 96. In every case the team thought they were doing it right but missed a critical detail.

How to Use This Book

In addition to the instructional body text, this book includes a number of extra components to help you visualize and work with People Research’s fundamental concepts.

Example projects

Throughout this book, grey sidebars as below will describe an example People Research project for a fictional dental product manufacturer, “DentalCo.” The project is meant to illustrate what many of the exercises and inquiry look like in a realistic project setting.⁵

// EXAMPLE PROBLEM STATEMENT

DentalCo

The client is DentalCo, fictional maker of all things home dental care. New leadership is agitating to disrupt the dental care business. They recently came back from an annual retreat, and many executives are charged up about the outcomes of their discussion:

- 1. Dental care products have been stagnant for 100 years.*
- 2. Dental hygiene is the root of many other health issues.*
- 3. People are ready for new dental care innovations...*
- 4. ...and will spend big on them to solve more significant health issues.*
- 5. Digital is a big opportunity for DentalCo.*

While their thoughts are reasonable enough, they are thin on specifics and high on expectations. The strategy team’s task is to frame out a People Research project and execute it in order to define how DentalCo might innovate, disrupt their own industry and possibly leverage “digital.” After a brief from Dave, the Head of Product, the team gets to work planning the approach.



Context & Change

WORKSHEET: CONTEXT & CHANGE

By getting started with your project, take a look at the context you're working in. Do what you can to understand your major competitors, customers and change either the location or delivery of your business offerings. Use this sheet to make some notes and guide your first work sessions. All the way, you can adjust your approach as the context of your work evolves. (Don't be a completed example of this worksheet as the following sheets.)

DENTAL CO. LIKE BUSINESS
NAME: DENTAL HYGIENE TRAILS AND SUPPLIES

1) Business Offerings
 Your business offerings are the only thing you can control. Consider the competitors of other business types in your industry. What makes the difference in their offerings. Consider the quality of business offerings your competitors expect.

2) Global Systems
 Consider the three of these global systems with the biggest impact on your work. How do they affect your business? How do they affect the lives of your customers? How do they affect the lives of your employees?

3) Patterns of change
 Consider repeating forces, such as these patterns, to shape patterns of change in your industry or system. What the most consistent or those of your own experiences.

4) Human Experiences
 How do people experience your offerings today, and what gaps have you not addressed?

5) Context Statement
 How do you understand about the current state of your business? How do you understand about your future? How do you understand about your competitors? How do you understand about your customers?

RATIONAL
 IT IS A HEALTHY CHOICE TO USE TEETH BRUSH. MUST BRUSH 2 X A DAY.

EMOTIONAL
 CHILDHOOD MEMORIES AND SENSE OF SELF.

TANGIBLE
 BRUSH, PASTE, RASH, RASH LINA, FLASK, MIX, RASH, RUNNING WITH.

ASPIRATIONAL
 WANT TO KEEP THEIR REAL TEETH INTO OLD AGE.

PEOPLE ARE SPENDING MORE ON DENTAL HYGIENE AND AESTHETIC TREATMENTS THAN EVER BEFORE.

THERE ARE MORE DIVERSE PRODUCT OPTIONS AVAILABLE IN THE USA. STRATEGIES OF BRUSH AND PASTE AS WELL AS RINSES AND WHITENING TREATMENTS.

DISPOSABLE PLASTIC ARE GOING OUT OF FAVOR, BUT STILL THE MOST HYGIENIC WAY.

Handbook of People Research

TABLE 1: THINKING AHEAD TO THE REPORT

If you know what kinds of content your audience responds to, and what they are looking for – you can more efficiently plan your engagement.

Does the audience want video highlights?	Arrange your research plan, team and according to easily collect, compile and deliver highlights. Note when you hear great quotes and track conversation topics to the video highlights.
Does the audience want a journey map?	Work this into your data synthesis exercise, or possibly have your participants show their own journey as part of the research.
Does the audience prefer a high-contrast presentation with lots of images?	Make a slide template and different collection rules for each researcher. Prioritize good lighting. Ahead of time, make a list of shots to look for.
Does the audience expect a long read?	Get ahead of the writing and collecting of long quotes from your sessions.
Does the audience have other organizational frameworks that this research needs to fit into?	For example, current product line or current customer profiles. Make sure you know about these ahead of time and weave them into the inquiry plan and the report.

31 /

Worksheets

Worksheets are full of prompts to align your team and focus your thinking. The first one you'll encounter, on page 20, helps you identify the context and change enveloping the people who experience your offerings. On the worksheets you'll find both a blank copy for your use and one completed to reflect the progress of the fictional DentalCo team.

Tools & tables

Tools and tables in this book provide additional information about the topics we are discussing. Many readers will find these valuable at the precise moment in your own research when you are grappling with the issues at hand.

With this groundwork established, let's begin by considering the human context for your research project.



**The only thing
you can control
are your business
offerings.**



01

PLANNING

CONTEXT & CHANGE

If your work is to create or communicate about products, services or other offerings, you must ground that work in an understanding of context and change. Everything we create sits in a context comprising both individual experiences and global systems, and despite our best efforts, much of that context is beyond our control. What you *can* control are your business offerings—your organization’s output, whether product, service, information and/or place. To drive your offerings’ success, you must ground them in an understanding of human experience and global systems that undergo constant change. A deep appreciation of context and change will shape your inquiry and analysis—and ultimately drive the value of your People Research.

Human Experiences

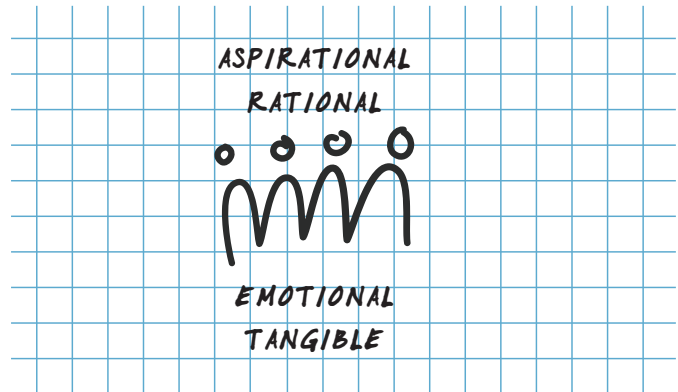
At the human scale, we have experiences all day, every day. Experiences are loosely linked through time and uniquely our own. Because of the centrality of human experience to successful design, a number of disciplinary tools have emerged to help make sense of people by modeling human experience.

One example is Jon Cagan and Craig Vogel's Value Opportunity Analysis method⁶. Their tool helps teams assess products through a list of common human-experience factors. More recent work⁷ in this vein maps human experiences across time, with experience diagrams or user journey maps that produce a timeline of experience.

From these we learn how important it is to remember that **people's experiences are multidimensional**. They include cognitive and rational decisions, as well as emotional responses. And to add further complexity, people's tangible and aesthetic experiences in a given moment are often guided by aspirational ideas about the future.

I like to keep in mind the mnemonic *head, heart, hands and hope*—four dimensions of human experience. With our heads we tend toward rational needs and logic; in our hearts we hold identity and emotion; with our hands (and bodies) we experience the physical ergonomics and aesthetics of design. Finally, hope for the future is where we place values and aspirations.

Whatever tool you use to map or remember, make sure to take a broad, thorough look at the human experience context of your business offering. For a quick, practical example of context analysis, see pages 22 and 23.





Global Systems

Human experience doesn't exist in a vacuum. It is often impacted by global systems—another key contextual component to consider. Global systems exist outside of your control and often seem to make it impossible for organizations to focus on people. To pursue people-centered innovation, though, it's imperative to understand how your business offering operates in the context of global systems.

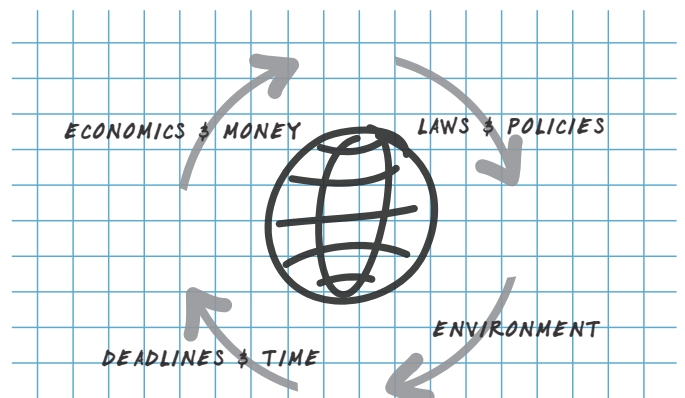
As with human experience, many people and organizations have created tools or lists for understanding global systems. Cagan and Vogel (2002) proposed that product developers attend to Social, Economic and Technical (SET) factors. More recently we've seen others expand SET to STEEP, PESTLE and beyond with the addition of Law, Environment and Policy. In my own work, I include Time—and, if warranted, Religious—factors, as well. From the list below, identify the factors that matter for the domain you work in:

- Political
- Economic
- Social
- Technical
- Legal
- Environmental
- Religious
- Temporal

Then, for each factor you care about, identify the specifics that affect your domain or offering.

Sometimes prioritization or focus on these factors can get in the way of a human-centered approach to the work. Although it doesn't always seem like it, these global systems ultimately exist to serve people. A people-focused approach to innovation means **understanding and aligning to global systems as your context**, rather than viewing them as opponents.

As you embark on People Research, keep the factors above in mind. Identifying what you can and can't control is important, as you'll see on the worksheet on pages 20 and 21. While you can change what you have to sell, your brand or your service, you cannot control how people experience it or the global systems at work around you.





NOTES:

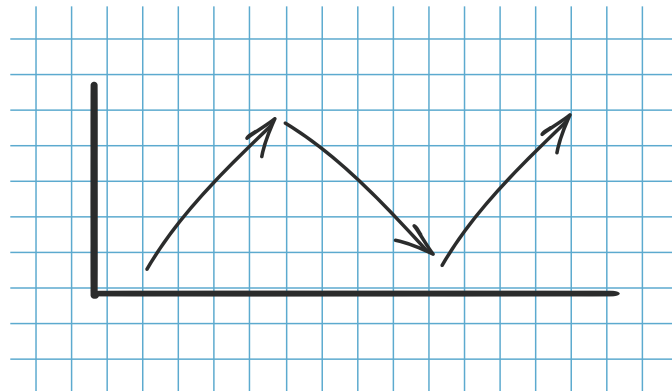
Change

To throw one final wrench into the works: you must anticipate that both human experience and global systems will remain in constant flux, influencing the things you need to make.

Luckily, **change does follow some patterns.** Often we see alternating patterns of increasing then decreasing; for example, a social imperative to have a lot of stuff will be followed by a minimalism trend. We see patterns of alignment and then divisiveness, where people may move from wanting to be “part of a team” towards individualism. Finally, we often notice turmoil that is followed by calm.

Acknowledging and defining change is an important tool for you as you begin to craft your initial People Research inquiry and as you analyze your findings later. Change is knowable and understandable if we accept it, observe it and plan for it. You’ll do research in order to harness change and leverage it to decide about what to make, to develop insights and to march your offerings forward.

On the next pages is a worksheet full of prompts and reminders for thinking about the context and change



enveloping the people who experience your offerings. You can use it early in your People Research to help establish your knowns and unknowns and bring focus to your work. Use it again later as you analyze the data collected to make meaning from your research outcomes.

Context & Change

To get started with your project, take a look at the context you're working in. Do what you can to understand what major experiences, influences and changes affect the success or failure of your business offerings. Use this sheet to make some notes and guide your first web searches. At the end, make an initial statement about the context that will begin to inform your hypothesis. (You'll find a completed example of this worksheet on the following spread.)

1) Business Offerings

Your business offerings are the only factor you can really control in the marketplace. All other factors are dynamic forces that will impact the success or failure of your offerings. Circle the type(s) of business offerings your organization creates.

PRODUCT	INFORMATION
SERVICE	TOOL
PLACE	TOY

2) Global Systems

Circle the three of these global systems with the biggest impact on your work. Take a deeper look to understand how these systems affect people's experiences of your offerings.

LAWS	POLICY
ECONOMICS	TIME
TECHNOLOGY	ENVIRONMENT
SOCIETY	RELIGION

3) Patterns of Change

Consider opposing forces, such as these examples, to gauge patterns of change in your industry or domain. Mark the trend direction on these or your own spectrums.

MORE	●	—————	●	LESS
CONSISTENCY	●	—————	●	TURMOIL
COHESION	●	—————	●	DIVISION

// EXAMPLE CONTEXT WORKSHEET

DentalCo

Below is a completed example of the context worksheet. The DentalCo team took a little time together to make some initial hypotheses about the context they are working in. They have established ideas about their business, the human experience and the global systems context they will be

Context & Change

To get started with your project, take a look at the context you're working in. Do what you can to understand what major experiences, influences and changes affect the success or failure of your business offerings. Use this sheet to make some notes and guide your first web searches. At the end, make an initial statement about the context that will begin to inform your hypothesis. (You'll find a completed example of this worksheet on the following spread.)

DENTAL CO CORE BUSINESS
HOME DENTAL HYGIENE TOOLS AND SUPPLIES

1) Business Offerings

Your business offerings are the only factor you can really control in the marketplace. All other factors are dynamic forces that will impact the success or failure of your offerings. Circle the type(s) of business offerings your organization creates.

<u>PRODUCT</u>	INFORMATION ?
SERVICE	<u>TOOL</u>
PLACE	TOY

2) Global Systems

Circle the three of these global systems with the biggest impact on your work. Take a deeper look to understand how these systems affect people's experiences of your offerings.

LAWS	POLICY
<u>\$ ECONOMICS</u>	TIME
TECHNOLOGY	<u>ENVIRONMENT</u>
SOCIETY	RELIGION

3) Patterns of change

Consider opposing forces, such as these examples, to gauge patterns of change in your industry or domain. Mark the trend direction on these or your own spectrums.

MORE	←	LESS
CONSISTENCY	←	TURMOIL UNCERTAINTY
COHESION	→	DIVISION

EXPERTS AGREEMENT

researching. Everything here is open to be proven or disproven with the People Research to come. With this worksheet complete they are ready to establish the conceptual framework to start the project.



WORKSHEET: CONTEXT & CHANGE

4) Human Experiences

How are people experiencing your offerings today, and what gaps have you left unaddressed?



RATIONAL

IT IS A HEALTHY CHOICE TO KEEP TEETH CLEAN. MUST BRUSH 2 X DAY.



EMOTIONAL

CHILDHOOD MEMORIES AND SENSE OF SELF



TANGIBLE

BRUSH, PASTE, BATHROOM SINK, FLOSS, MIRROR, RUNNING WATER.



ASPIRATIONAL

HOPE TO KEEP THEIR REAL TEETH INTO OLD AGE

5) Context Statement

Now craft a brief statement about the context you're working in. Formulate it to describe what you think might be happening today, or open it up to describe your opportunity (where you think you can innovate).

PEOPLE ARE SPENDING MORE ON DENTAL HYGIENE AND AESTHETIC TREATMENTS THAN EVER BEFORE.

THERE ARE MORE DIVERSE PRODUCT OPTIONS AVAILABLE IN THE CORE CATEGORIES OF BRUSH AND PASTE AS WELL AS RINSES AND WHITENING TREATMENTS.

DISPOSABLE PLASTICS ARE GOING OUT OF FAVOR - BUT STILL THE MOST HYGIENIC WAY.



**Nail down
the research
objectives early.**



PLANNING

ALIGN GOALS

People Research is fundamentally a design challenge and, as such, benefits from a clearly defined purpose. Any time you devote to honing your purpose now will be returned to you in the form of efficiency throughout the work. As tempting as it is to write up a questionnaire and get started, you and your stakeholders have to begin with a strong, shared understanding of what you're doing, why, and what a successful outcome will look like. This chapter guides you through aligning your goals with those of your audience, so that your People Research can focus on only the most important questions. The Inquiry tool on pages 32 and 33 will help you organize your initial inquiry.

Before meeting with your audience to nail down objectives, it's worth spending an hour hypothesizing about the following components on your own, or with your team; then, when you meet with your audience, you arrive prepared and leave with a clearly defined plan.

