

Designing for Veterans

A Toolkit for Human-Centered Design

POWERED BY DEPARTMENT OF VETERANS AFFAIRS CENTER FOR INNOVATION

October 2015

Version 1.0



TABLE OF CONTENTS

An HCD Toolkit for VA Employees	6	Useful Frameworks	45	Step: Pitch and Execute the Concept	80
The HCD Philosophy	7	Root Cause Analysis	46	Build the Pitch	81
The Human-Centered Design Process	12	Prioritize Customer Needs	47	Summarizing the “Elevator” Pitch	82
An Interactive Toolkit and Menu	13	Compile a Research Findings Report	48	Step: Track and Learn Going Forward	83
FRAME	14	Discover Checklist	49	Evaluate Outcomes	84
Steps and activities	15	DESIGN	51	Tracking Against Metrics	85
VA Innovators Network	16	Steps and activities	52	Create a Learning Plan	86
Step: Problem Framing	17	Revolutionizing HIV Testing	53	Deliver Checklist	87
Identify the Problem	18	Step: Craft Design Principles	54	APPENDIX	89
Step: Business Framing	20	Step: Generate Ideas	55	Templates	89
Define the Ambition Level	21	Group Ideation and Clustering	56	STEEP Framework	90
Step: Project Framing	22	Step: Develop Concepts	58	Empathy Map	91
Determine Scope and Metrics	23	Ten Types of Innovation Framework	59	5 E’s	92
Write a Problem Statement	24	Step: Evaluate and Prioritize Concepts	60	Fishbone Analysis	93
Create a Project Plan	25	Concept Evaluation	61	Customer Needs Assessment	94
Frame Checklist	26	Balanced Breakthrough Model	62	Business Model Canvas	95
DISCOVER	28	Depict the Solution	63	Causal Loop	96
Steps and activities	29	Storyboarding	64	Resources	97
Veteran-Centric Ethnography	30	Rapid Prototyping	65	Additional Resources	98
Step: Contextual Research	31	Usability Testing	67	Additional Case Studies	99
Plan Contextual Research	32	Design Checklist	68	Compensation & Pension Exam Discovery	100
Step: Ethnographic Research	33	DELIVER	70		
Plan Ethnographic Research	34	Steps and activities	71		
Develop an Interview Guide	36	Cancer Care Center Redesign	72		
Interviewing	37	Step: Finalize the Concept	73		
Different Types of Interviews	38	Visualize the Final Concept	74		
Observation	39	Step: Plan for Implementation	75		
Debrief with Your Teams	40	Build a Roadmap	76		
Step: Identify Insights	42	Identify Capabilities and Resources Needed	77		
Clustering	44	Business Case	78		
		Business Model Canvas Framework	79		



PUTTING PEOPLE AT THE HEART OF OUR INNOVATION EFFORTS

Many people talk about the “Golden Rule,” but at VA, and in all customer service organizations that strive for excellence, we should aspire to the “Platinum Rule.” Instead of treating others the way you want to be treated, we must strive to treat others the way they want to be treated. Becoming a truly Veteran centric organization means living the platinum rule and organizing ourselves and our services around the needs of Veterans.

Human Centered Design (HCD) is an approach developed to help organizations produce designed products, services, and processes focused on the needs of those who will use them and benefit from them. Simply put, people are better served when their needs are aligned with the application and purpose of the products and services they use.

HCD is one of the approaches that will help VA transform to best serve Veterans. HCD will serve as a foundational approach in which Veterans’ needs are the main focus during all stages in the development of products, services, and processes. We are examining our current programs to see if they were created with the Veteran experience in mind. VA will use HCD to improve our processes so that Veterans interact with VA in ways that are best suited to fulfill their needs and wants.

VA employees across the country are already putting HCD into practice and with great results. You can read some of their stories in the pages that follow, and I can’t wait until we can add your stories to this list. Through our dedication to employing tools like HCD we create a VA that Veterans are proud to call “My VA.”

Secretary Bob McDonald

PUTTING PEOPLE AT THE HEART OF OUR INNOVATION EFFORTS

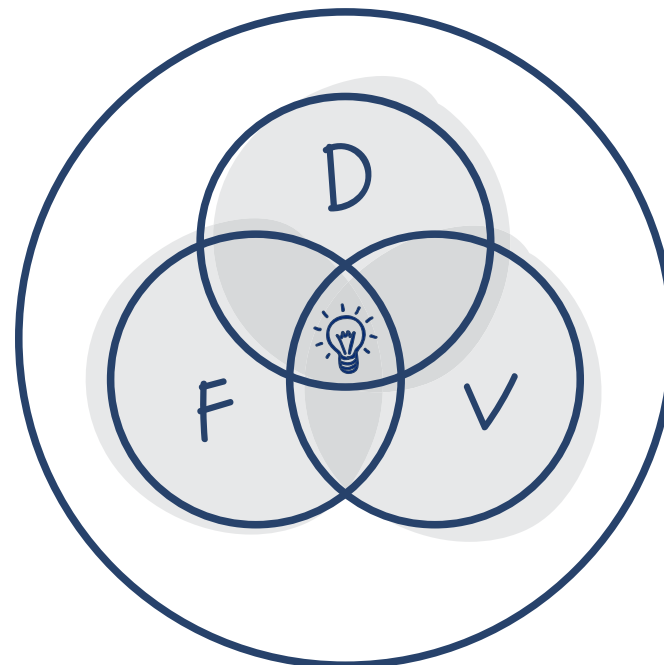
Human-Centered Design helps us to understand what our customers really need so that we can create solutions that are relevant and important to them.

It gives us the tools to put Veterans at the start and the center of our work. This means that we prioritize our efforts how Veterans would want them prioritized, and helps us make sure that when we invest in something, we're investing in the right projects, ideas, or technologies for Veterans.

PUTTING PEOPLE AT THE HEART OF OUR INNOVATION EFFORTS

Human-Centered Design drives towards solutions. It grounds our decision-making and work in the voices and needs of Veterans and, in doing so, helps us focus our efforts and investments towards the most meaningful—the most necessary—solutions and innovations. By using it, we can better target solutions that are desirable, feasible, and viable for Veterans and VA.

- **Desirability:** Does the solution serve the needs of Veterans?
Does it improve the experience for Veterans?
- **Feasibility:** Can the solution be executed? What assets and capabilities must we improve or create to build it? Who else should we partner with?
- **Viability:** Will the solution have a significant, positive impact on VA? How does it align with VA goals and aspirations?



An HCD Toolkit for VA Employees

Human-Centered Design is a highly versatile and adaptable approach and set of methods that can nimbly respond to a wide array of unique and nuanced challenges. This toolkit is a resource that can give you a strong foundation to learn by doing. It will introduce you to the HCD process, goals, and activities you can use with your teams to design and deliver new programs, services, and products for Veterans. It starts with a simple step: going out and talking to Veterans, their supporters, and other partners.

THE TOOLKIT WILL:

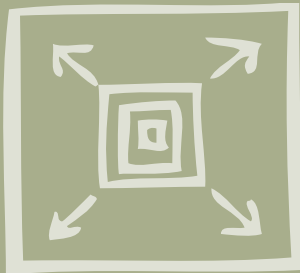
- Orient you and your team to the HCD process, its tools, and the purpose and outcomes of each stage of the process
- Provide the information to plan and execute key activities at each stage
- Point to links and resources where you can learn more and deep dive on different subjects
- Give you the skills to get out the door so you can learn by doing and start designing for Veterans

THE TOOLKIT WILL NOT:

- Dictate what happens on each day of your project, that will vary by each team and challenge you're tackling
- Replace the lessons you will learn by doing
- Replace all aspects of how you work; human centered design enhances and complements the work we're already doing
- Provide a comprehensive, single resource on all things human centered design; the community around human centered design is vast and vibrant and there are more resources available to practitioners at every level of interest and expertise. You can see some of them [here](#).

The HCD Philosophy

Human-Centered Design is built on thinking and acting differently in order to gain a deep understanding of our customers and the challenges facing them. First and foremost, it requires a high degree of curiosity and empathy. A few other behaviors that support this are:



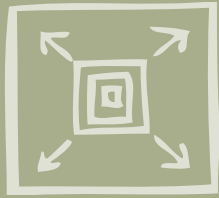
BE OPEN-MINDED



BE COLLABORATIVE



BE ADAPTIVE



BE OPEN-MINDED



We all see and make sense of the world based on our past experiences, but it's important when tackling complex problems to be open-minded. Confront your assumptions. As Einstein put it: we cannot solve our problems with the same thinking we used when we created them.

SOME TIPS

- » **Be conscious.** Practice and remind yourself frequently that you want to approach the design problem with fresh eyes.
- » **Be unbiased.** Observe and engage without judging participants' actions, circumstances, or decisions.
- » **Question everything.** Look critically—particularly at the things you think you already understand.
- » **Be curious.** Assume a posture of wonder and curiosity—especially if circumstances seem familiar or comfortable.
- » **Find patterns.** Look for threads and themes that emerge across interactions with Veterans.
- » **Really listen.** Forget about the agenda and soak in the moment. Absorb what your participants say and how they say it.



BE COLLABORATIVE



Being collaborative doesn't just mean being polite or sharing the work load. Learn from each other, challenge each other, and disagree with each other. By involving diverse opinions and skillsets in your team, you'll come to a richer understanding and create stronger solutions.

SOME TIPS

- » **Embrace differences.** Bring in many different types of people, viewpoints, and backgrounds as often as possible to help tackle the problem from different angles. New approaches lead to new solutions.
- » **Trust each other.** Facilitate an environment where you can ask questions that may seem rudimentary and patiently explain tradecrafts and subjects that are unfamiliar to others.
- » **Create an engaging workspace.** Develop a space and plan events that will foster creativity. Doing things differently will help you think differently.
- » **Document frequently.** Keep track of evolving ideas and record your process as it goes, so you can share with others and collaborate remotely when needed.
- » **Have fun!** Enjoy the journey and the process. It's difficult at times, but incredibly rewarding.



BE ADAPTIVE



The HCD process moves through uncertainty and ambiguity to greater clarity. Adapting to these hurdles with your team will help provide clearer direction. By working through challenges, you'll move closer to meaningful solutions and become better and more resilient designers.

SOME TIPS

- » **Embrace ambiguity.** Acknowledge and accept the uncertainties you have in order to reach a more comprehensive solution.
- » **Promote continuous learning.** Learn from each other and your customers.
- » **Prepare for iteration.** Recognize that your path will be non-linear and require constant iteration as you refine your understanding of the challenge and solutions.
- » **Strike a balance.** Appreciate the small details and moments in the process without losing sight of the bigger picture.
- » **Course-correct often.** Adapt your team's approach to learning based on shifting perspectives and avoid jumping to conclusions.

Mindsets to watch out for ...

We all fall into mental traps. We've outlined below some of the traps we've found ourselves.

"I'm a Vet, so I understand what all Vets need."

Every Veteran has a unique background, context, needs, and experience, so it is critical to get as many different viewpoints as possible to ensure your solution addresses the right challenge.

"It's easier if we just figure this out ourselves."