Identify Your Audience

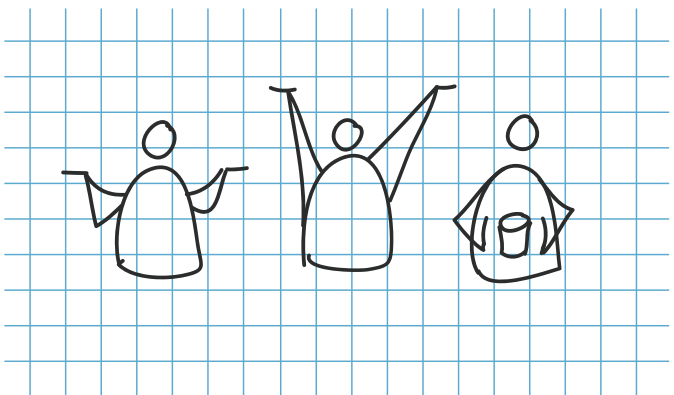
Begin by identifying your audience—that is, the customer(s) for your research. The primary audience for your research is the person or people who will use it. (Tip: It's usually the person or people paying for the research.) Your company—or even a department— isn't the audience; you should be able to identify specific individuals by name. Align your objectives with these people and match the report to their requirements and preferences. **The more you can understand about their purpose and context, the better you will meet their needs.**

The secondary audience for your research is anyone who will see the research report, at any time, ever. You'll address this group in your final report with a clear, brief (one-page or one-slide) research summary that sets the stage for when and why the research was done, whom you talked to and where, and some high-level outcomes.

Identify Their Objectives

People Research grounds thinking, decisions, visions, or actions in a larger human context. Once you've named your audience, you need to identify their objectives. People Research can be requested by any part of an organization, both at various levels up and down the ladder and in various departments. As you take a first pass at identifying goals, consider the following generalities:

- **Executives** often seek out People Research to set strategic visions, to tell the story of what the future should be for the organization. Expect them to amplify the research outcomes.
- **Management** is often in a position to make decisions. Expect them to use research to help distinguish among multiple options and determine a path forward.
- **Design and engineering teams** need to act on the research in very tangible ways. Their targeted applications are often fast-moving and detailed. They'll need concrete design recommendations. (Tip: The more you can involve this type of audience in conducting research, the better.)



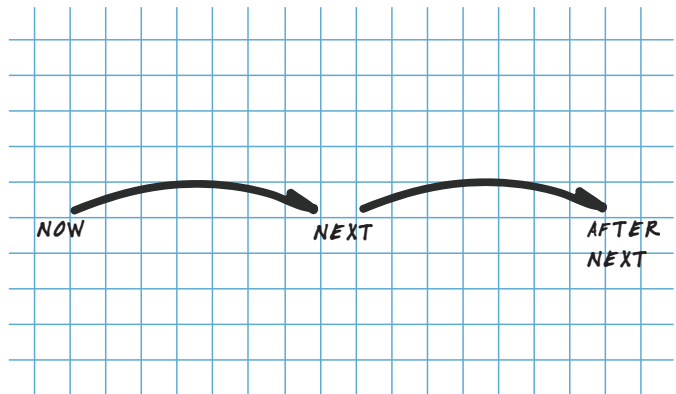
What don't you and your audience know?

To zoom in from these general goals to your audience's specific objectives for the research, consider: what does your audience need to know or learn from this effort? Brainstorm what you and your audience know for sure, what you're guessing, and what you don't understand, as it relates to people and your organization. Of these, what are the most important, urgent unknowns? Additionally, can you identify a few "unknown unknowns"—factors that haven't yet come into play but might? Many of us have been trained to value having answers, but successful research depends on questions, on admitting what we don't know. The "unknowns" comprise the first part of your research objective.

What will be the impact of this research?

The other key question to consider as you define research objectives: How will more knowledge impact the team, design decisions, direction or funding? Often we undertake research to establish a rhetorical position in our organization or to fuel decisions about budgets. Discern how insights from the research will be deployed in your organization.

Taking into account your audience, their unknowns, and how they'll use the research, spend a few minutes drafting possible objectives—some very general, some highly specific—for your People Research process. Remember, you'll confirm and revise (and perhaps entirely replace) these with the help of your audience before beginning the research.



Plan for Time

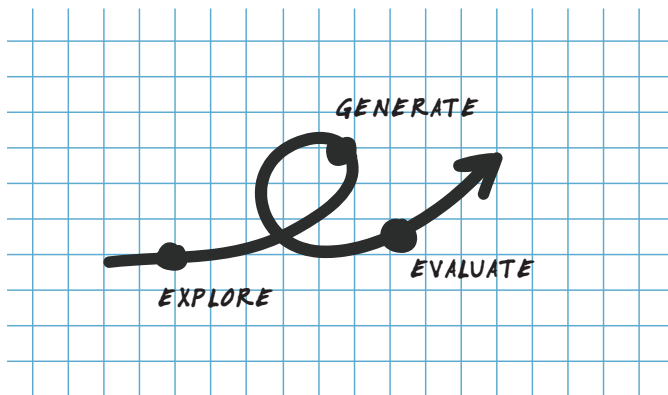
Across all People Research, keep in mind that time is an important factor in human experiences. Common organizational and mental models about time influence perceptions. So, will this research inform our understanding of the past or now, or will it affect what comes next? **Be very clear about the temporal context of your research.**

Tip: For future planning and longer-term road mapping, it's useful to clarify your language about exactly what you mean by "future." Here are some possible models for specifying about the future:

- **Next vs After Next:** Are you planning what comes "next"—that is, what you could begin implementing tomorrow? Or are you going truly visionary—imagining what could happen with technology still on the horizon?
- **Fuzzy Thresholds:** Some industries identify futures by thresholds crossed, without knowing when (or if), exactly, that will happen—for example, "when electric cars outnumber gasoline-powered cars in the United States."
- **Specific Dates:** You can always refer to financial quarters, months, or years. This might work best when a business is heavily driven by quarterly financials.

Plan for Research Purpose

People Research can be broken into three types, defined by their general purposes. During this planning phase, it's important to name the type of research you'll be conducting as a way of further strengthening your focus. As you'll see in the next chapter, the type of research you choose will help drive your methods, your modes of engagement with people, your data collection, and your outcomes. **Which research purpose best fits your situation?**



- **Exploratory Research** is often done early in an organization's or project's life, or as a reset to understanding. Its work is to explore the human experience in a domain or with a particular offering. The open nature of this work requires you to be expansive in your inquiry—truly open to exploration, to seeing what you can find.

- **Evaluative Research** is done to measure impacts of some offering or intervention. With this type of research, measures are key to understanding. Here you are carefully evaluating something in order to make claims about it, or thoughtful revisions to it.

- **Generative Research** is about engaging people in the effort to create new ideas or offerings. Here the tools, instrument and inquiry will be unique to your situation and the engagements with people much longer. In Generative Research, you innovate together with the stakeholders who matter most.

Plan for Report Style

Start thinking now about how you'll deliver your research outcomes to your audience. Keep this in mind as you plan the details of your research process, to ensure that you gather all important information along the way and don't need to retrace your steps.

Every individual and organization assimilates and stores information differently. Find out how your audience best engages with new information: is it a presentation and a folder full of data? A series of conversations with a rapidly-iterating design team? A single poster, or a 20-page white paper? Will your audience listen once, or refer back to your report again and again?

Think about what matters most to your audience and what kind of report meets those needs. Perhaps your report should include video highlights or lots of images. Perhaps your audience wants to see customer journey maps or read long-form customer stories. And perhaps your report needs to be delivered in the format of the organization's existing customer profiles. In the next chapter, you'll use the Method Selection Tool to plan a process that provides precisely the kinds of information you need to produce an extremely effective report.

Essential components of a strong report

How will you know you have succeeded in your research? What kinds of information or analysis is your audience hoping to see—what will they immediately flip through your report to find? It is critical to know the highlights of a successful outcome. Perhaps your audience needs a set of materials recommendations, or a visual framework for thinking through some problem. Perhaps they want to gain empathy for customers, set priorities for the engineering team or decide between two paths. Knowing precisely what kinds of information to include in your final report will, again, help shape your process most effectively.

Here are some common components of the research report. Learn from your audience which of these they expect to see—which will be most meaningful and valuable for them.

Process: Just enough about your data collection and analysis to inspire faith in your research. This should fit on one page and describe whom you talked to and where, and methods used.

Strategic outcomes: High-level visions for decision makers, usually with a longer impact timeline—up to two years from the present. Executives might use strategic outcomes to inform funding decisions or reorganization.

Stories about how your domain will be in the future: A story-based report helps build bridges across an organization, so that product, service and marketing teams can see how their work comes together for the customer.

Detail design (requirements, documentation, prototypes): This report type is very tactical and supports near-term action on an offering's refinement.

Data: Some audiences want the data. This doesn't mean dumping a massive spreadsheet or video file in their lap, though; you still need to organize it to be readable by others who didn't participate in the research.

Plan for Budget

Good research can be done with any size budget. Time and money are flexible factors for gaining insight. Determining how much your research will cost is a balancing act of several factors, many of which are listed on the next page. The general rule of thumb is that **more people and more time with the people equals more cost;** that is, as your in-person time with participants goes up, so does your price.

I've done research for startups that lasted a day, and projects in academia that lasted several years. Corporate teams have the most flexibility to leverage different scales of research to serve different needs. If you're in a big company, remember that you can use that research budget judiciously: do one big study and several small ones, or mete out the inquiry and do one per month, or find a big challenge and give it a six-month effort.

I'm often asked, what if we can afford to do either one Contextual Inquiry or a 50-person Survey? What should we do? As a method choice, the Contextual Inquiry will net more learning for the creative team. Then, try to leverage someone else's published Survey data.

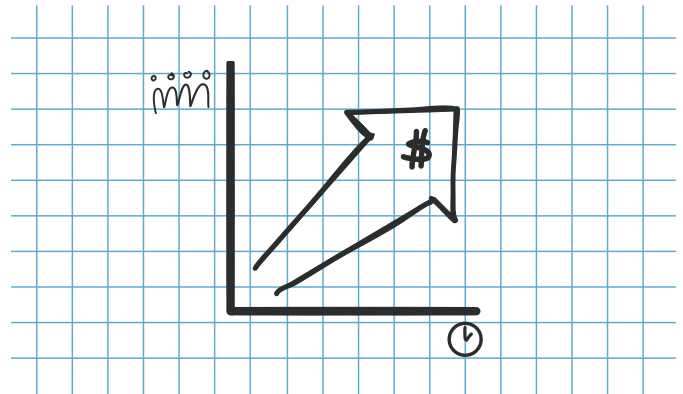
When thinking about a budget, consider both direct costs and the cost of time spent, based on hourly rates.

Cost factors related to your time:

- Writing a screener
- Recruiting people
- Drafting protocol
- Running a pilot
- # of participants
- # of sessions
- # of people per session
- Duration of session
- # of researchers
- Conducting analysis (team)
- Writing the report (draft, edit, review)
- Delivering the report

Possible direct cost factors:

- Travel
- Paying a professional recruiter
- Compensation of participants
- Meals
- Transcription services
- Measurement tools or subscriptions



Now: Align with Your Audience

Once you have thought through all of the above and completed the Initial Inquiry (see pages 32 and 33), schedule a meeting with your audience to check your hypotheses with them. Without aligning your expectations early, you greatly increase the chance of delivering a report that's ineffective or just off the mark. Get on the same page about goals, research type and report style—everything included in the Inquiry tool on the next pages. After the meeting, revise your expectations, and send your audience a one-page summary of what you agreed on. With these expectations clearly defined, you're ready to move on and plan the research process itself.

NOTE:

If you are in school, your professor has likely stipulated this audience alignment as part of the assignment. If you have a client, this alignment might also be required in a scope of work or contract. If you're doing research as an organizational insider, it is still important to achieve alignment early, even if contracts don't require it.



TABLE 1: THINKING AHEAD TO THE REPORT

If you know what kinds of content your audience responds to and what they are looking for, you can more efficiently plan your engagement.

<p>Does the audience want video highlights?</p>	<p><i>Manage your research plan, team and recording to easily collect, compile and deliver highlights. Note when you hear great quotes and note conversation topics to the video timestamps.</i></p>
<p>Does the audience want a journey map?</p>	<p><i>Work this into your data synthesis exercise, or possibly have your participants draw their own journey as part of the research.</i></p>
<p>Does the audience prefer a highly visual presentation with lots of images?</p>	<p><i>Have a couple cameras and different collection roles for each researcher. Prioritize good lighting. Ahead of time, make a list of shots to look for.</i></p>
<p>Does the audience expect a long read?</p>	<p><i>Get ahead of the writing and collecting of long quotes from your sessions.</i></p>
<p>Does the audience have other organizational frameworks that this research needs to fit within?</p>	<p><i>For example, current product line or current customer profiles. Make sure you know about these ahead of time and work them into the Inquiry plan and the report.</i></p>

Initial Inquiry

Use this worksheet to make notes about your initial inquiry before meeting with the audience for your research. You'll refine and clarify the details on these eight dimensions as you dig deeper into the planning. Take this to your meeting with the audience and check in with them on these topics. After meeting with the audience, refine and expand the contents of this page. You should share it as a one-page outline of what you expect to do and what you expect to have at the end of your research. Think of this as the plan. If you need to, attach a price tag to it and call it a proposal. It might also suffice as a scope of work. Share this plan with the audience and any research team members to align your thinking and expectations for your People Research. (You'll find a completed example of this worksheet on the following spread.)

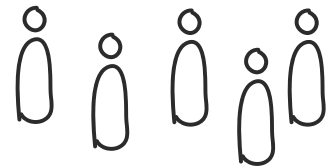
1) Describe the Context

Add the context statement from the previous worksheet.

2) Choose the Purpose

Circle the purpose of the research.

EXPLORE EVALUATE GENERATE



3) Identify the Audience

Who will read the report?
Who is paying for the research?

4) Identify the Participants

Who will you recruit and talk to for this research?



WORKSHEET: INITIAL INQUIRY

5) State the Objectives

What are the overall objective underlying the need for People Research in this domain?

6) Set a Timeframe

How long will the research take? How far in the future are the projects we need to inform?

7) Draft a Hypothesis

What do you think is happening in the domain for people?

8) Identify Report Elements

What will be the content that your audience looks for first? What will have the most value as an outcome?

// EXAMPLE INQUIRY WORKSHEET

DentalCo

Below is an example of the initial inquiry worksheet filled out by the team in the first meeting with their client (in this case the internal leadership at DentalCo). While some questions were answered, others will be left up to the team to sort

Initial Inquiry

Use this worksheet to make notes about your initial inquiry before meeting with the audience for this research. You'll refine and clarify the details on these eight dimensions as you dig deeper into the planning. Take this to your meeting with the audience and check in with them on these topics. After meeting with the audience, refine and expand the contents of this page. You should share it as a one-page outline of what you expect to do and what you expect to have at the end of your research. Think of this as the plan. If you need to, attach a price tag to it and call it a proposal. It might also suffice as a scope of work. Share this plan with the audience and any research team members to align your thinking and expectations for your People Research. (You'll find a completed example of this worksheet on the following spread.)

DENTAL CO EXPLORATORY RESEARCH - Q1

1) Describe the Context

Add the context statement from the previous worksheet

MORE SPENDING ON MORE

DIVERSE PRODUCT OPTIONS.

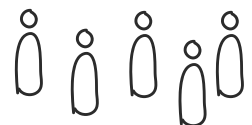
FEWER DISPOSABLES

PEOPLE EXPECT PERSONALIZED

2) Choose the Purpose

Circle the purpose of the research.

EXPLORE EVALUATE GENERATE



3) Identify the Audience

Who will read the report?
Who is paying for the research?

CEO & EL TEAM ARE LOOKING
FOR THE NEXT BIG THING TO
INVEST IN, ENG LEADERS NEED
TO BE ENGAGED EARLY

4) Identify Participants

Who will you recruit and talk to for this research?

PEOPLE WHO CARE ABOUT
DENTAL HYGIENE FOR A
VARIETY OF REASONS AND ARE
NOT SATISFIED

out and decide. With this information nailed down they are ready to further refine the questions and choose their re-search method.



WORKSHEET: INITIAL INQUIRY

5) State the objectives

What are the overall objective underlying the need for People Research in this domain?

FIND A PRODUCT GAP WHERE
OUR CUSTOMERS HAVE UNMET
NEEDS WE CAN ADDRESS - AND
LAUNCH A NEW PRODUCT

6) Set a timeframe

How long will the research take? How far in the future are the projects we need to inform?

FOUR WEEKS TO RESEARCH,
PLAN FOR A PRODUCT LAUNCH
BY EARLY NEXT YEAR

7) Draft a hypothesis

What do you think is happening in the domain for people?