The best solutions come from getting out and talking with Veterans and co-creating and testing concepts with them. It's not always the easiest route, but we owe it to Veterans to choose the hard right.

"What if my solution doesn't work? It's best to not rock the boat."

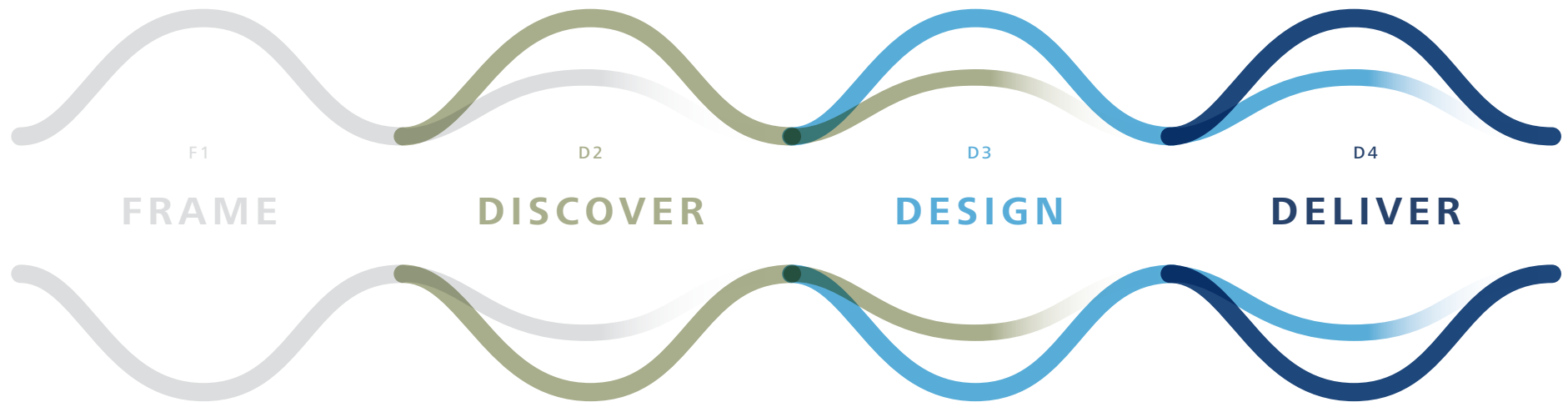
The HCD process is not magic; it doesn't guarantee the best solution the first time around. However, by embracing and learning from times when things didn't go as planned you can ultimately create a better solution.

"Human-centered design isn't for me, it's for trendy designers and specialists."

As an unfamiliar process, HCD may feel difficult at first. However, these skills are, in fact, attainable and accessible to all. They can empower your team to create the best experiences for Veterans. The best way to learn is by doing.

The Human-Centered Design Process

The Human-Centered Design process is comprised of four main stages: Frame, Discover, Design, and Deliver. Teams will shift between analyzing and synthesizing information to reframe problems, discover new customer and market needs, and shape opportunities and solutions.



The team will make a few early choices about the boundaries of the project: How will you define success? Who will you need to speak with throughout this journey? What issue(s) will you aim to study? Remember, these choices are not “written in stone.” Instead, they are starting points. These initial choices will set the parameters that will allow your team to focus your efforts and move purposefully to actionable insights. Remember this good rule of thumb: tighter framing directly correlates with a more meaningful, targeted solution.

During the Discover stage, the team will talk to Veterans. You’ll talk to their supporters and you’ll talk to other stakeholders important to understanding their challenge. You’ll then take what you heard in the interviews and begin to make sense of it, pulling out key themes and insights that will drive your solution. The Discover phase focuses entirely on coming to a better understanding of your problem and your customers.

In the Design phase, The team will move from thinking about insights in the abstract and start applying them to the challenge at hand. You’ll brainstorm potential solutions, iterate on prototypes, and narrow your ideas down to a few distinct, bold concepts for further development.

In Deliver, you and your team will make. You will finalize your concept and make the plans for bringing it to life. To do so, you’ll tell the story of your research, outline the steps for implementation, and secure leadership support. The team will also determine how it will continuously improve the product or service going forward.

An Interactive Toolkit and Menu

This document is interactive. You can click links in the Table of Contents and below to navigate to specific sections. You will also notice links throughout that will help you jump around the document or that lead to additional resources, templates, or examples. Anytime you see the diagram below, [orange text](#), or this icon ➡ you can click it to navigate in the document.



Frame

IN THIS STAGE

The team will make a few early choices about the boundaries of the project: How will you define success? Who will you need to speak with throughout this journey? What issue(s) will you aim to study? Remember, these choices are not “written in stone.” Instead, they are starting points. These initial choices will set the parameters that will allow your team to focus your efforts and move purposefully to actionable insights. Remember this good rule of thumb: tighter framing directly correlates with a more meaningful, targeted solution.

Different projects have different timelines. We've sketched out what Frame might look like at different effort levels:

LOW

Focus on identifying your problem and crafting a problem statement. Spend less time on metrics, scoping, and project planning.

MEDIUM

Run through the whole process, but don't burn too much valuable time. Like with many phases, medium is about finding the Goldilocks zone for you and your team: what's just right.

HIGH

Be diligent. The longer your project, the more important planning will be to keep you focused and demonstrate to leadership the value of your work will be worth the time.