THE HEALTH TECH MARKET
HAS CREATED A RICH NEW
SET OF TOOLS THAT EMPOW-
ER PEOPLE AND THE DENTAL
INDUSTRY HASN'T KEPT PACE

PEOPLE ENGAGED IN DENTAL
CARE HAVE UNMET NEEDS WE
CAN FILL

8) Identify report elements

What will be the contents that your audience looks for first? What will have the most value as an outcome?

- UNDERSTAND OUR CORE CUSTOMERS DENTAL HABITS BETTER (IDENTIFY UNMET NEEDS)
- AUDIT EDGE PRODUCTS
- VIDEO OF PEOPLE BRUSHING & DISCUSSING HABITS
- USER STORIES ABOUT TEETH AND HEALTH
- POG DEFINITION



First identify what you don't know, then select the research method.



PLANNING

QUESTIONS & METHOD

This is the second of three times you'll work your questions. You initiated the inquiry with a quick set of questions that touch on what is unknown. In this section you expand and explore the questions driving your work more deeply in order to select the method (or methods) you'll use to engage your participants. Later (in Chapter 2: Engagement) you'll further refine and organize questions into the set you use with participants. This iterative approach to working with questions, going broad and then narrow, refining and reframing, is the crux of your work.

Initial Questions

Start by creating a brain dump of questions related to your research objectives. With your team, articulate and write down as many questions as you can—each on its own sticky note or index card.

You can expect a couple of hurdles in this process. Some teams will need to enforce a safe space for talking about what they don't actually know. Similarly, some teams will need help phrasing unknowns as questions, instead of assumptions. We all make assumptions about people's behavior based on personal experience or popular culture. This, though, is the time to check your bias and preconceived notions at the door. Be open to the likelihood that you and your experiences are unique, not representative of all people. During the question-brainstorm process, challenge yourselves to acknowledge assumptions as such and to rephrase them as questions—complete with actual question words (*who, what, where, when, why, how*) and question marks. Because many of us have limited tolerance for uncertainty, this process can feel overwhelming. But don't stop short in developing your question list: take a break, and then keep going—until every possible question is out on paper.

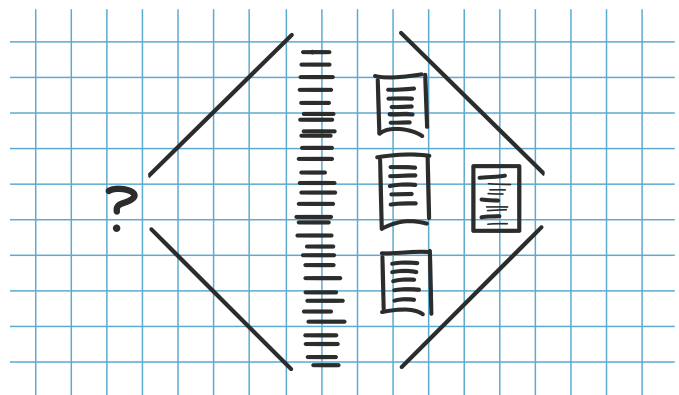
Now you have a massive set of questions. How big is “massive”? A hundred questions is a fair minimum to get started, depending on your goals.

Work Your Questions

Together, take a step back and look at your full question set. You'll notice the emergence of themes or categories; work together to physically move the questions into thematic groups. Questions are the raw material you are working with now. Organize them into like groups that emerge from the content of the questions themselves. (See the tool on page 40 for help sorting questions.)

Articulating and breaking apart the large question list into components you can organize and prioritize allows you to regain control of the uncertainty (instead of avoiding or ignoring it).

Now that the questions are divided into manageable, themed groups, you'll notice a few trends. First, you'll see some groups of questions whose answers will be easy to find with a literature review or inside the organization. Second, you'll notice that some questions, while unknown and perhaps interesting, are irrelevant to the purpose of your research. Finally and most importantly, you'll notice some top-priority questions that require People Research—that cannot be answered by any other means. *These are the questions you'll take into the next steps.*



// EXAMPLE QUESTIONS

DentalCo

The team starts out by creating a massive list of questions.

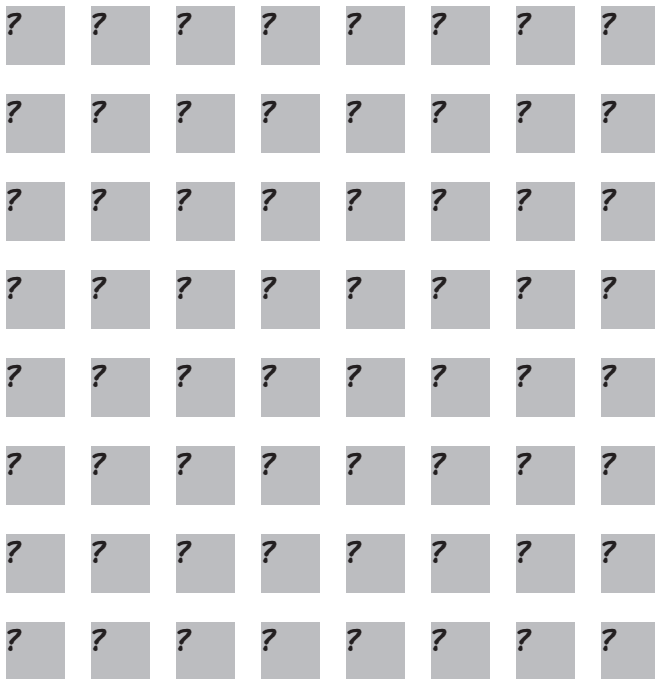
Does everyone brush their teeth twice a day?
Do we know by sales numbers and population data?
How many people are not following recommended dental habits?
If people don't follow recommendations, why not?
Is there a group that uses dental products more or less than others?
Are the claims about dental health grounded in any real research?
Do we know how widely understood this relationship is?
How do people teach their children to brush teeth?
What challenges do people face in learning to brush?
Is there a right way to brush or not?
How do people correct bad brushing habits? Can they?
Do people who live together brush together?
Why are there so many different toothpaste choices?
Do electric toothbrushes provide real value?
Where else to do people brush outside the bathroom?
What else do people do while brushing?
How does dental hygiene fit into the larger set of bathroom grooming habits?
How loyal are people to particular dental products?
What does the dentist do that could be done at home?
Is there a risk associated with home dental care?
Is dental care outside the home different from doing it at home?
Does everyone brush the same way, in the same sequence?
What factors make people prefer a specific dental care product?
What motivates people to care for their teeth?
What dietary decisions influence dental health?
What are other grooming habits associated with proper dental care?
What about toothpicks, gum and other on-the-go tools?
How are they getting used, when and why?
What if you have a mouth injury? How does dental care change?
What about the floss question?
Are there any dental products that are useless?
What do people do when they can't get to their regular dental routine?
How do people manage when they forget?
Do they forget?
Will they admit to forgetting sometimes?
How are people using other bathroom appliances in the context of their grooming habits?
Where and how are bathroom appliances stored?
Are there any favorites and why?
Does bathroom hygiene or dental care change when you're feeling sick?
Do people generally associate hygiene with health?

Working with Questions

Only when you have an absurdly long list of questions to work with can you start to refine, combine, sort and focus them. The process described here is about working with your questions as the raw material of inquiry.

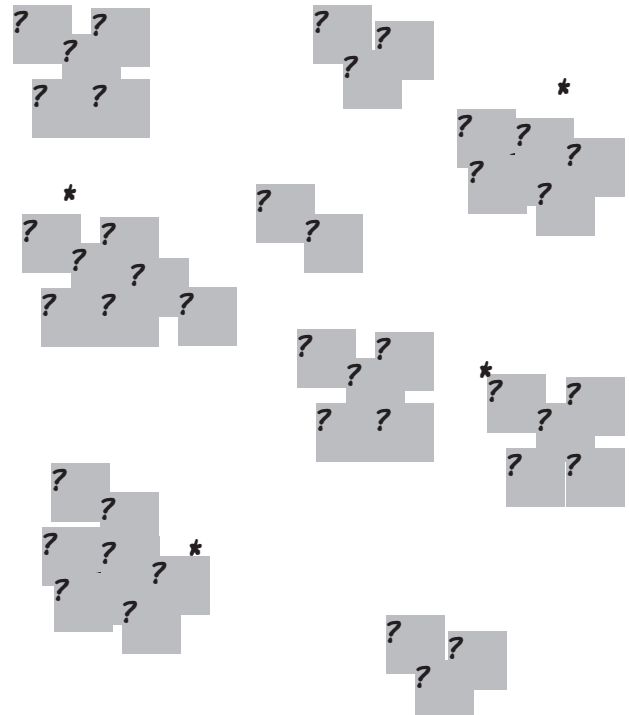
1) Identify unknowns

Create a list of all the questions you can think of. All the questions. This should be a really large list.



2) Organize & prioritize

Sort all the questions into groups by affinity. Isolate the questions that are truly top priority and only answerable by People Research.





TOOL: WORKING WITH QUESTIONS

3) Balance

Consider your top-priority people-related questions. Which method will serve to find answers?

INTERVIEW



LITERATURE
REVIEW



SURVEY? or
SCreener?



4) Reframe

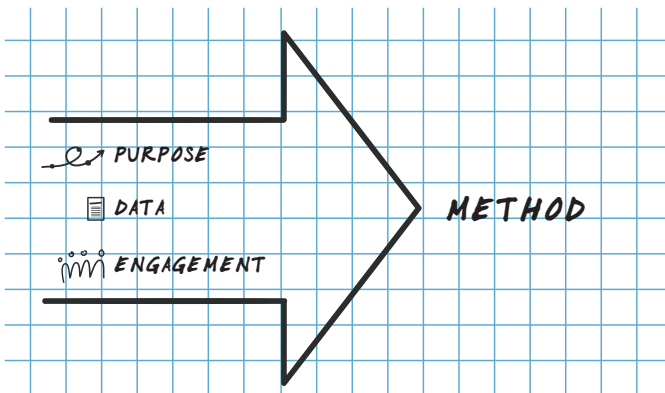
Reframe and organize the questions into the right format for the method.



Question Your Questions

Now, compare the set of top-priority People Research questions that emerged from this exercise with your Initial Inquiry and notes from the meeting with your audience.

- Do your questions align to the purpose you and your audience agreed upon?
- Do you need to add or remove research participants from your list?
- Does the timeframe still make sense for this?



Thoroughly **aligning your questions with your purpose is critical to the success of your research project.** This effort lays the groundwork for selecting the method(s) you'll use, refining your research plan, and creating your research protocol in the next section.

A final note about how to use the top-priority People Research questions you've identified: The research questions you have just distilled will guide your research, but they are not the questions you ask your participants. It might seem that you should just say your questions aloud to the people you are interested in learning about. But the way you phrase a question is critically important to the quality and quantity of response you garner. In the Engagement chapter, you will learn to transform your driving research questions into direct questions for your participants.

Choose a Research Method

Your research objectives and questions will drive your choice of research method(s). This bears repeating: always start with your purpose, and then choose the method. Don't start with the method. If you were prompted toward research by someone who dove headlong into a particular method, you'll have to redirect the work to discern the right method for your goals.

Books and resources on research methods are plentiful, but all of the myriad methods out there boil down to a small number of basic variables that serve the research. The Method Selection Tool on page 46 will help you choose research methods best tailored to your research needs.



First, choose a research purpose (explore, evaluate or generate). This was initiated in the Initial Insights document and confirmed with your audience in the previous chapter. Then, determine whether you can do primary research (talk to people) or whether you're sticking with secondary sources. If your work is primary, will you need qualitative or quantitative data? The best work uses both—but in sequence, not simultaneously, so that the findings from one drive inquiry for the other. (For example, the results of a small quantitative survey could direct your recruiting for a deep-dive, qualitative contextual inquiry, whose outcomes could be validated through a second, larger quantitative survey, and so on.)

Once you've made these decisions, it becomes clear which People Research method types to employ—and you don't waste time or energy doing fruitless work. After homing in on the best types, you can scour the many available resources for specific methodologies⁸. For this, I like the work put together by LUMA Institute⁹. Both their book *Innovating for People* and their online LUMA Workplace are rich troves of methods of all types, and illustrate the subtleties of executing these methods through tools, text, video and examples.

On page 46 and 47 is a flow chart describing how you can arrive at the right method. Choose one or two methods to get started, and return to this chart for reference as your research inquiry progresses.

// EXAMPLE FRAMING QUESTIONS

DentalCo

FRAMING QUESTIONS

Here are several questions that the team might ask as part of People Research for DentalCo and some notes on how we decide which questions to ask when.

“What percentage of people brush their teeth daily?” *This question has probably been asked before, and we can find the answer in a literature review.*

“What factors influence a decision to brush teeth?” *This question might be a new question we can ask in a survey. We might create a list of factors for respondents to choose from.*

“How do you know when your teeth are clean?” *This is a question for an interview! This is an open-ended qualitative question that will allow people to talk about the myriad tradeoffs involved in using just a toothbrush vs other additional methods alone or in combination.*

“How is brushing part of a larger personal health and hygiene ritual?”

Lean on Literature

Throughout the work, whenever you have a minute, feel stuck, need perspective or someone else is requiring it—dig into a literature review. A literature review is a critical part of any research effort because it grounds the work in the collected domain knowledge of humankind. A warning, though: more information has been written and published about nearly every topic than would be possible for one person to review in a lifetime. In a literature review, it is critical to establish focus, be discriminating and serve the purpose of your research.

Focus

To complete your research in a reasonable amount of time, you'll need to attenuate your focus. Within your working domain, narrow your language to reflect exactly what you need to know about. Reference librarians are a great resource here. Then, as you search databases, catalogs or the Internet, use a variety of extremely specific language to find precisely (and only) the information you need.

Discriminate

Be picky about the sources you rely on. Who authored them? Who published them? When? Be attentive to the publication status of your source materials. For some projects, only peer-reviewed academic publications will suffice. For others, personal narratives as reported in blogs may also be of interest. Citations and reputation matter here, as does quality.

Serve your purpose

Finally, the purpose of the literature review should be clear from the outset. In People Research situations, literature reviews are usually done as a step in establishing context and domain knowledge to serve some larger research or design initiative. What do you need the literature to tell you before you can move into effective engagement with people?

Synthesize literature

To make a literature review worthwhile, you must synthesize the information you've unearthed in a few key points. To do this, I list each document's main takeaways in a spreadsheet, then organize them into thematic groups. From this, I usually net several groupings of ideas from different sources; the labels on these groups become points of synthesis. As I read across groups, I can see where contrast or contradiction occurs; these contrast points then become another point of synthesis.

Now that you've articulated your driving research questions and chosen a couple of best-fit methods, it's time to find your participants.



// EXAMPLE METHOD SELECTION

DentalCo

Since the DentalCo team determined that this research effort should explore people's experiences with dental hygiene products, the Method Selection Tool on the following pages points them to collecting primary qualitative data. The team will do some Literature Review and Role Play to get started. The primary People Research will need to be in-person and in place, since bathrooms and tooth-brushing sites vary so much. The team will need to choose among Observation, Contextual Inquiry, Interview and Co-Design. Observing without talking to people is possible but just inappropriate, given the context. So they settle on an Interview in person, in the home, immediately followed by a Contextual Inquiry that will give them access to bathrooms during the grooming ritual. A Co-Design session is still on the table for later, when they have a more detailed hypothesis to test. With the method in mind, the team goes on to identify who they will talk to.

Method Map

Purpose

Goals and questions for the research determine its purpose.

To explore: an open-ended exploration that will result in a richer understanding of a domain, its people and cultures

To evaluate: a measurement of a situation, product or service to judge what is working and where it's not working for people

To generate: an approach that will result in new solutions, ideas and thinking about offerings in a domain

Data

What type of data do you want to collect and work with?

Secondary data, found in other people's previously published research studies

Primary data that is qualitative in nature
Text or photographs that require deeper analysis

Primary data that is quantitative in nature
Numeric and comparable across the set



TOOL: METHOD MAP

Take a step back from the project and consider the *Purpose* of your people research and the *Outcomes* you are driving toward. Use this flow chart to decide which *Methods* to employ to address different “unknowns” your project faces.