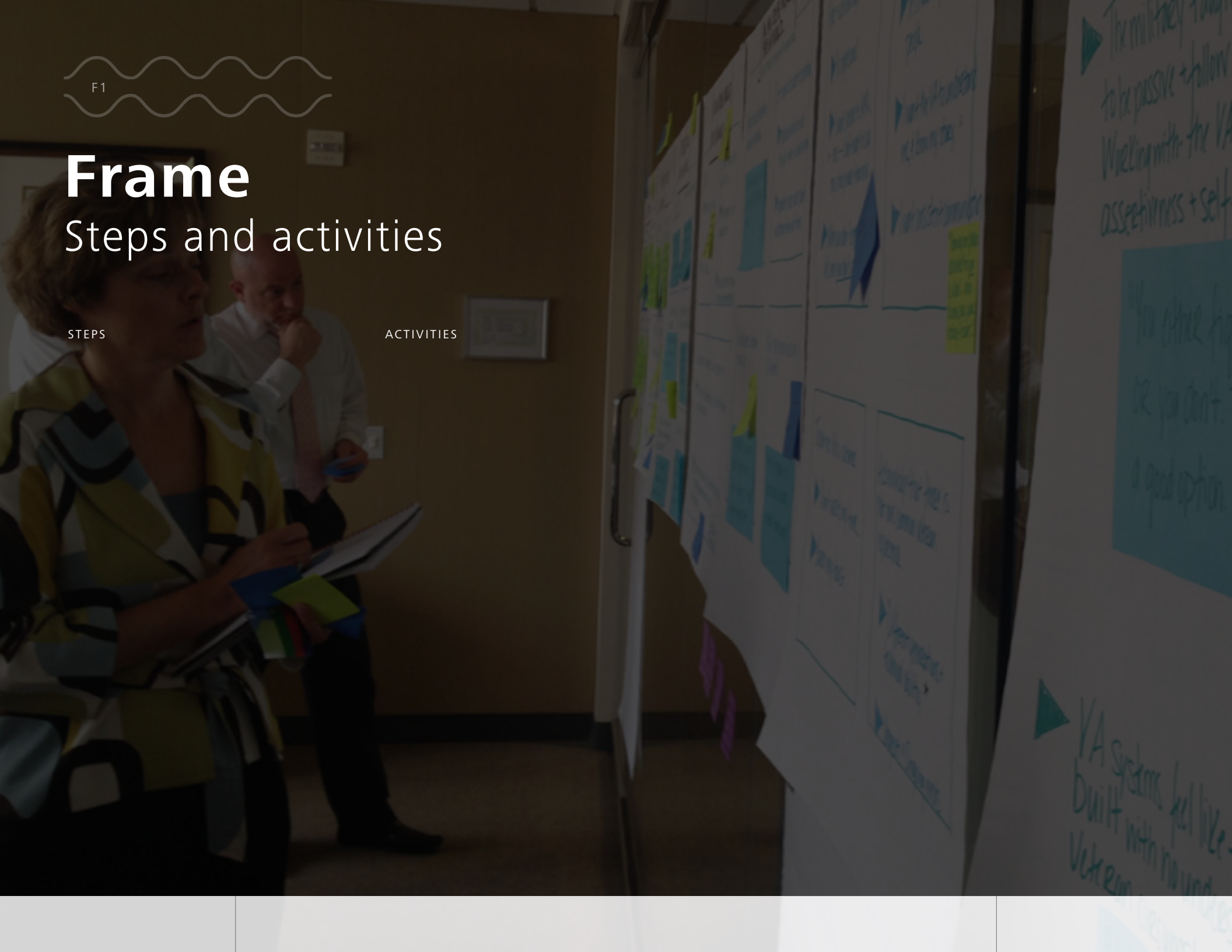
F1

Frame

Steps and activities

STEPS

ACTIVITIES



VA Innovators Network

Department of Veterans Affairs (Powered by VA Center for Innovation and in partnership with VBA, VHA, and NCA); Nationwide

CHALLENGE

To build upon the great history of innovation at VA and grow a future of creative work, VA needs ways to rapidly share ideas, foster a culture of innovation, and respond to Veterans' emerging needs.

APPROACH

VA is designing and piloting an Innovator's Network to build the innovation "muscle" across the organization. After framing the challenge, the team set out on a Discovery phase, interviewing VA employees across the country to understand the current state of innovation and employee needs and perspectives. The qualitative data gathered generated several overarching themes pertaining to needs and opportunities. Informed by these findings, the team held multiple co-design workshops with employees to design a pilot.

RESULT

In early 2015, VA launched the VA Innovator's Network Pilot at seven pilot sites across the country. Powered by local VA Innovation Specialist, the seven sites will explore value-based methods to share, empower, and grow innovation practices to resolve unmet needs of Veterans and VA employees. The effort was designed and put into motion by employees. Stay tuned!





Step: Problem Framing

DEFINITION

Problem Framing defines the “problem” or need we are trying to solve for our customers: Veterans and other stakeholders. It requires us to articulate and align around their specific needs and the value we hope to create for them. In turn, this clarifies the issues we need to explore.

During Problem Framing, the team:

- Starts with the sense that something needs to be fixed or that a new kind of experience is possible, then...
- ... identifies the unknown, before it finally...
- ... suggests topics to study to quickly become more informed very quickly

WHY IT MATTERS

Though some projects may seem fairly unambiguous—either because of a hypothesized need or newly available technology—many projects are little more than a recognition that things could be better for Veterans. But even a well-defined project can become overwhelming and prone to scope creep without making hard choices about where and how to focus efforts. You can read more about how reframing problems can unlock innovation [here](#).

WHAT GOOD LOOKS LIKE

- Clear and agreed upon sense of who or what will be studied and why
- Understanding of the issues to explore, why they are relevant, and what is out of scope.
- Have a sense of who or what will not be studied and why that choice is appropriate

COMMON PITFALLS

- “We’re going to study everyone.”
- “We’re going to understand everything.”