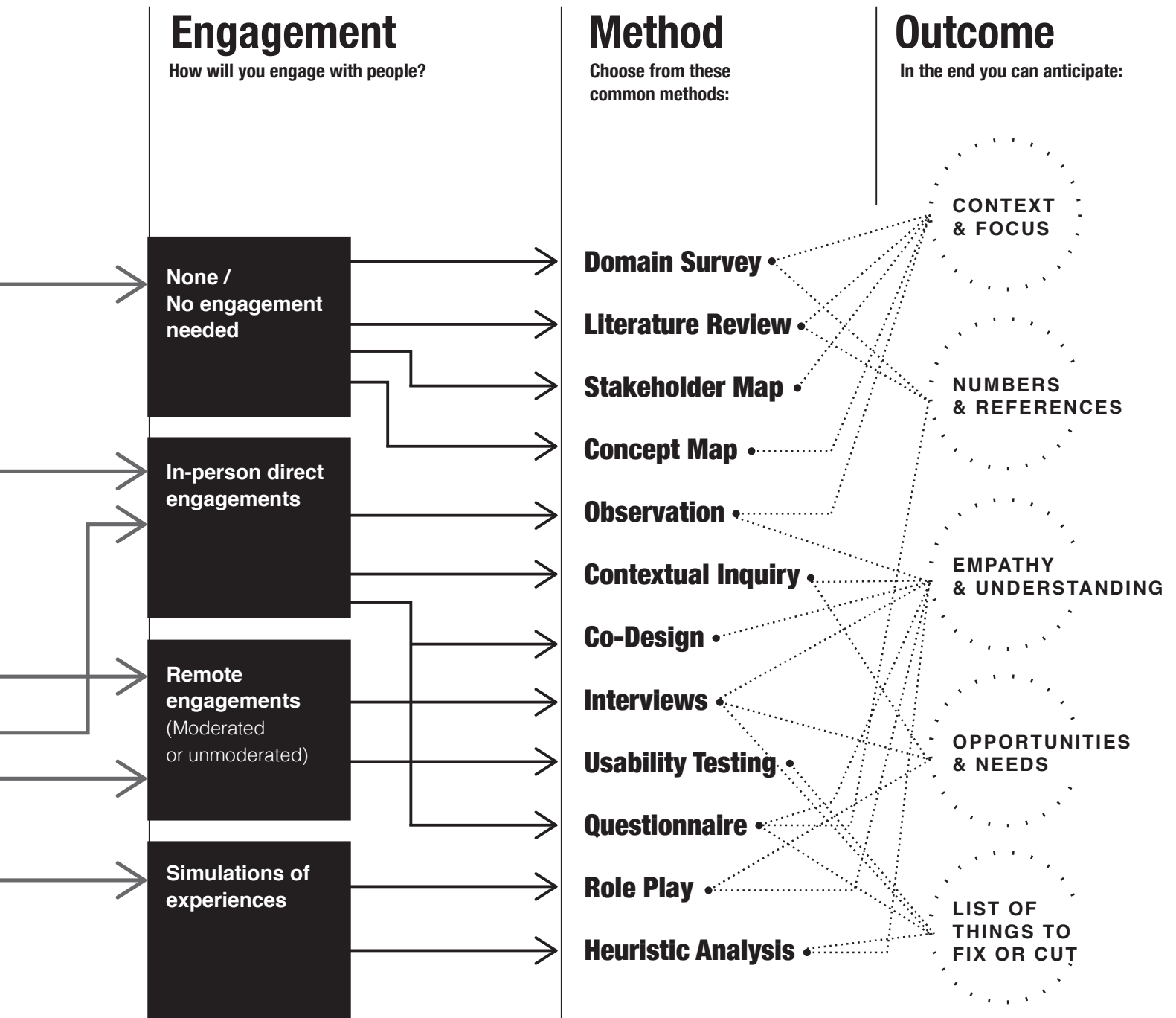




TABLE 2: METHODS OVERVIEW

DOMAIN SURVEY	<i>Take a close look at the landscape of offerings in this domain. What's out there already? What are people's other modes of accomplishing the same goals? Shop for the offering. Read a memoir. Find a local expert you can take out to lunch. There will be times when this is the closest you can get, and that's OK.</i>
LITERATURE REVIEW	<i>Work with a librarian, not just Google, to learn what has been published in this field relevant to your line of inquiry. (See page 44 for more detail.)</i>
STAKEHOLDER MAP	<i>Create a list of the people who care, then map the relationships and connections among them. Use this map to identify precisely whom you want to talk to. (See page 54 and 55 for more detail.)</i>
CONCEPT MAP	<i>Identify all concepts in the domain as nouns (things) and map them by connecting them through verbs (actions)¹⁰.</i>
FIELD OBSERVATIONS	<i>Go out into the "field" where people are doing the thing you're interested in. Just watch or join them and take notes¹¹.</i>
CONTEXTUAL INQUIRY	<i>Find someone who will invite you to the place where the thing of interest is happening. Conduct your interview and observation while participating in the activity in context with the participant.</i>
CO DESIGN	<i>Build an inquiry kit and put making tools in your participants' hands. Observe as they physically articulate their current view, process or priorities¹².</i>

INTERVIEW

Run a directed conversation in which you ask open-ended questions and listen closely¹³.

USABILITY TEST

Ask someone to use the product and note where they run into issues with its efficiency or effectiveness, or with the overall experience¹⁴.

QUESTIONNAIRE

Develop a sequence of closed-ended questions and send them out to a large group¹⁵.

**ROLE PLAY/
EXPERIENCE
ANALYSIS**

Try out the offering yourself and take careful notes on how it goes. Optionally: role-play as the user by trying it with some specific challenge or attitude.

**HEURISTIC
ANALYSIS**

Use the product and document violations of a standard set of usability heuristics (rules)¹⁶.

A NOTE ABOUT METHODS:

The list above is not exhaustive, since many other online resources and books about methods exist. Many People Research methods go by different names in different regions, companies or academic areas. The names don't matter. Instead, consider what each method takes to accomplish and what you can expect to gain from it.



Be precise and respectful with the language you use to talk about people.



PLANNING

PEOPLE

At the heart of People Research are people—the people who share their experiences and insights with you in order to make your products and services better. This chapter will guide you through the work of identifying the people you need to hear from, connecting with them, and recruiting them.

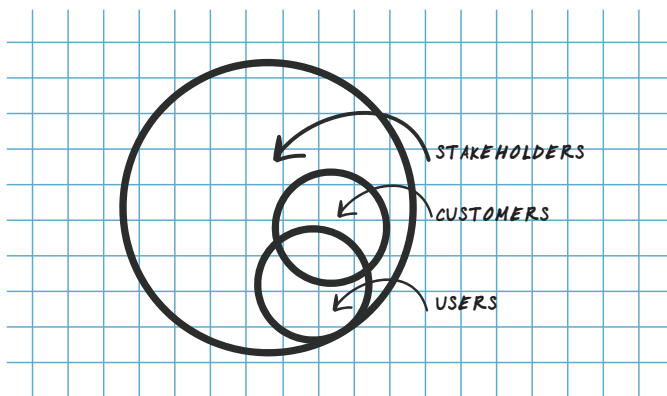
Identify Your Stakeholders

Who cares about your project? Well, potentially everyone—but that’s a lot of people, some seven billion of us. Some product offerings are great for everyone, but “everyone” is not a good starting place for People Research. Instead, name stakeholders.

Organizational stakeholders are people in your organization who have a stake in the outcome of the business. This includes you, your research audience, your design and implementation team and the people who’ll deliver the offering. It also includes business owners or shareholders, competitors and vendors, and all the customers and users of the business offerings.

Customers are people who will spend money on the offering you're working on. In consumer products a customer is often also the user; often in the military or business-to-business applications, the purchase decision-maker is not the user. Be sure to sort this out for your offering or domain.

Users are the people who "use" the product or service. Let's do them a favor, though, since almost none of us refer to ourselves as "users," and give them a more appropriate and respectful name. They should be able to recognize themselves in your work. Shopper, homeowner, athletic teen: identify them by a name they might use within the context of the offering.



See page 55 for a step-by-step guide to creating a stakeholder map that charts the people you care about and helps you precisely identify who will be the participants in your People Research.

Define the Perfect Participant

In some People Research projects, you can work with pretty much anyone. Humans can be great stand-ins for other humans and are often capable of role-playing new situations. For this you might have friends or colleagues participate in your research. Even talking with just one possible user or customer is better than none.

For optimal results or in a larger study, though, it's important to **discern exactly whom you want to talk to** and be aware when you've veered from the perfect participant to what we might term a "warm body." A warm body is literally anyone not part of the project design team. Conversely, the perfect participant meets a long list of criteria defining them precisely as your user, customer or audience.

On the stakeholder map you've created, identify who might be:

- The one who pays for the offering first
- The one with the most domain expertise
- The one who holds the answers to many of your questions from the Inquiry exercise on page 32

Now ask what distinguishes that "perfect participant" from others. Do they have a job, attitude or hobby you can describe? Where might you find them? What characteristics can be used to filter them from the larger population? The answers to these questions start to define the screener and recruiting approach you'll use to find these people.



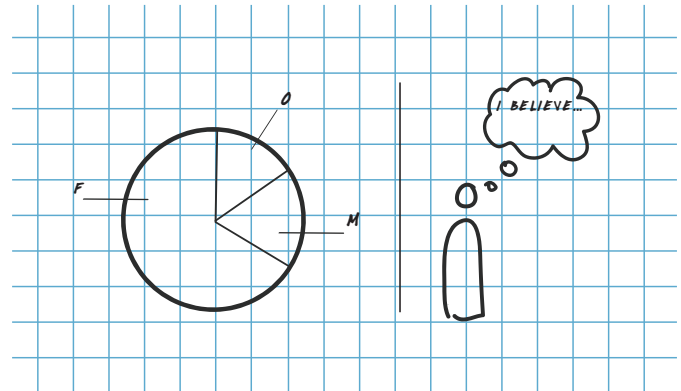
What matters about people?:

Demographics vs. attitudes

The range of what we can know about people is vast. Often, though, **the easiest features to know about people are the least important** to People Research. Most US residents are fairly familiar with the notion that companies collect demographic data (e.g., age, gender, income, zip code). Many companies also capture more personal data (e.g., height, weight, race, ethnicity, marital status, household size, number of x you own). Additionally, the US Census Bureau collects a big dataset on our population every decade.

Fortunately, this data is readily available; unfortunately it tells makers and innovators almost nothing of interest. We want to understand how people think, what makes them tick, what they care about, what inspires them, what they're afraid of. We seek to expose the challenges they face, the hopes they hold dear and the biases that guide them. None of that can be discerned from demographics—although many a researcher has tried. It most often results in inaccurate and sometimes offensive stereotyping.

You might want to collect demographics. Maybe it matters a lot, or maybe your audience for this research will care. Just don't confuse demographics with understanding people. Be careful not to make a false link between a demographic data point (like age) and an attitude that really matters to your design work. Note the important and fundamental differences between demographics and attitudes below.



Sample demographics

- Age
- Race
- Gender
- Income
- Zip code
- Marital status

Sample attitudes

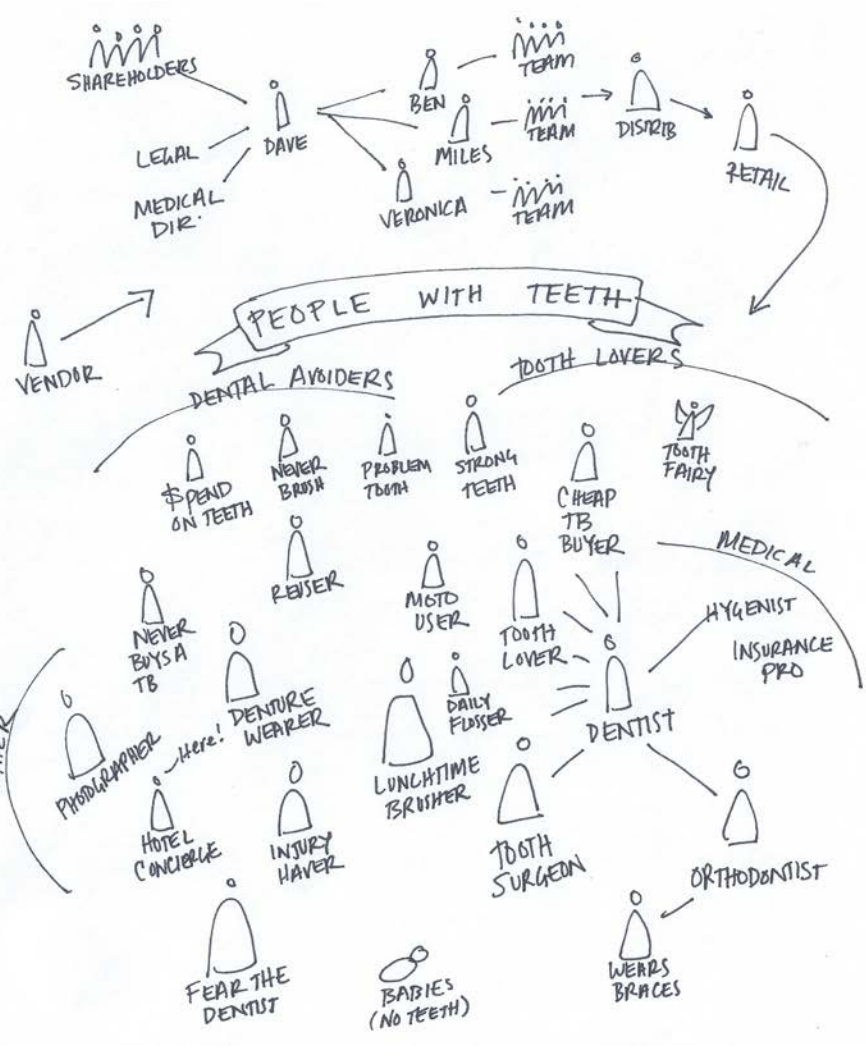
- “It’s OK to sometimes skip personal hygiene.”
- “I want to be a total health resource for my clients.”
- “You can tell a lot about a person by their teeth.”

// EXAMPLE STAKEHOLDER MAP

DentalCo

STAKEHOLDER MAP — WHO CARES IF DENTAL CO MAKES NEW PRODUCTS?

- DAVE - CEO
 - MILES - VP ENG
 - BEN - DESIGN LEAD
 - VERONICA - CMD
- KEY AUDIENCE
- DESIGNERS
 - PHOTOGRAPHER
 - ENGINEERS
- MARKETING TEAM
 - LEGAL TEAM
 - MEDICAL DIRECTOR
 - VENDORS
 - RETAILERS



- PEOPLE WITH TEETH!
- TOOTH PROBLEM PEOPLE ✓ BRACES
 - STRONG TEETH PEOPLE ✓ DENTURES
 - CHEAPEST TB BUYER ✓ INJURIES
 - LUKE TB BUYER ✓ NEVER BRUSH
 - MOTO/ELEC TB USER ✓ FEAR DENTIST
 - DAILY FLOSSER ✓ REFUSE XRAY
 - LUNCHTIME BRUSHER
 - TOOTH AESTHETIC
 - TB REUSE / RECYCLE
 - TOOTH FAIRY
 - PEOPLE WHO NEVER REPLACE
 - HOTEL CONCIERGE - FREE TB!
 - DENTIST HYGIENIST
 - DENTAL INSURANCE PRO
 - DENTAL SURGEON
 - BABIES
 - FLUORIDE CO.
 - WATER TREATMENT
 - PLANT GUY

To identify the people who matter to the project, the team undertakes a stakeholder mapping exercise. This type of chart includes only people and allows them to quickly identify what they know about the people who have a stake in their offering. They can then use this map to align the thinking of team members or to identify unknowns. Ultimately, they'll use the map to precisely identify the customer, user or person who matters most and represents most important "unknowns." This is the type of person to recruit to participate in People Research. Given the engagement method you've chosen, will you need to meet with these people in person? Remotely? Will you role-play to understand their experiences?

The DentalCo Team decides to focus in on people who brush teeth outside the home and those who use tools beyond toothbrushes for regular maintenance of clean teeth.