Click [here](#) to see an example.



Problem Framing

Identify the Problem

WITH YOUR TEAM

1. Write down the problem you are trying to solve (e.g., “How do we improve the appointment-making experience for Vets?”) such that everyone can see it.
2. Have each team member write what they already know about the topic on sticky notes. Use the 5 Ps (at right) to spark and organize your thinking. Stick to one piece of information per sticky note.
3. Ask each person to read their sticky notes and arrange them under the design challenge and according to the 5 Ps. Have other members of the team challenge assumptions or “facts” that they understand differently—this will be important for developing the right mindset before going out in the field.
4. Have the team individually write down areas that they know they need to explore in more depth. It might be customers’ actions, thoughts, or feelings. Or how they value different things from VA or from outside VA. Read them out and post them in another area as the start of a list for future research.
5. Group similar ideas and concepts to help guide your research in both areas. There is no right or wrong way to do this. Step back and look at what you think you know and what you don’t know. Where are the biggest needs? How does this inform who you should talk to? What questions should you ask to get at those gaps?

THE FIVE P’S

- **Purpose:** Why are you undertaking this project? What goals/objectives do you hope to achieve for both Veterans and VA? How big is the opportunity?
- **People:** Who are the customers of your product, service, or experience? Veterans? Spouses? Vietnam-era? OEF/OIF/OND-era? Who might be the customers? Who are the key stakeholders, both within VA and outside it?
- **Place:** Where will your customers experience your offering? List out some of the key customer scenarios. What related projects and dependencies exist already?
- **Performance:** Are there any specific measures that VA is aiming to achieve in undertaking this project?
- **Problems:** What are the known or assumed problems with the current service? What other issues and limitations do we need to think about when designing solutions for this service? What risk factors are there?



Problem Framing

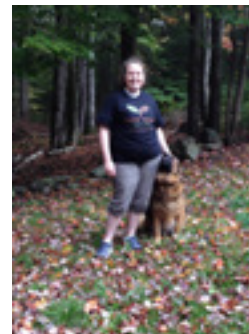
Identify the Problem

TIPS

- Be aware of managing different points of view. Effective conflict management is key to both the team's dynamic and how they engage with stakeholders. The design process intentionally creates opportunities for disagreement. Ensuring that conflict is positive and generates better outcomes is critical. If you aren't prepared to manage these conflicts, you'll wind up with negative, destructive disputes. Be explicit about that and be aware of it throughout.
- Get an honest response from your team members.
- Don't assume or think you know the answer.
- Don't assume you know what Veterans and other customers want.

"By taking the time and effort to uncover the real issues at play, we can better do what we've set out to do...serve veterans."

Amber Schleuning, VA Center for Innovation





Step: Business Framing

DEFINITION

Business framing defines what we are trying to achieve as an organization and asks, “Why is this important to Veterans and VA?”

During Business Framing, the team ...

- Starts with the sense that there is a real opportunity out there
- ... or that Veterans’ experiences are suffering in an area
- Calls for significant change in what the business does, makes or delivers
- Provides a common articulation of what the future will look like

WHY IT MATTERS

Business framing forces us to articulate why our project’s goals and expected outcomes align with broader VA initiatives and ambitions. Doing this exercise now will not only focus your work but will provide a valuable tool for communicating your project’s importance to leadership before, during, and after the project.

WHAT GOOD LOOKS LIKE

Clear and shared sense of:

- How your work relates to other VA initiatives and challenges
- Constraints

Clear articulation of the ‘business challenge’ including:

- Strategic importance of the project
- Aspirations for how it could advance, expand or even transform VA and Veterans’ experiences with it
- Any risks or sensitivities to respect in driving the project
- Aspirations and anxieties of the project sponsors
- Alignment to problem frame

Click [here](#) to see an example.



Business Framing

Define the Ambition Level

WITH YOUR TEAM

Discuss what level of ambition characterizes the goals for this project and what criteria define that ambition level.

Core Projects

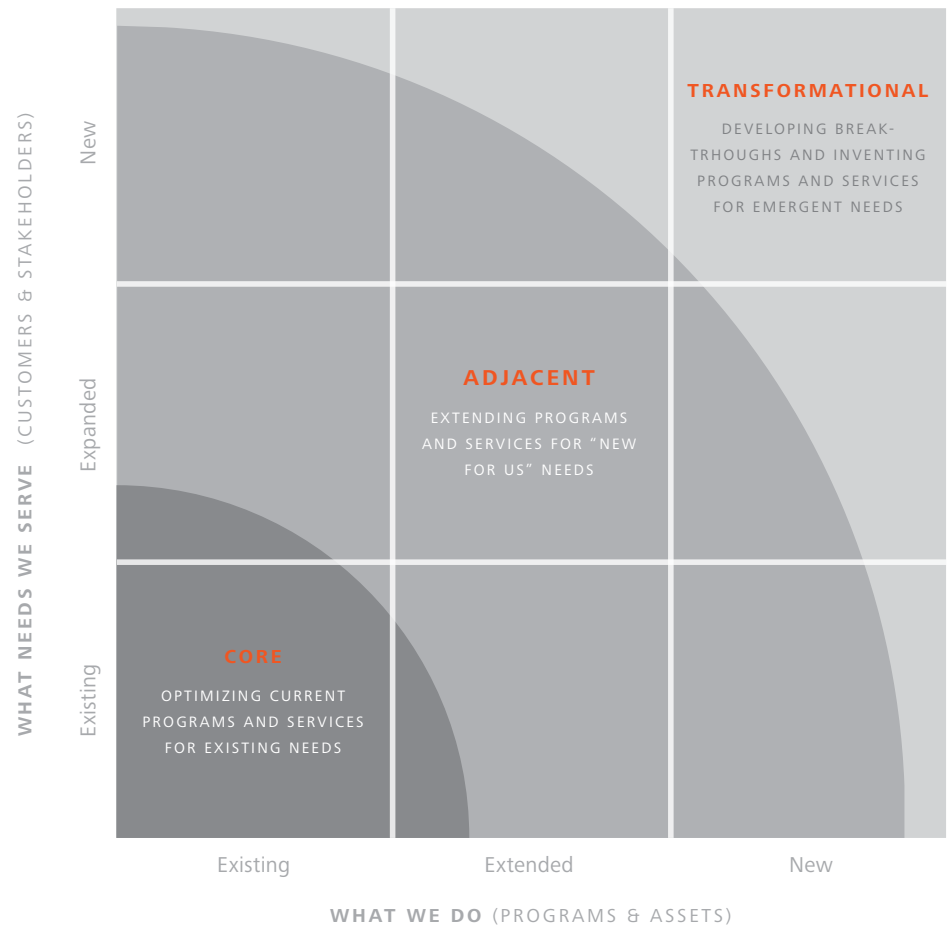
- Focus on hearing clearly from customers what they are looking for in existing products or services
- Build their innovations off of assets or programs already in place
- *Example:* Redesigning the letter that explains an Appeals decision to a Veteran