MAKE A STAKEHOLDER MAP

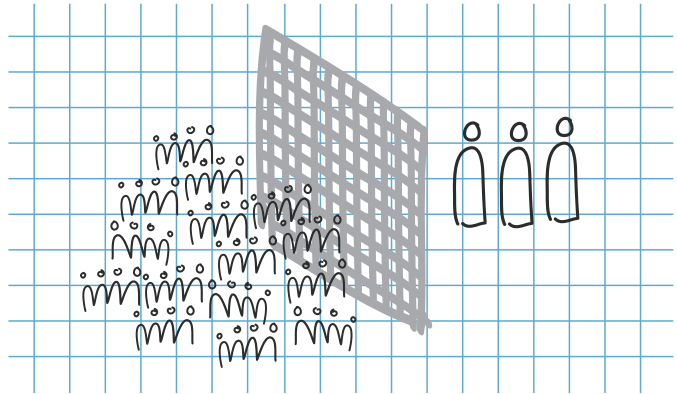
- 1. Start with a big list of the people who might care about the success or failure of your product or business offering.**
- 2. Organize them into groups of people who are connected somehow.**
- 3. Map them: spread the names on sticky notes on a wall.**
- 4. Draw circles around those grouped together.**
- 5. Identify any major lines of communications among these people.**
- 6. Add dollar signs to indicate who is spending money and where.**
- 7. Star the key decision-makers on your map.**
- 8. Find someone who knows the domain and talk them through the map...**
- 9. ...and ask them to add to the map and challenge its assumptions.**
- 10. Who on the map do you need to talk to in your People Research? Whose experience, motivation, attitude and goals are your hypotheses built upon? Who would provide the most value if you could talk to them?**

Create a Screener

You'll nearly always have a greater number of willing but not-as-helpful participants than of perfect participants. In order to **filter out all but the best-fit participants**, draft a screener—a small set of questions designed to let you know immediately whether the respondent's subsequent participation will be useful for your project. You'll ask the screener questions first and use the response to reject or accept someone into your study.

Typical screener questions carry a secret “accept” or “reject” qualifier on the answers and can be used to filter participants in or out. They are closed-ended questions and shouldn't make it easy for the respondents to know what you want to hear. In addition to attitudes that align with your research focus, you may also want to filter in certain mixes of demographics so you can be sure you are hearing from a diverse group. If you're working with a specific technology application in mind you may need to filter (in or out) people who haven't used it before. For universal design applications you may want to filter in diversity in bodily functionality (e.g., vision, hearing, mobility). Every topic and prompt will require something different of the participant group, so attending to the screener is important. Without a good screener, your participant profiles could cause the audience to discredit the work later on.

Writing the screener is the first step in the recruiting process. Next, find people to answer the screener questions.



WRITE A SCREENER SURVEY

Find your special someones with a screener that filters for:

- *Right attitude*
- *Right interest*
- *Right expertise*
- *Right demographics*
- *Right experience with the product*
- *Willingness to participate*

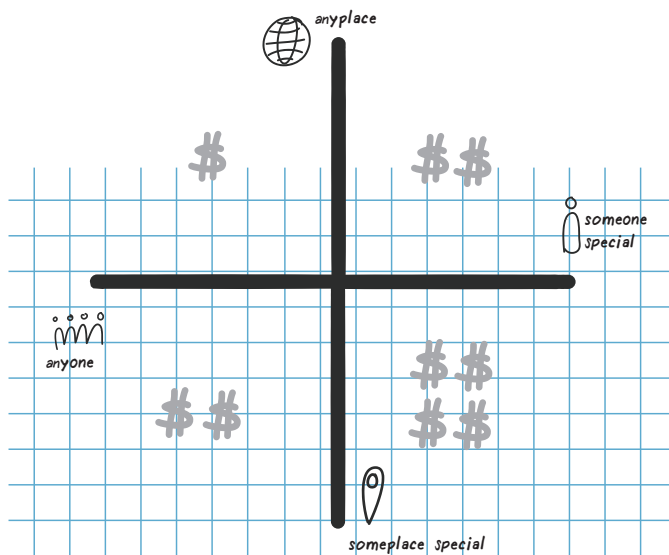
// EXAMPLE SCREENER

DentalCo

Based on responses to these questions, the team should be able to recruit people who are engaged in tooth care. They will have a lot to share about their bathroom grooming rituals, and they are an attractive audience to test out new product ideas.

- How many times per day do you brush your teeth?
1 or less (reject); 2-3 (accept); 4 or more (accept)
- How often do you try out new dental care products?
always (accept); sometimes (accept); never (reject)
- Do you keep toothbrushes in more than one location in your home? yes (accept); no (reject)
- Do you believe good dental care enables you to live more healthfully? yes; no (accept either)
- Are you willing to invite a researcher into your home to discuss dental hygiene?
yes; no (if yes, proceed to schedule)

Proceed to invitation.



NOTE:

Who you talk to and where you do the research impacts your overall costs. The more special your participants and your location are, the more expensive you can expect the research to be.

Recruit People to Participate

There are many ways to find and connect with people for your research. Some common recruitment methods are listed in the table on the next page. But how many people do you need? As with many questions, it depends. One is always better than zero. Consider your timeline, budget and quantitative/qualitative balance. For quantitative research, more is always better until you can prove statistical significance in the patterns in your data. A good rule of thumb for qualitative research: when you start hearing the same things again and again, you have a pattern and enough people. Six to 12 is a good starting place; you can always add more from there.

The way you invite people to participate in your research really matters. Put yourself in their shoes: they have places to go and things to do, and you're asking out of the blue for their help. The invitation should clearly state the purpose of the research, why and how you think they can help, how much time it will take and how they will be compensated. Be friendly and succinct—and offer your participants as much flexibility as possible. Use the checklist at right to craft a context-appropriate invitation.

Invite Participants

Once you've located the right people, extend to them an invitation to participate in research. **Make it easy for people to say yes.** An invitation should include:

- Why you should do it (purpose of the research)
- Dates
- Time & duration
- Locations
- What they need to prepare
- Confidentiality
- Compensation
- Note about any risk identified and how you will mitigate or eliminate it



You're getting closer to the actual engagement with people. Now is the time to prepare the details of your participant engagement.



TABLE 3: RECRUITING APPROACHES

APPROACH:	HOW:	WHEN:
INTERCEPT	<i>Go to the place where your people gather and ask them if they'll answer some questions.</i>	<i>When you want to get quick responses and your protocol is short.</i>
ONLINE	<i>You can set up a screener or participant profile inside a web-based tool. Many online tools have an active participant community.</i>	<i>When the people you want are geographically distant or time and budget make in-person sessions impossible.</i>
PROFESSIONAL RECRUITER	<i>Professional phone banks and web tools will blast the invitation to participate and screen a large number of people.</i>	<i>When you care the most about the quality of participants and have the budget to pay for those "special someones."</i>
FRIENDS & FAMILY	<i>Reach out to everyone in your own social circle and ask them to participate or connect you to their networks.</i>	<i>When you need something fast and free.</i>
TAP THE ORGANIZATION	<i>Reach out internally or post flyers in restrooms and hallways to find participants not part of the project team.</i>	<i>When you need to do it fast and keep the work inside your company.</i>
JOIN THEM	<i>Attend a conference or casual event where you are sure to find the right people.</i>	<i>When a vibrant social community exists that is open to your inquiry, and you are willing to make on-the-spot connections.</i>
COLD CALL	<i>Call on people who you think would be perfect for your research.</i>	<i>When you can get a reliable list of contact info for people who won't be surprised you reached out.</i>



Pilot-test your inquiry and approach before the actual engagement.

02

Engagement

PREPARING, PRACTICING AND DOING

Engaging with people is a recursive process: you'll plan, practice, pilot-test, do a couple sessions and might need to revise your plan on the spot. With that in mind, read this entire chapter; use it to plan your people-engagement; then use it to test your protocol, questions and approach; and only then use it to do your real data collection. It's OK to refine a research approach midway through—because your purpose is to learn, not to keep pushing a flawed plan.

Your work with this chapter should take the following form:

1. Fully read the chapter, including the section on ethics, which must permeate all of your activity.
2. Plan your engagement.
3. Set up your entire engagement—protocols, researchers, equipment, wording, sequences, travel, everything—and do a full trial run.
4. Do the real thing, with real participants—but keep these principles in mind, and make small revisions throughout as necessary.

Refine and Organize Your Questions

You've already defined and organized both an initial (huge) set of questions and a set of driving research questions. And in the context of method selection you began to craft the list of questions you'll actually ask your participants. Now you need to refine and finalize the question set to build out your Moderator's Protocol, survey or details of the method you chose.

Revisit

First: is your big list from earlier big enough? If not, review your Context Audit: each bullet point in those lists of Global Systems, Human Experiences and Business Offerings can spark additional questions. Have you made any assumptions about how the social context is changing or how change is affecting people? Those assumptions might also be important to validate through research. Your goal in this step is to home in on what can be gained from this research effort. You'll do that by organizing those top-priority questions that are unknown, important and truly about people into a cohesive inquiry.

Reframe and organize the questions into the right format for the method

Your questions should be designed carefully to elicit the type of responses you expect in the data. Do you want qualitative questions that elicit stories—or questions that get a one-word response? Are you open to people deciding not to answer some questions? As you are reframing the questions, write with an understanding of how someone might reasonably respond. These will be the questions the participant actually hears or reads during your time with them. See notes below about how to sequence and phrase questions effectively.

Question sequence

The best way to get the most out of your time with each participant is to order your questions in a way that elicits natural storytelling or explanation. A good interview question sequence looks like this:

1. Get-to-know-you questions
(*Easy icebreakers: you might even already know the answers to these.*)
2. High-level topic questions
3. Detailed topic questions
4. Very open-ended question
5. Repeat 2, 3, and 4 for additional topics
6. Synthesizing questions
(*How do topic A and topic B connect in your mind?*)
7. Ask if you missed anything important in this domain.
8. Wrap-up and thank you.

A usability study or research with a stimulus and response might require a different question order. In a case where you want to get a quick “gut reaction” to something, you might start there and then move into more “getting to know you” questions.

Open-ended and closed-ended questions

An open-ended question elicits narrative or detailed responses. It’s great for an interview, contextual inquiry or any situation where you want the unique personal experiences of your participants to shine through. Some examples of open-ended questions:

- “Tell me about your commute.”
- “How does dental hygiene fit into your day?”
- “How have online tools affected how you meet people?”

A closed-ended question has a limited set of possible responses. These questions are key for observing alignment or difference along one simple dimension, across a number of people. Some examples of closed-ended questions:

- “How many minutes does your commute take?”
(*The answer is likely a number and possibly some variables that modify that number.*)
- “How often do you brush your teeth?”
- “How many dates have you had with people you met online?”

Generally, you’ll want a mix of open- and closed-ended questions; the key is to ensure that you’re crafting each question to elicit the information you truly need. An initially closed-ended question (“*Do you like your commute?*”) could be rephrased as an open-ended question (“*How do you travel to and from work each day?*” or “*How do you feel about your travel to and from work each day?*”), or vice-versa, as needed.

Question phrasing: content and context

The subtle use of language and listening is key to successful People Research. Both a question's content and context are critical to how the respondent understands the question—and to gaining valuable insight from responses.

A question's content directs its answer. It's worth parsing each question's content to ensure that you're asking precisely what you want to know. Learn and use the language of the domain, or of the respondents. Decide whether a given question should elicit a general or a specific response, and wordsmith accordingly.

A question's context narrows the scope of an answer within space and time. Be sure that each protocol item sets the contextual stage, so you can focus on the precise information you want. You might do this by introducing each question with a couple of contextual clues, which could be...

- time-related (e.g., at X time of day, in the future, right this moment)
- place-related (e.g., at home, at work, in the car)
- more ephemeral (e.g., when I'm feeling happy, when I want to exercise).

For example, the following protocol item prefaces the content of the question with two context sentences: *Many people have a ritual or pattern of things we do in the morning. For this research, we are interested in learning about these patterns. Can you tell me about the things you do every morning?*

// EXAMPLE: POSING QUESTIONS

DentalCo

In planning their interview, the team wants to craft questions that do a lot of work to get at the information they need. As they work through the phrasing of questions, here are some of the options they consider.

*Open-ended question: Tell me about your bathroom grooming rituals.
Closed-ended question: How many times per day do you brush teeth?*

*A note on phrasing:
"Do you like bathroom grooming?"
A binary (yes or no) question will net the team a limited result. The word "grooming" means different things to everyone; therefore, they might not learn anything from this question.*

The team could enhance the content of this question by getting more specific. "What kinds of grooming do you do each day?" "How do you feel about your daily grooming?"

They could also add to that line of inquiry a more specific context, like "today" or "when you're late for work" or "when you're tired."

Craft an Engagement Protocol

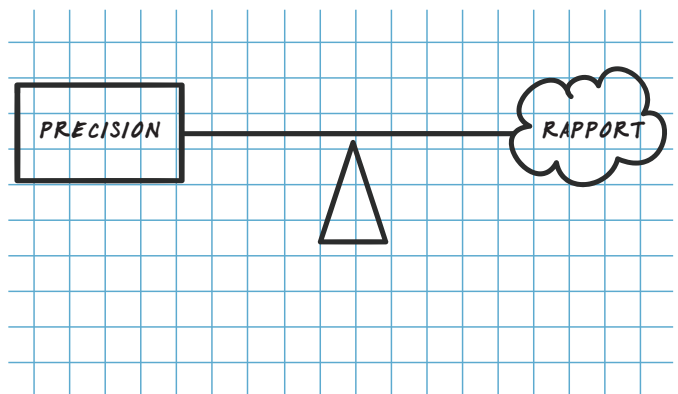
The engagement protocol is like a script for a show. It should include the order of events, what will be done and said by whom, the sequencing of questions and any notes or reminders to make sure everything runs smoothly.

Whether you're interacting with participants directly or remotely, the primary purpose of the protocol is to direct the inquiry and ensure you are collecting the data you want. The protocol may be a Survey, an outline for a Role Play or a Moderator's Guide for an in-person session. Most in-person People Research requires some sort of Moderator's Guide, so we'll go into that in more detail here. Its purpose is to support the Moderator in conducting a thorough interaction with every participant. If you don't use a protocol, you can't count on any consistency across engagements or refinement in how you phrase the questions, their sequence or thoroughness. Generally, a protocol's length is dictated by time limits: How many minutes do you think people will realistically want to keep filling out a remote survey, or talking with you in person? Consider these factors when choosing the number and sequence of questions. Similarly, as you craft the engagement protocol, con-

sider both the Moderator's and participants' needs when grouping questions, labeling the groups, and adding intro text, checklists or space to sketch.

Assign Research Team Roles

Your research team should consist of at least two people. One of those people is **the Moderator**, who asks most of the questions, leads the session and is the primary point of contact for the respondents. Other team member(s) will accept **the Recorder** role or other supporting functions. (It is possible for one researcher to take on all of this alone—but it's certainly better to have at least one partner.)



A NOTE ON STYLE

Much of how we conduct research depends on our personal style and what we're comfortable with, as well as the nuances of a given topic or domain. A tremendous amount of any People Research project's success depends on your making good choices within the context you're given. With this in mind, carefully match research roles to researchers' personalities. The Moderator's primary role is to establish rapport with the participant and converse deeply about the topic while maintaining a level of precision. He or she needs to be creative and thoughtful, capable of shifting directions if necessary.

The Moderator

The Moderator is the engagement leader and takes the greatest responsibility for following the protocol, sticking to the agenda, and getting the most possible value out of your time with the respondent. Sometimes, “getting the most possible value” requires adapting on the spot—a subtle but powerful skill. Similarly, sometimes “following the protocol” means making sure you get all the information you need—not necessarily asking every question exactly as it was typed up. The Moderator will need to spot opportunities to see, hear and learn more than originally expected. They’ll find the right moment to say “can you show me that?” or “do you have an example you could share?” as appropriate to the research.

As Moderator, you can expect to garner as much response as you’re open to hearing. Use eye contact, body language and gestures to let people know whether you’d like to hear more or have heard enough. We are social creatures, and most people you interview will be eager to “get it right” and to help you as much as possible.

Though the Recorder takes the primary notation role during participant engagement, the Moderator should also take some notes. Regardless of what style you use as Moderator, here are a couple of notation tips:

- At the very least, note on your Moderator’s Guide which questions net the most interesting responses.
- Leave space on your Moderator’s Guide to jot quotes and key things each participant says. Noting the time when a key moment occurs will save time later when you want to locate it on the recording.
- Don’t try to capture every word; rather, focus on eye contact and optimizing engagement from the participant. Be friendly, open and responsive.

A quick note about tricky situations: Engaging with people can become tricky in about a zillion different ways. Interpersonal issues, bathroom challenges, hygiene, timing, weather-related problems...people can be messy and unpredictable. The best bet is to over-prepare and try to be ready for anything. When things become complicated, use your best judgment, treat your respondents and their community with professionalism and respect, and if you absolutely need to leave, do so.

EXAMPLES OF WIDENING THE LENS ON A SINGLE TOPIC

- *Narrow lens – Show me how you brush your teeth.*
- *Medium lens – Tell me about your dental hygiene habits.*
- *Wide lens – I’d like to observe and follow you through your morning ritual.*

Finally, here are some basic dos and don'ts for the Moderator.