Adjacent Projects

- Try to uncover opportunities to add value by extending existing programs or services
- Strive for unique insights into customer needs and comparative trends
- *Example:* Adding a new touchpoint to increase Veteran understanding of the Appeals process at the outset

Transformational Projects

- Develop breakthroughs and invent new programs and services
- Require considerable learning (and, typically, time) to understand and develop a concept and greater resource to realize the opportunity
- *Example:* Redesigning the entire Appeals process





Step: Project Framing

DEFINITION

Project Framing ties together Problem Framing and Business Framing to determine the scope and plan for your project.

During Problem Framing, the team ...

- Sets the guardrails by determining scope
- Write a problem statement and project plan that will guide the project

WHY IT MATTERS

Project Framing will establish the parameters and plan for your project. It brings together your preliminary understanding of the problem and its importance to Veterans and VA. In doing so, it launches you into the Discover phase with a shared understanding of the path you will take.

WHAT GOOD LOOKS LIKE

- **An articulated scope** for the project and a list of metrics that will determine success for your project
- **A strong problem statement** (understood by all) that succinctly defines your objective, scope, measures of success, and understanding of the opportunity
- **A project plan** that will guide your work and can be shared with leadership and team members alike

Click [here](#) to see an example.



Project Framing

Determine Scope and Metrics

FOR THE PROJECT SCOPE

Define the bounds of the project—what is in scope (and out), what is necessary for success, and what resources are available to deliver that success. Determine how much time the core team members have allocated to the project, as well as which extended team members are available for interviews or workshops. Clarify the expected project timeline and the budget available.

FOR THE METRICS

Determine what metrics will be used to measure success for the project. For example, how many interviews will you aim to achieve? How will you incorporate geographic, racial, or gender diversity into your research? How many times will you engage leadership?

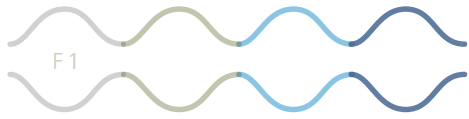
Some commonly used metrics to define project success are:

- Time to pilot and launch
- Geographic impact
- Development of new capabilities and assets
- Strategic objectives
 - › Brand value
 - › Capability development

“Right now, VA has before it perhaps its greatest opportunity to enhance care for Veterans in its history.”

VA Secretary Bob McDonald





Project Framing

Write a Problem Statement

WITH YOUR TEAM

Take both the problem framing inputs and the business framing inputs, and stitch them together into a problem statement—a short description of the project’s goals and aspirations. The problem statement succinctly defines the project’s objective, scope, measures of success, and current understanding of the opportunity in a sentence or two. It summarizes the most important objectives and attributes of exploration. Keep your problem statement on hand. It acts as both a touchstone and guardrail in guiding the efforts of the team. Your team should revisit it throughout the project and update it as your understanding of the problem space or opportunity improves.

A GOOD VA EXAMPLE

PROBLEM FRAMING, includes context, end customers, needs, and activities

- Parking at VA Medical Centers (VAMC)
- Veterans and family members visiting VAMCs
- Improved customer service and car-side assistance



BUSINESS FRAMING, includes ambition level, scope, constraints, and metrics

- Increased safety and health ratings (~15%) of Veterans visiting VA facility
- Maximize utility of limited space to save taxpayers money
- Pilot solutions at 100 VAMCs by 2020



PROBLEM STATEMENT, may include some, but not all, of the components of business and problem framing.

“To create a comprehensive program that increases convenience and safety when accessing VA medical facilities and maximizes the utility of limited space to save taxpayers money for visiting Veterans and their families.”



Project Framing

Create a Project Plan

WITH YOUR TEAM

Synthesize the considerations and outcomes developed through the iterative discussions pursued during framing activities into a coherent, detailed plan that can be shared with project sponsors and extended team members.

GOVERNMENT SPECIFIC CONSIDERATIONS

Recruiting

If you interview participants for free who aren't government employees the Anti-Deficiency Act requires you to either:

- Give all members of the public an opportunity to participate by posting the opportunity somewhere everyone can see it (like your website), or...
- Get participants to agree, in writing, to the statement: "I understand that I will receive no compensation and waive all claims for compensation from the U.S. government in exchange for my participation in this research."