Do:

- ✓ Ask one question at a time, and give the respondent enough time to think through a response
- ✓ Anticipate what the content of the response might be, and develop some appropriate probes or follow-ups that you may or may not use
- ✓ Make eye contact, take notes, and show your friendly interest
- ✓ Be quiet and patient, and listen. Give people time to formulate their answers
- ✓ Be open to spontaneous opportunities or topics that may arise
- ✓ Keep track of timing and alert everyone as necessary (“We have about 20 minutes left today”)
- ✓ Confidently redirect topics

Don't:

- ✗ Interrupt or talk over people
- ✗ Ask leading questions
- ✗ Answer the question for people
- ✗ Pursue anything that is making someone uncomfortable
- ✗ Be rude in any way
- ✗ Write anything on your protocol that you don't want respondents to see; they'll invariably peek at it

The Recorder

The Recorder takes primary responsibility for capturing data during the engagement session. As Recorder, you'll use all equipment for recording (images, audio, or video), and you'll make detailed sketches and diagrams where necessary. You'll also note new questions or changes to the protocol.

You may want to create a paper template to structure your note-taking; this is particularly helpful if multiple people will fill this role over the course of the engagement. Depending on what your research highlights, the template might include an unfinished framework (like a floor plan, wireframe, or conceptual model) or simply a question/answer format.



TOOL: MODERATOR'S GUIDE TEMPLATE

- Introductions and purpose*
- Contracts:*
Consent form to participate in the research, video consent form, participant compensation and information about confidentiality.
- Description:*
Scripted description of what you expect to happen to make sure everyone is on the same page. At the end of this give the participant a moment to ask any questions.
- Reminders:*
Notes to self, a time check, a reminder to turn on the camera.
- Interview:*
 - *Getting to know the participant [This group of questions establishes rapport with the participant, should be easy questions]*

 - *Key topics [These questions set context for the main focus of the research]*

 - *Details [These are questions that probe into specifics]*

 - *Summary [These questions allow you to paraphrase what you heard and give them a chance to respond]*
- Wrap up and thank you*

// EXAMPLE MODERATOR'S NOTES SHEET

DentalCo

Bathroom Research

BATH 1 - primarily in morning
 Sequence of activity somewhat disordered?
 * see photo of storage
 Tooth care starts, ends here but after
 does other things while brush.
 → rationale < see tape w/ 1:00 > ← NEVER! ←

X BRUSH ✓ PRODUCT
 not able to complete hair b/c mirror
 placement

- Morning
- Evening
- Teeth
- Hair
- Cleanup
- Storage
- Sharing single
- Multi-Tasking
- Feels Good

"this is the bathroom I use when I'm sick"

Example Moderator's notes sheet for DentalCo in-home study. The grid creates a place for a quick floor-plan sketch and documentation of a sequence of activities that are covered in the interview. Open space for notes and a checklist of topics to cover are on the bottom of the page with room for the Moderator's notes.

Prepare Your Setting and Capture

People Research can happen anywhere in the world or online—so carefully choose the location for your engagement with people. First, look closely at your inquiry to determine whether you need to be someplace special for your research—or will a survey or phone call suffice? The method(s) you chose using the method selection tool (on pages 46 and 47) should guide your choice of setting.

Every once in a while, it's genuinely cost prohibitive and fundamentally unnecessary to physically visit the place where your people are—but usually, it's the only way to truly understand them. Only with what anthropologists call “field observations” can you gain insights into three-dimensional spatial complexity, human adaptations to the built environment, important factors that people take for granted and might not think to tell you about or contextual challenges to which people have adapted. Ultimately, People Research is an effort to understand human experience in a particular domain. The closer you get to being present when that experience happens, the wider your lens into your participants' world, and the deeper your understanding. And being with your participants in context facilitates serendipity—seeing something you hadn't expected and inquiring about it.

So, consider: will just voice on a phone call or words on a survey give you the information you need? Or do you need an in-person visit, perhaps in a special location (home, a participant's favorite coffee shop, a place that's otherwise relevant to your topic)? Balance the type of information you most need with the method you've chosen, to identify the ideal setting for your research.

Prepare your tools and supplies

Prepare for any type of research with trial runs and appropriate tools. For remote research, you likely have a full complement of office supplies at your desk, though you'll still need to prep before beginning. When you head out for fieldwork, take a travel toolkit. (See below for more details.)

Final preparations for a remote engagement session

Digital remote tools seem simple—but software is being revised all the time, so be sure to run pre-checks on all technology you plan to use. Test and re-check your tech setup before every remote engagement session.

Tip: If on-site engagement is truly impossible, you can simulate that experience by asking participants to share relevant photos or videos with you.

Final preparations for an in-person engagement session

- If applicable, contract with a language translator and/or local guide.
- Double-check that you have correct location information; drive by in advance if you can. Make a paper copy of the address and contact info. Arrive early, and plan plenty of time to find parking.
- As soon as you arrive, assess and prepare the best possible audio, lighting, and furniture setup.
- Use the bathroom, eat, and hydrate before the session.

Toolkit for an in-person engagement session:

- Hard copy of location and contact information
- Basic office supplies (tape, scissors, paper, pens, business cards)
- Camera (still and/or video)
- Audio recorder
- Sketching supplies
- Schedules
- Contracts and payment organizer

Capture Your Session

Once you finally begin engaging with your participants, ensure that you're capturing everything you want to. Remember that you must gain consent to use electronic recording tools. Ahead of time, consider: what will your data look like the moment the session is over? What do you hope or expect to have collected? How will you navigate through it and make sense of what you now have?

Usually, a combination of audio/video recording with pen-and-paper recording yields the best information capture. Then, you can capture everything without too much effort, and you can synthesize on the spot what you hear and see by sketching connections, diagrams, floor plans and other ideas.

Debrief and Record Highlights

When the engagement has ended, your team will be brimming with thoughts and ideas ranging from protocol adjustments to new questions and hypotheses. Many of us also erupt with design solutions and product ideas from this type of research. Immediately, do a quick debrief with the research team, and write up a (max one-page) summary of the session highlights. It's harder than it sounds to make time for this, but it will make your next phase—Analysis—much easier.

Notes on Compensation

You need to compensate your participants somehow, but this does not always mean a big cash outlay. Here are some rules of thumb for participant compensation:

- Clarify up front what you can pay.
- Try to match the price to the time commitment.
- Some people will participate for candy bars, \$5 gift cards or other low-cost compensation.
- Some insight you can get for free (e.g., from family or friends)—but you owe your participants at least your gratitude, via handwritten thank-you notes. Possibly include a specific reference to how their participation helped your team.
- In more expert or professional domains you'll need to pay participants hourly, roughly equivalent to their professional compensation.

Notes on Ethics

Ethics are an important consideration in People Research. Find out right away whether your organization or your client is subject to the review of your human subject research by an Institutional Review Board (IRB). If not, you are still required to work ethically—but you're on your own to figure out what that means. This section includes tips for conducting research ethically. Generally, this means treating people the way you would like to be treated, by prizing the following attributes:

- **Honesty:** Convey information truthfully and honor your commitments.
- **Accuracy:** Report your findings correctly and take care to avoid errors.
- **Efficiency:** Use your resources, including participants' time, wisely; take care to avoid waste.
- **Objectivity:** Let the facts speak for themselves and work to avoid bias.

Ethical misconduct

The U.S. Office of Science and Technology Policy (OSTP) defines research misconduct as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research or in reporting research results¹⁷.

- ***Fabrication*** is making up data for respondents that do not exist—a pretty clear violation. Often a recruitment doesn't go as planned, because humans are unpredictable. If you need more people and/or more time, it's fair to ask for it. It's always better to do more research, or decide to move ahead without it, than to fabricate data.
- ***Falsification*** is misrepresenting the data you have. Sometimes the data disappoints us or points a different way than we hoped or expected. That's not justification for falsifying it. Research processes always involve learning and surprise. To move your program forward, make sense of the data you have, not the data you wish you had.
- ***Plagiarism*** is using text or images that belong to others and (explicitly or implicitly) indicating that they're your own. Build on others' work, but always cite it appropriately!

Keys to ethical design research

Think of the following as rules of thumb for your research. Always ask yourself, how would I feel if a researcher used my [image, comments, etc.] to further their design work?

- ***Consent***: Ask people to agree to participate. Get their express agreement before you record audio or video.
- ***Risk***: Risk is the chance that some unwelcome event will occur. Your method should include zero risk for the participant. Exposure, injury or harm—whether physical or psychological—is your responsibility.
- ***Anonymity***: Keep your participants' identity and any identifying information confidential.
- ***Facts***: In your reporting, clearly distinguish between exactly what you saw and how you thought about it.
- ***Compensation***: In addition to verbally thanking them, be sure to compensate people for their time.



The insights and hypotheses that emerge from analysis are key sources of value.

03

Analysis

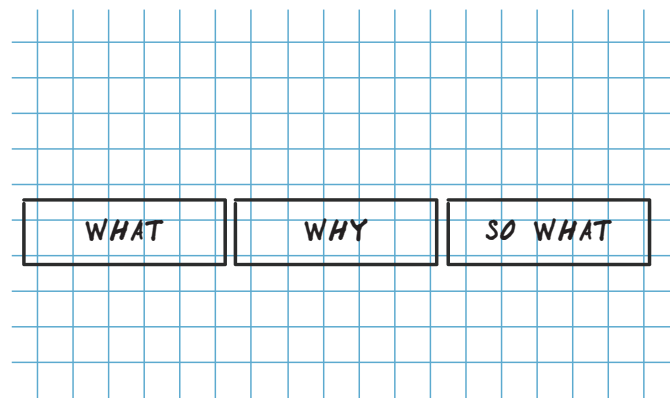
UNDERSTANDING YOUR DATA

This part of the research project can be overwhelming and, therefore, easy to skip. You may feel pressure to deliver the report soon after data collection ends. The volume of data you have (in notes, recordings, photos, to name a few) can seem vast. You had some fascinating insights directly after your engagements; you might be tempted to call these your “analysis” and begin reporting. While proper data analysis is a lot of work, it is crucial to your project. This phase will yield the most important insights and hypotheses; it’s the source of People Research’s value. I’ve heard from frustrated product designers, “We tried research, but we didn’t learn anything that we didn’t already know.” Inevitably, this is at least partly the result of not spending enough time on analysis. Insufficient analysis engenders organizational distrust or undervaluing of research as part of a creative process.

Minimal Analysis

At an absolute minimum, an analysis should include a **review of what came out of the research and reflection of what it means for the next steps**. Take a look at all the data and ask yourself:

- What did we learn?
- Why is it important?
- So what should we do?



This exercise leads into careful problem framing that drives the next iteration of the project, formulating the problems as “How might we” questions that open up the context and opportunity space for a design phase. Forming problem statements follows a similar pattern to forming research questions. The context, content and open or closed nature of the question will direct the level of creativity and innovation it demands. For example:

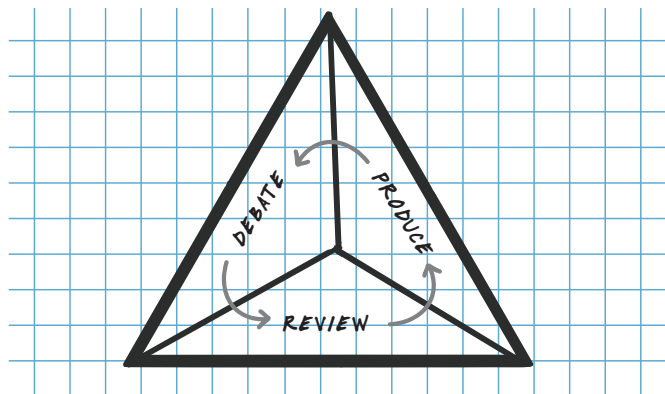
- *How might we get people to brush more?* This question will lead us into solutions that focus on frequency and tooth brushing.
- *How might we integrate tooth brushing into lifestyle choices?* This question might open up the thinking about what drives frequency, and the myriad factors that influence a decision to brush or not brush.
- *How might we facilitate good hygiene?* This question expands the context even further; now, solutions are not embedded in our problem statement.

Digging Deeper with Your Analysis

If you’ve collected a lot of data, worked with a team, or have more stakes riding on your research outcomes, minimal analysis is insufficient. Moving from raw data to insights that drive innovation is both the hardest and most valuable part of People Research. First, to ensure alignment of understanding, let’s take a close look at the terminology. The smallest unit of information coming out of the research is your **data**. The data is what you collected—raw information gathered during engagements with people. It’s what you saw and heard, verbatim. On first review you’ll organize data into initial **findings**. Findings summarize the data and might reveal patterns. Conceptual patterns are commonly held ideas that repeatedly arise—across research methods—like “I have bad teeth” or “I’m religious about dental hygiene.” An **insight** is the brand-new knowledge that results from combining two or more findings with your own creative thinking about the topic.

Destruction and Construction

There's a reason that you often see people clustered around white boards and sticky notes for this type of work: these tools allow us to visualize and share information and our thinking about it. They also allow us to **remove information from one organizing structure (break it) and rebuild it in another organizing structure (reconstruct it)**. Restructuring is key to analyzing data. The structures imposed by our computer tools—grids in spreadsheets, lists in file folders, or narrative notation in a text document—all serve important purposes, but they can limit our analytical thinking and exploration. To analyze People Research data, we need to bust it out of those structures and reform it in new structures that emerge from the data itself. So, find a white board and sticky notes to begin your analytical process. Note: if you don't have access to these items, you can simulate the experience through online tools, like Mural¹⁸, that facilitate a shared collaboration space.



Data analysis for People Research projects generally falls into three recursive phases: Review, Produce, and Debate. You needn't move through them sequentially: if you get stuck in one, move to a different phase. If you're not satisfied with where the analysis lands, begin again. You'll likely bounce among these phases several times before arriving at a final analysis.

// EXAMPLE FINDINGS

DentalCo

Some things that were top of mind for the DentalCo team as they wrapped up the research:

1. *While a toothbrush is a standard, people are using proxy tools to clean teeth on the go (gum, tissue, toothpicks)*
2. *Mouth injuries, disease, and appliances present new and different mouth cleaning situations*
3. *Toothbrush replacement patterns and dentist visits vary widely*
4. *People leave the water running when they brush even though they know they shouldn't*
5. *About half the participants bring their mobile phone into the bathroom during morning grooming*

Review: Look at the Whole, and Look at the Parts

First, “look at the whole”: read your notes. Give this step as much time as you can afford. Look across the notes. Reread all your notes. Review all your recordings and make new notes. Read those again, too. As you do that review, create a first round of highlights capturing “what’s interesting” in the data. Proxies for “what’s interesting?” include:

- What surprised you?
- What stood out to you?
- What conflicts or contrasts did you hear?
- What details did you see that you didn’t expect?
- What did you expect that you didn’t see or hear?
- What new questions did this research prompt?

In addition to reading (and re-reading) your data, now is the time to “read” your personal observations. Anything from the sessions that caught your attention—a respondent’s momentary hesitation, an object on a desk, an off-handed remark—might be worth discussing. List these highlights, as well, and add them to your data set.

After reading, re-reading, and re-re-reading, reflect. Intentionally step away from the data. It’s hard when you are under a time crunch—so bake this day into your schedule. Change the scenery. Get into a flow state with a sport, family time, or other activity. Then reflect again on the data from a distance.

Now, “look at the parts”: break your data apart and reform it. First, remove its structure. Take the data out of whatever structure is currently forcing it into order, whether narrative text, a spreadsheet, or a file folder of images. Make your data movable by writing each data point on a sticky note (or printing each image), and sticking everything at random on a white board. It now looks like a mess, but that’s okay. You have to break your data out of its arbitrary structure before you can allow its natural structure to emerge.

Reorganize the data.

- Group notes into concepts. Physically arrange and organize the data in order to see new patterns and trends, or generate insights.

- Create spectrums that allow you to compare and contrast concepts. These might be subtle variants of one idea, or they might map opposing forces.

- Document the same data type across the set of participants and put them all up on the wall together. These might be a similar photo of every participant or everyone’s answer to the same question.

- Create a new table that lists a finding in the first column, then correlated content in the second, third and fourth columns—for example, a hot topic and your participants’ “where,” “what” and “why” responses.

Produce: Generate New Thinking

From a distance, good user experience research looks like magic¹⁹: the team goes out and collects data and then somehow returns with incredibly insightful new understandings about people and their experiences. But it's not magic; it's hard work that drives you from data-collection to insights. It takes time and will be messy, frustrating or overwhelming before it gets good. Stick with it. Here are some principles for producing new insights from your reorganized data.

Everything is a candidate.