Consent

Informed consent from participants is the cornerstone of ethical research. Individuals must be given the opportunity to provide (and withdraw) consent to participate in the study.

See this [VA Participant Consent Form](#), which includes appropriate consent and Anti-Deficiency Act compliant language.

Privacy

We have the legal and ethical obligation to protect people's privacy. Whenever possible, avoid collecting Personally Identifiable Information (PII) and anonymize your notes. If you must collect PII, be sure to follow standard government protocols for the handling and storing of PII.

Paperwork Reduction Act

Only a narrow set of research methods (e.g., large surveys and very structured focus groups) require PRA approval. None of the methods described in this toolkit require PRA approval.



Frame Checklist

Necessary outputs before moving to *Discover*:

- **Problem statement** based on the principles of both business framing and problem framing
- **Project plan** or charter outlining the project goals, needs of research, background, critical success factors and possible risks

Remember to consider these questions with your team:

- Has the team clearly articulated the challenge?
- Has the team included a diverse set of perspectives in developing the direction for the project?
- Is the team aligned on what project success looks and feels like?
- Has the team confirmed the scope with project sponsors and extended team members through a kickoff workshop?
- Does the team understand the direction for research—who and what to study and why?
- Has the team defined a work plan to execute the project?



Discover

IN THIS STAGE

During the Discover stage, the team will talk to Veterans. You'll talk to their supporters and you'll talk to other stakeholders important to understanding their challenge. You'll then take what you heard in the interviews and begin to make sense of it, pulling out key themes and insights that will drive your solution. The Discover phase focuses entirely on coming to a better understanding of your problem and your customers.

Different projects have different timelines. We've sketched out what Discover might look like at different effort levels:

LOW

Focus your energies on simply having conversations Veterans and others connected to your problem. Spend what remaining time or resources you have digging into what you heard and identifying themes and insights.

MEDIUM

Think hard about the topic areas you want to cover in your interviews to use your time wisely. Focus your efforts on learning and interpreting as you conduct the interviews to shorten the time needed for synthesis on the back end.

HIGH

Take the time to really craft your hypotheses through contextual research before conducting interviews. Interview not only Veterans and other stakeholders directly involved in your problem statement, but think about those who indirectly influence it as well. Allow yourself the opportunity to live in the data you collected to fully take it in and uncover deeper meaning.

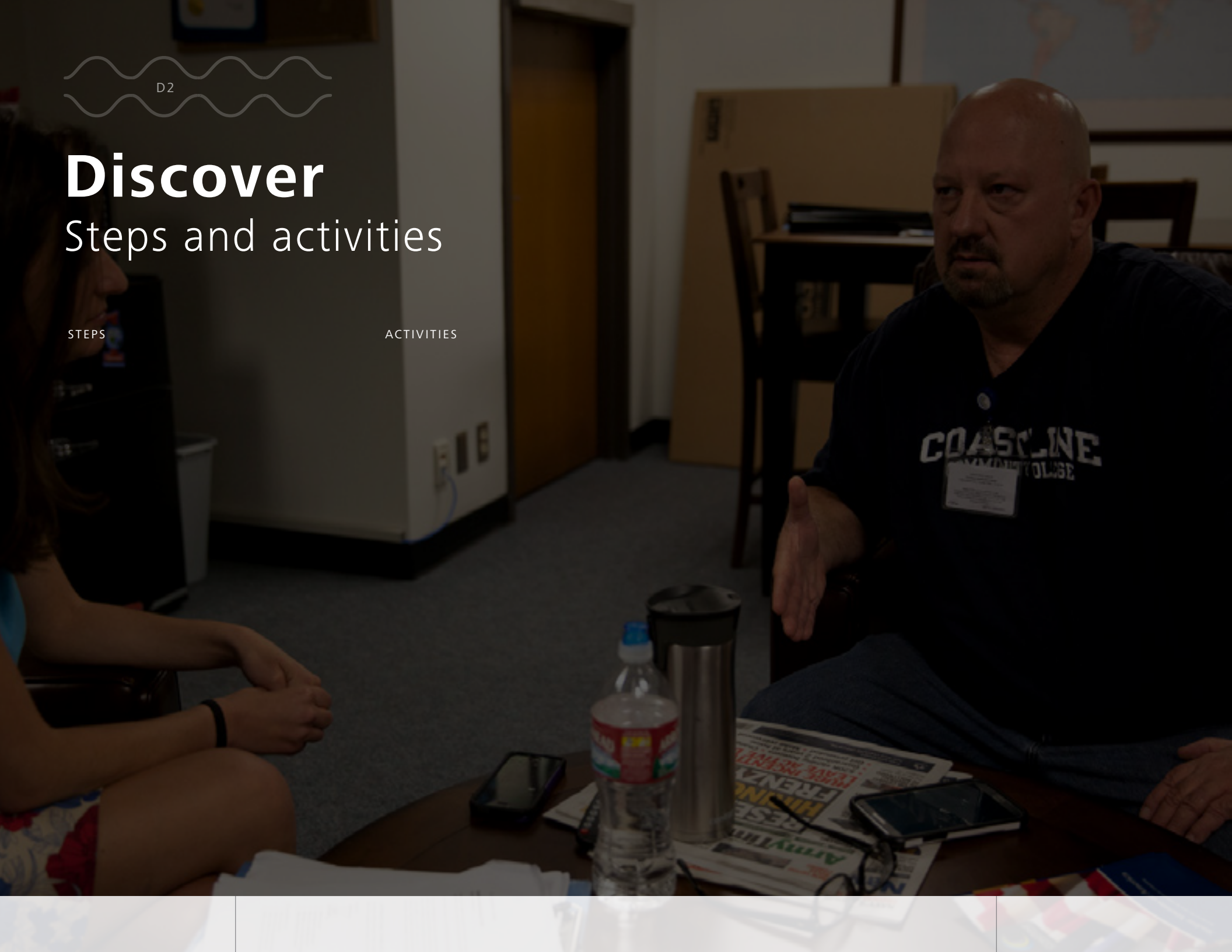
D2

Discover

Steps and activities

STEPS

ACTIVITIES



Veteran-Centric Ethnography

VA Center for Innovation, Nationwide

CHALLENGE

Gain a better understanding of Veterans' perceptions of how well VA services were fitting into their lives and meeting their needs and expectations to help VA become more Veteran-centric.