As you start this phase, think of each new idea as just a draft—a “candidate”—and make as many of them as you can. Don't worry at first about refining them to perfection; just generate them. You should be able to generate enough that you can combine some and toss the weak ones later. Your candidates might include:

- Patterns that lead to themes and findings. A pattern is just something that you heard over and over again, that caught your attention. Sometimes we call patterns “themes.”
- Models that organize the findings to make some deeper meaning from our data. Common model types include spectrums, 2x2 grids, journey maps, and cultural models (like the “onion model,” which depicts layers of meaning through concentric circles).

Sketching is the analytical tool of choice.

Crafting models from research findings is best done through sketching, discussion and iteration. Through sketching we are trying out new structures for our understanding, working with shape and framework, as well as with language and meaning. Iterate on a whiteboard for this. Look for sequences, opposites or layers that inform each other. You might use some of the common sketching modes outlined in Table 4 on page 86.

Insight = data + analysis.

Sometimes a simple observation or data pattern (*people seem to keep their old toothbrushes for awhile, even after opening a new one!*) seems so revelatory that we're tempted to call it an insight and close out the analysis phase. Don't do this. To spin simple data into real insight, you must apply thoughtful analysis. Begin with these questions:

- Why is this data/observation/pattern important? A gut instinct that something is important is an invitation to wrestle through why—what deeper meaning does this data have in the context of your project?
- What new understanding have we gained? An insight, by definition, is new. It must enlighten the reader to novel understanding of people's experience in the domain.

Once you have worked through a thorough analysis, carefully craft an insight statement—a concise and powerful assertion that people will remember and refer to again and again.

Debate: Discuss and Challenge Your Candidate Findings

Now, with a partner or team, discuss and debate your candidate findings. Poke holes in them, challenge each other and build on the thinking together, using your brains as natural synthesizers. Even if you did your research alone, find someone knowledgeable to review the data with you, push on your thinking and bring new questions to the table.

This step will be both frustrating and exhilarating. Discussions will at times be intense, but should always be productive and never devolve into a fight. After all, analysis is not a cage match between “my idea” and “your idea;” it’s a search through the data for new understanding, so everyone can win.

Repeat, Refine and Commit

The analysis phase ends when you have some strong concepts you can confidently communicate to the audience for your research. It may take few cycles of reviewing, discussing and producing new thinking to get to this place. A good rule of thumb is to schedule twice as much time for analysis as you spent collecting data. One week of field research results in two weeks of analysis.

If your analysis phase seemed quick and easy, ask yourself whether it yielded any new information or insight. Are you finding exactly what you thought you would find? If so, you probably didn’t dig deep enough or look long enough at the data to gain new knowledge from it. Keep working until you do.

Organize Your Outcomes

Toward the end of your analysis phase you should have a list of the outcomes of your research. Outcomes usually fall into a few common categories, ideally reflecting the goals identified in your Initial Inquiry. Common outcomes include but are not limited to any combination of the following:

- Documentation
- New understandings
- Hypotheses

Documentation of the current situation

People Research often results in a highly organized set of findings that document how things are right now for people with regard to your business offerings. Some examples:

- Visual stories (sketches, diagrams, journey maps)
- Quotes, photos, or highlight videos
- Models or frameworks of understanding

Content about the current situation pulls your reader into a deeper empathy and understanding of the current state of people's experience with the offering. A few highly compelling or powerful pieces of documentation of real people go a long way to make your point.

New understandings that help bridge from current to future

This category of outcome includes words or ideas

that construct paths from what is being offered today to what should be offered in the future. They ultimately have the most value in business, as the short soundbyte of a good insight will be repeated. The format for new understandings can be highly specific to different domains, offerings and organizations. New understandings point the way forward and might include:

- Insights
- Themes
- Product opportunity gaps

Hypotheses about the future

Hypotheses or ideas about what should come next will emerge during data collection or analysis. By all means, go forth and drive the work forward with these ideas. Make something with your hypothesis. Either build out the next round of research or start a prototype, demo, storyboard or scenario that makes the hypothesis real enough to test with the team or another group of people. These future ideas might take the form of:

- A plan for the next inquiry
- Guiding principles
- Recommendations
- New solutions

The next chapter details how you might share and archive these outcomes in the form of a report.



**Create a report
to extend your
insights to others.**

04

Reporting

SHARING OUTCOMES

Your research report creates value. It allows people beyond the research team to learn from the work, leverage it and use the new knowledge gained to move their work forward. It also gives your future self a way to reference the work and use it as needed.

If you are the only audience for your research, it might be tempting to skip this step and move on—but please don't. You'll always be glad you took the time to summarize the findings, insights and recommendations that emerged from the research. This chapter describes how best to develop powerful stories and usable information tools that leverage your research.

With the help of the Initial Inquiry tool, you invested significant work in framing your goals and aligning expectations with your audience. Now you reap massive returns for these efforts. You know your audience's preferred report format and what report components they're most eager to see. Focus your energies on these priority areas as you craft your report. Review the list of possible components of a good research report on page 31.

You finished the analysis phase with a short list of research findings, organized into three categories: documentation about the current situation, new understandings and hypotheses about the future. Now use what you know about your audience, as well as the nature of your outcomes themselves, to choose the best ways to communicate those outcomes to your audience.

How to Document the Current Situation

Curated raw data

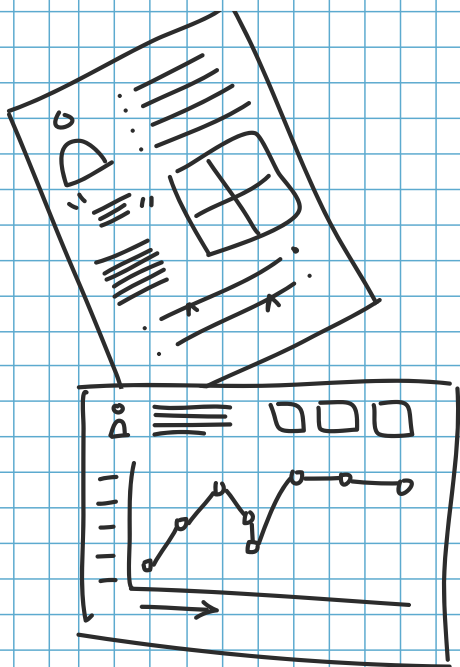
Sometimes raw data is the most powerful way to make a point. This is often the case with particularly compelling qualitative data—quotes, photos or video. Perhaps you recognized the moment's value when it happened, or perhaps a theme emerged in the analysis phase. Even the most interesting raw data, though, needs to be curated. Cull your data for a brief and evocative collection of highlights. Give them titles and use them in key moments to remind your audience that this research was with real people.

Visual storytelling

Visual storytelling can take many forms, each intended to **bring your audience to a deeper empathy and understanding of human experience** in the domain. Basically, you want to make the customer or end-user relatable, putting a human face on your research's findings. Your visual story might center around one real participant (a user profile), or it could be a composite fictional person synthesized from all of your data (a persona). Use storyboards, video or journey maps to convey customers' relevant thoughts, feelings, priorities or fears, as well as relevant timelines or sequences of events related to the use of your product. Often, these timelines highlight breakdowns or pain points in the process, demonstrating room for improvement. Regardless of its format, a visual story is an excellent tool to help an audience build empathy for people who are different from them.

Frameworks

Frameworks bring graphical shape to abstract concepts, allowing you visually to unpack relationships among ideas. Graphical frameworks are crucial for getting members of a group on the same page about how key concepts in the domain interrelate. Visual representation of concepts, dimensions and degrees allows you to convey more—and more clearly—than words alone. See page 86 for some common frameworks.



How to Report New Understandings

Themes

A theme is a high-level pattern or trend that resonates from the research. It could be a topic, position or subject recurrent in the research findings—notable because it reveals a pattern across participants and methods. A theme should be communicated through a memorable title and a couple of points of supporting evidence.

Insights



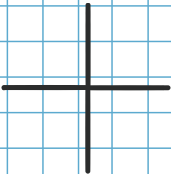
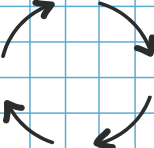
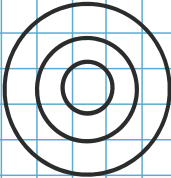
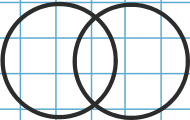
An insight statement typically combines an understanding of a person or situation and some sense of change or novelty. Unlike themes, insights don't always reflect patterns: sometimes one powerful comment from a participant can spark a researcher's "aha" moment. As with a theme, an insight statement should be phrased memorably and concisely and should contain some supporting evidence.

Product Opportunity Gaps

Product Opportunity Gaps²⁰, or POGs, identify people's unmet needs that could be met. POGs are the context for a new offering that doesn't exist yet. They are frequently revealed (sometimes serendipitously) when we do People Research. Participants might not even be aware of a gap in service—but a keen observer notes places where people are hacking together solutions or repeated pain points that never seem to resolve. POGs often emerge when we look closely at where offerings are (and are not) meeting the needs of human experience in the context of the global systems that surround us. Take a look back at the Context tool on page 20 and 21 at some point in the Analysis and Reporting phases to contextualize your outcomes.



TABLE 4: SKETCHING & FRAMEWORKS OF UNDERSTANDING

MODEL:	LOOKS LIKE THIS:	PURPOSE:
VECTOR		<i>Arrows are verbs depicting action or movement in a direction. Often used to describe time as an axis from left to right.</i>
SPECTRUM		<i>Good for considering opposing forces at opposite ends of a range. Also great for teasing out subtle differences between two similar concepts.</i>
2x2 or QUAD CHART		<i>Allows you to unpack spectrums within two concepts (x and y axes) and then map your findings or ideas onto them. You can add arrows to indicate movement around the map.</i>
CYCLE		<i>Describes a process that repeats in a sequence. This can be achieved with arrows in a circle, triangle, square or any repeating pattern.</i>
EULER		<i>Nested shapes describes concepts that are subsets of each other.</i>
VENN		<i>Describes overlapping areas between two concepts where the shared area contains shared content.</i>

How to Report Hypotheses About the Future

Good People Research answers the question, “So what?” Now that we know what we know, what should we do next? Research that doesn’t end with strong next steps doesn’t spark innovation.

Recommendations

Recommendations can occur at any level of detail. They are not, in themselves, detail design but do assertively push a design team toward something. Recommendations might take the form of a list or collection. They should be clear and direct, asserting a position about what should be and why. For example, a research team might recommend that designers move a button from an obscure location to the place where people most often look for it—a detailed recommendation. A higher-level recommendation could be, “The website’s Help tab should include animations for all complex processes.” This would apply across all “help” content and function as a rule of thumb for content creators.

Design principles

Design principles are high-level guidance for the creative and technical teams responsible for using the research to bring something new into existence. Technical teams often want principles to guide their work in the (usually messy) decision-making inherent in interdisciplinary design. Three common formats

for design principles are:

- **Guiding principles:** For example, any wearable-computing device a person wears for work should provide minimum burden and maximum options—a simple value equation for that domain.
- **Must/should/could:** A set of prioritized concepts that remove the guesswork for design teams trying to balance competing factors. For example, we might say that a new wearable technology *must* provide function that people need on the go, *should* be lightweight and comfortable and *could* be fashionable.
- **Set of guidelines:** A brief list of factors the design team needs to keep in mind throughout its process. For example, a set of guidelines for wearability might identify the factors design teams need to account for and how—such as placement, shape, size or attachment to the body²¹.

New solutions

If forward-looking solutions are an outcome of your work, it may make sense to share those solutions with your audience in a tangible form. Prototyping and sketching ideas for new approaches can make the findings real for your audience and engage them fully in your research. For example, as one way of sharing insights from a day spent shadowing a therapist at a psychiatric hospital, we made detailed sketches of the people and context. The therapist (audience for the research) had requested visual learning materials, but no photography was allowed in the hospital—so we used sketching to synthesize findings and offer solutions.

Delivering the Report

The impact of your research depends heavily on where, when and how you deliver its outcomes. In planning your delivery, consider three key factors: timing, voice and media.

Timing

The best research is delivered to the audience in the precise moment when they need it, can absorb it and are ready to put the findings into action. Do what you can to learn the best time for delivering your research. Understand your organization's annual planning cycles, and time your research to help set direction for the next quarter or next year. Or plan delivery to coincide with a summit, conference or creative session that naturally launches the team into what's next.

Voice

When choosing the language and style of your report, consider your audience and organizational culture, and diversify when possible. You can convey the voice of the researcher (you), the customer (your participants), and experts (from your literature review or interviews). It's a good bet to include all of these in the report. Organizational cultures vary, though, and while one group might trust a PhD above all else, another group might trust only the customer. Learn what voices your audience most values, and put them front and center.

Media

In choice of media, as in voice, organizational culture often trumps all. Groups of people gel around different tools for sharing information, and many people have their favorites. Sort out early whether your report should be a PDF or slideshow, and whether your audience wants videos or pages and pages of text. In all cases, making the report more visual adds accessibility, interest and memorability to the work. Visual interest simply attracts more attention to the good work you did—as well as making it skimmable and shareable.

Note: white papers

Historically, most research has been reported in the form of a white paper. It's mostly text and describes the inquiry, approach, related work and findings. The best peer-reviewed white papers also contain some new high-leverage understandings and resonant ideas about the future. The traditional academic peer-reviewed white paper, though, is not the best primary format for today's fast-moving business environment. In response, many organizations now internally share a sleeker, "sexier" presentation—and externally publish a more academic digital post or white paper establishing domain expertise.

// EXAMPLE IDEAS ABOUT THE FUTURE

DentalCo

MUST/SHOULD/COULD

The team's bathroom grooming research may have revealed some critical lessons about dental hygiene.

A dental solution in that space:

- *MUST address individual variations in dental health and wellness,*
- *SHOULD provide visual cues about timing, and*
- *COULD leverage smartphones in the bathroom during brushing.*

PRODUCT OPPORTUNITY GAPS

1.

Many people stereotype their teeth and have adapted their routines to this belief system. In order to meet the needs of people who believe they have "great teeth" or "bad teeth" DentalCo should refine and establish "tooth types." With a surety of knowing their tooth type, people can customize their products and routines. The opportunity is to create a tooth type test and a suite of product offerings. This could include information, tools and treatments for each type of teeth.

2.

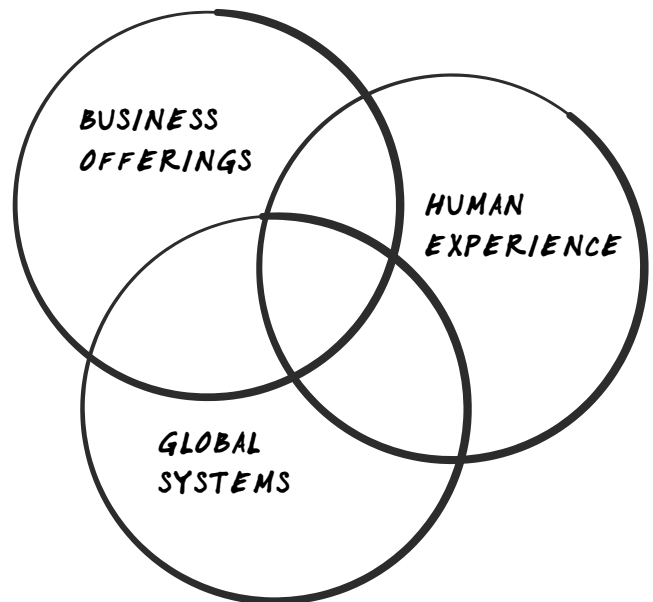
Marry digital with bathroom grooming to increase knowledge and engagement with dental care. Many people carry a mobile phone or tablet from the bedroom to the bathroom in the morning. The content they seek varies from news and entertainment to music, weather or calendar updates. Even with this information tool inches away, they demonstrate and discuss a lack of knowledge around the quality of their dental care routine and a desire for improvement. DentalCo should leverage this reality and create a digital companion that supports health and hygiene in the morning routine.

Report Planner

As you wrap up your project, make a plan for how you will codify and commit to the outcomes. The report will help you not only share with others what has come out of the research, but also have something to revisit later. You can document the real data you have about the current state of the experience for people, note your insightful new knowledge, and make some claims about what this new understanding of people means for the products and services you offer in the future.

1) Describe the context

Create a visual reflection of the current situation that people are experiencing. What is happening right now at the intersection of their experience, your business offerings and the global systems at work around you?



// EXAMPLE REPORT WORKSHEET

DentalCo

Below is an example of the report worksheet filled out for the DentalCo project team. Here they have started to notate the key takeaways that will be part of their report. This early synthesis of the research makes a first draft of the one-page executive summary, and can also serve as an outline for a longer presentation.

Report Planner

As you wrap up your project, make a plan for how you will codify and commit to the outcomes. The report will help you not only share with others what has come out of the research, but also have something to revisit later. You can document the real data you have about the current state of the experience for people, note your insightful new knowledge, and make some claims about what this new understanding of people means for the products and services you offer in the future.

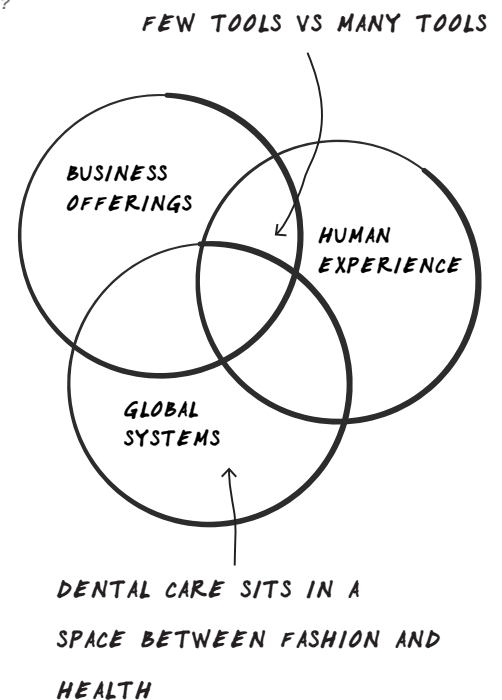
DENTAL CO - HYGIENE & HEALTH STUDY REPORT

1) Describe the Context

Create a visual reflection of the current situation that people are experiencing. What is happening right now at the intersection of their experience, your business offerings and the global systems at work around you?

PEOPLE HAVE COMPLEX BELIEF
SYSTEMS ABOUT "GOOD TEETH"
AND "BAD TEETH" THAT ARE
LARGELY UNFOUNDED. THEIR
RESPONSE TO THIS VARIES.

OFFERINGS NEED TO STRIKE
A CHORD WITH HIGH FASHION,
OPTIMUM HEALTH AND AD-
VANCED TECHNOLOGY





WORKSHEET: REPORT PLANNER

2) New Understandings

Develop an insight statement that reflects the new knowledge from this People Research. It should combine facts from data with your analysis. Proclaim this new insight with confidence!

TIME SPENT, TOOL USE AND
SPENDING VARY BY BELIEFS
ABOUT TEETH, NOT FACTS.

PEOPLE MAKE DENTAL CARE
DECISIONS AT THE DRUG
STORE OR ONLINE BASED ON
LITTLE MEDICAL KNOWLEDGE
OF THEIR TEETH.

MOST ENGAGED BRUSHERS
BRING A SMARTPHONE INTO
THE BATHROOM DURING
THEIR DENTAL CARE ROUTINE,
BUT AREN'T YET USING IT TO
SUPPORT THE TASK.

3) Hypotheses about the future

Determine how abstract or concrete your ideas about the future are. What can you confidently say about what the next new offering in this space should be?

MORE UNIVERSAL
●
●
MORE DETAILED

GUIDING PRINCIPLES

PRODUCT OPPORTUNITY GAPS
A PRECISE GENETIC
TEST FOR
"GOOD TEETH"

MUST SHOULD / COULD

INCLUDE A RICH ONLINE
DATA RESOURCE

DESIGN RECOMMENDATIONS



**People Research
can disrupt
stagnant industries,
drive innovation
and change lives.**



Conclusion

The approach to People Research described in this handbook is not unique to any industry or domain. Anyone who recognizes that their work could be better with an increased understanding of people can (and should) use the guidance provided here. Whether you are crafting language for a law or shaping plastic for a new product, it's crucial to understand more about the people you expect will adopt, enjoy and spend their money on the fruits of your labor.

Failure Modes

I've seen research fail in myriad ways. Sometimes I've watched my own research flop; often, I've been the consultant contracted to clean up after someone else's research effort came up empty. So, without being a downer, I'd like to describe a few common failure modes—and their undesirable results—in the hope that you'll sidestep them.

Failures of Planning

Planning-phase failures usually have to do with misalignment between researchers and audience. If your inquiry asks the wrong questions—if they don't reflect your audience's actual unknowns—your report might elicit an audience response of “we already knew that!” If you don't tailor your report's format to your audience's needs (for example, you hand a dense research text to a creative team who wanted videos or bullet points to a UX team who set aside a week to review your outcomes), your audience may end up ignoring, undervaluing, or being unable to profit from your work. It is imperative that you iterate your research planning with your audience until you are in complete agreement about the components reflected in the Initial Inquiry tool on pages 32 and 33.

Failures of Engagement

The most common failure in the Engagement phase (though it may reflect poor planning, as well) is choosing the wrong participants. Without precisely identifying the stakeholders that matter most, you run the risk of gathering useless data. An audience reading a report based on the wrong participants will likely discredit any emergent findings or insights.

Other failures of engagement are the result of poor study design and deployment. It's crucial to tend to all the seemingly trivial details to optimize your participants' engagement. Check and double-check everything.



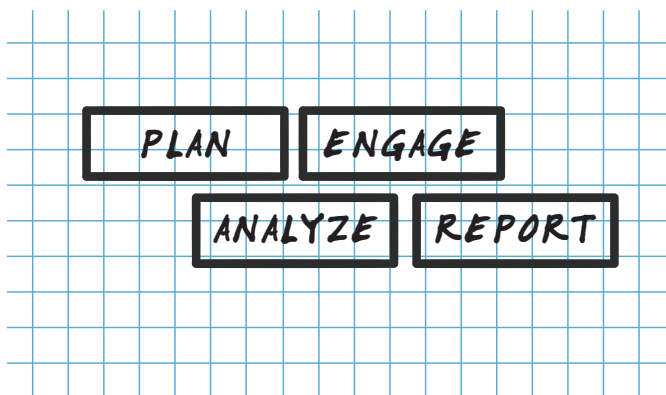
Failures of Analysis

By far the most common People Research failure modes are those of analysis. Many researchers are so energized by their initial observations—observations that seem so robust and interesting—that they skip the analysis phase entirely. Jumping ahead to (re)design directly after engaging with participants, though, is a huge mistake: you're left with weak reasoning for your new design and a lost opportunity to integrate findings that only emerge from robust analysis.

Almost as pernicious as skipping analysis altogether is failing to leave enough time to conduct analysis thoroughly. As mentioned earlier, your team should plan for an analysis period of at least double the length of your engagement period. Anything less will result in rushed or overlooked insights—a shadow of what could have been.

Failures of Reporting

If your planning efforts were strong, it's hard to fail at reporting. The most common problem I've seen in this area is a lack of structure and order to the report: the contents are all there, but the audience can't find what they need when they need it. Continually checking in with the audience for your report will help you avoid this.



Final Note: **Stay Curious!**

People Research can be done at any time in a project. The moment you realize there are things you don't know about the people your work serves is the right time to embark on research. Your research purpose and questions might depend on where you are in the process, but you can begin at any time. The best application of People Research is iterative.

To train yourself to see the unknowns—and thus know where to jump into the research process. Practice research in your daily life. Be curious about people around you and about how they interact with the world. Here are a few practical ways to do this:

- As a private mental exercise, practice framing ideas as questions. Listen to yourself speaking and try to rephrase your assertions as questions or hypotheses.
- Participate in other people's research. Anytime you encounter a phone or web survey or someone at your door with a clipboard, take the ten minutes to watch research in progress. Note the quality and sequence of their questions and the feelings they evoke in you. Speculate about the goal of their research. (In most cases, the people paid to run the study are not its designers.)
- Take note of the designed objects, experiences and interfaces you encounter. Could they have been designed in a different way? Ask yourself how else they could work.

Great People Research can disrupt stagnant industries, drive innovation and change lives—or it can sit on a shelf, gathering dust. Planning and executing a thoughtful research process can help ensure that your research creates real value, gets real traction within your organization, and drives real change.

Certainly, your research may lead only to small changes not readily visible to the consumer seeing your product on the shelf or using your service. Successful research informs and inspires the work of innovation by increasing empathy and highlighting opportunity. If your research helps you and your organization understand and serve your people better, it's a success.



NOTES:

A large grid of blue lines, typical of graph paper, intended for taking notes.

Endnotes

¹The Value of Design Fact Finder Report can be found on this website: designcouncil.org.uk/sites/default/files/asset/document/TheValueOfDesignFactfinder_Design_Council.pdf

²The 2015 DMI Design Value Index Results and Commentary can be found here: www.dmi.org/page/2015DVIandOTW

³The ISO Standard 9241 part 210 can be found here: www.iso.org/obp/ui/#iso:std:iso:9241:-210:ed-1:v1:en

⁴Jonathan Ball and Justin Knecht created a great tool for taking a structured approach and leveraging the “double diamond” process. It can be found at designthinkingcanvas.co.uk

⁵Many students have worked on the fictional “Bathroom Grooming” project in Carnegie Mellon’s Integrated Innovation Institute User Research Methods Class. Brandon Zepeda allowed me to borrow a few ideas from his final report to flesh out the example project in this book.

⁶Cagan, Jon and Craig Vogel. *Creating Breakthrough Products: Innovation from Product Planning to Program Approval*. FT Press 2002. Now available as a free digital download here: www.CreatingBreakthroughProducts.com

⁷Do a web search for “journey mapping.” Kerry Bodine has done the clearest articulation of the tool and its role in business through her writing (at Forrester Research), teaching and publishing as Kerry Bodine & Co. Learn more and take a course at: kerrybodine.com/customer-journeys

⁸For more on methods take a look at Bruce Hannington and Bella Martin’s *Universal Methods of Design: 100 Ways to Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions* and Bruce’s website at designresearchmethods.com/

Research Toolbox: daed.com/ResearchToolbox.pdf

⁹LUMA Institute has developed a rich set of resources around the tools for innovation including several just focused on People Research and analysis. Booking time in one of their short courses is the best way to quickly learn these methods: www.luma-institute.com. In addition they have developed a rich set of online resources (instructions, videos and examples) which can be found at: www.lumaworkplace.com

¹⁰Concept Mapping was pioneered by Joseph Novak. Considerable references, discussion and tools can be found on his website at cmap.ihmc.us



¹¹For more rigor around your observation work, a great book is James P. Spradley's *Participant Observation*.

¹²For a deeper look at CoDesign, read Liz Sanders' book *Convivial Toolbox*.

¹³For a rich resource that covers the basics of interviewing and so much more about People Research, take a look at Steve Portigal's book *Interviewing Users*.

¹⁴Jakob Nielsen is by far the world's expert on Usability Testing and he has thankfully produced a rich set of resources for you at his website: www.nngroup.com/topic/user-testing

¹⁵Building a Questionnaire can be done with many tools, in particular those specific to remote research. Learn more about remote tools here <http://remotereseach.ch/tools/>—but don't forget to attend to your questions! Just because the tool lets you ask a poorly worded question doesn't mean you should.

¹⁶Heuristic Analysis has been articulated by many experts in the usability field. My favorite paper also details a method for how to prioritize the findings from the analysis. See Bishop & McQuaid: www.researchgate.net/publication/2389004_An_Integrated_Method_for_Evaluating_Interfaces

¹⁷For more on research ethics and to find training and certifications for working with people, visit: ori.hhs.gov/definition-misconduct

¹⁸Many great tools exist for online collaboration. The digital whiteboard spaces at www.mural.co—as well as the templates they offer are a great place to start.

¹⁹Amy Goldmacher first pointed this out to me and since it's part of her dissertation we can cite it here: "...And Then The Magic Happens": My Dissertation Research. Presentation for ANT 5210, October 13, 2009.

²⁰Also from Cagan and Vogel's *Creating Breakthrough Products*.

²¹Research on wearable computing in the 1990s led to this and other insights that were published by Carnegie Mellon's Wearable Computing Group at the IEEE International Symposium on Wearable Computing.





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ABOUT THE AUTHOR

Francine is a designer and researcher with more than 25 years of experience conducting research to inform design, applying a range of research methods to hundreds of projects. She has expertise in gaining insights about people and bringing their needs to the forefront in technology development. Francine collaborated on the foundational materials that became LUMA Institute; now, in addition to her work with companies from startups to global corporations, she teaches User Experience Research at Carnegie Mellon University. With five patents and more than 15 publications to her credit, Francine has exhibited and lectured about her work at schools and institutions around the world. She currently works at Uber Advanced Technologies Group.



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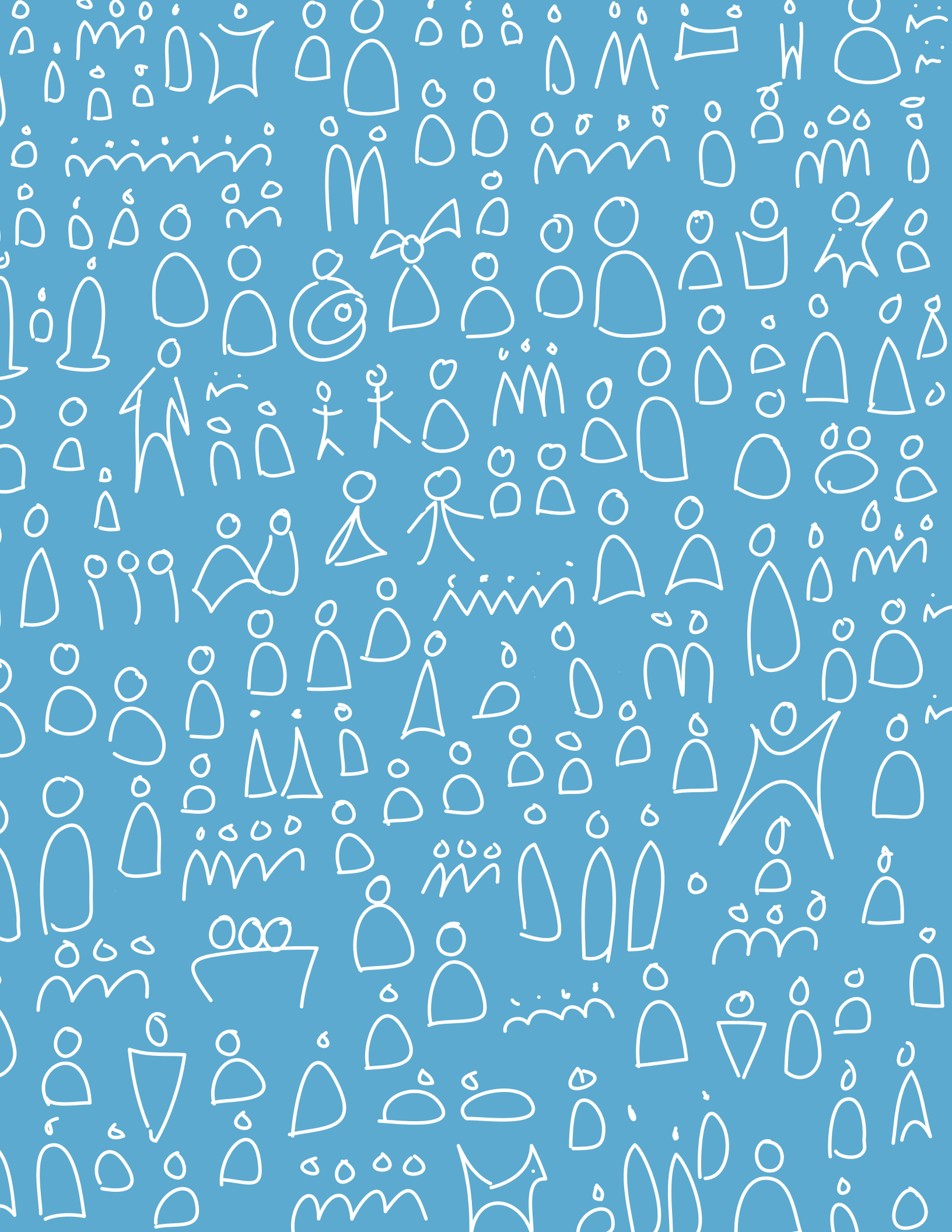
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Handbook of People Research

You don't know enough about people.

People grow and change constantly, impacted by the cultures they create and the global systems that surround them.

This book is a practical guide to succeeding at People Research in creative, technical and business domains. Presented here is a basic framework for conducting research with people to inform design, in four parts: planning, engagement, analysis and reporting. The content is presented as a handbook that includes worksheets, tools and tips for people who plan to actually conduct People Research. It is a practical, hands-on guide that you will refer to again and again.