APPROACH

In 2014, VACI embarked upon two Discover efforts to better understand VA's customers. The team framed challenges by exploring the [Five P's](#) and settled on three main objectives: 1) pilot design research methodology within VA; 2) identify high level user needs and characterize trends in Veterans' experiences interacting with VA; and 3) create a deep understanding of VA's customers. VACI teams interviewed a diverse set of Veterans, meeting with them and their families in their homes, communities, offices, and social venues. The teams then synthesized the findings, identified opportunities for future service design work, and developed an initial set of personas.

RESULT

VA's research formally surfaced themes about the needs, perceptions, and expectations of Veterans we serve. These observations have helped guide the development of more Veteran-centric efforts, including the work of the new Veterans Experience Office at VA and of VA offices across the country.



To read more, [click here](#). To read the reports, [click here](#).



Step: Contextual Research

DEFINITION

Consider contextual research akin to secondary research; it orients you to the context of the problem you're tackling and helps you get a sense for how others before you have approached it. As you begin your research, look both within and beyond VA. You might study efforts in similar government agencies (Federal, state, local, or international) or examine social, economic, market, or cultural trends to which VA will need to respond. There are a variety of methods that can be tailored to different research objectives. In this toolkit, we explore two: Trends Analysis and the STEEP framework. They are outlined on the following page.

WHY IT MATTERS

Contextual research gives you the lay of the land before you dive into ethnographic research. It seeks to answer background questions like: Who are the important actors in this process? What current trends influence the problem we're trying to solve? What are other government or private sector organizations doing to address this problem?

HCD TIP

Use a wide variety of sources. Academic or business journals, popular media, the web, user groups, blogs, etc.

HCD TIP

Cast a broad net whenever possible. A trend in one arena can lead you to trends and stories in others—fields where a trend might have begun and is bleeding into others.

HCD TIP

Consider the sources. Evaluate the reliability of sources and understand the points of view of sources to evaluate their importance, position, and credibility.



Contextual Research

Plan Contextual Research

WITH YOUR TEAM

Research planning should enable you to articulate the research goals, scope, and timeline for the research activities on the project. The plans for contextual and ethnographic research will be combined to create a robust set of data for your team to synthesize.

TACTIC: COMPARATIVE & TREND ANALYSIS

Examining the best practices and new thinking of other organizations and trends influencing them helps you to understand both current issues affecting your design challenge and those that might influence it in the future. You might look at what other VA offices are doing, but should also expand your thinking to include leading practices in other parts of government and the private sector. This type of analysis will be useful for:

- Identifying trends that have affected similar industries and organizations, or industries with similar properties, to predict changes that might arrive and inform potential solutions
- Ensuring development of innovations that are sustainable in light of broader political, economic, social, and technological forces
- Building the business case for the innovation to key stakeholders (internally and externally), and understanding expected impact of different ideas

TACTIC: STEEP FRAMEWORK

Try using the acronym **STEEP** to frame your contextual research: **S**ocial, **T**echnological, **E**conomic, **E**nvironmental, and **P**olitical factors. When doing contextual research, a team will gain better insight into a topic if they gather information around all five factors.

HCD TIP

This framework should be used to ensure a comprehensive approach to contextual research, when the topic can be placed in a larger context perspective. It might be a difficult tool to use for a very specific topic.



Step: Ethnographic Research

DEFINITION

Ethnographic research forms the bedrock for human-centered design projects. In short, it means getting out and talking to people. It is discovery-driven in nature, and often explores a broad range of customer behaviors and needs. It emphasizes empathy with actual customers through immersive experiences. Ethnographic research is designed to explore the universe surrounding your key research questions, not test specific hypotheses.

Research like this can feel uncomfortable because it is neither definitive nor exhaustive in nature. The point here is “thick” or “deep” data on a small number of people, not “big data. You do not need to declare sweeping conclusions about a broad population or uncover every possibly useful insight about your customers. While a large sample of customer data is necessary for some research methods, your team only needs enough data to find inspiration and a sense of connectivity to your customers and their experiences.

WHY IT MATTERS

By observing, understanding, and empathizing with Veterans’ actual behaviors and hearing their own words, we can uncover key insights and hidden trends that will inform the project’s direction.

WHAT GOOD LOOKS LIKE

- A cohesive set of “like” participants that cover important types of customers (e.g., three to five per customer type) and other important influencers of their experience with the product or service
- Activities chosen with research goals in mind, with ways to push beyond what people say into what they actually do, feel, or believe
- A schedule that balances gathering data with documentation and timely reflection

An example would be:

A team of Compensation & Pension (C&P) examiners plan to examine the C&P experience at their Regional Office. To get a full picture of the current state, they interview Veterans of various ages, ethnicities, and genders and ensure that their interviewees are at various stages of the process (e.g., both before and after their exam). The team also talks to others who influence the process, such as family members and supporters, other C&P examiners, and community partners.

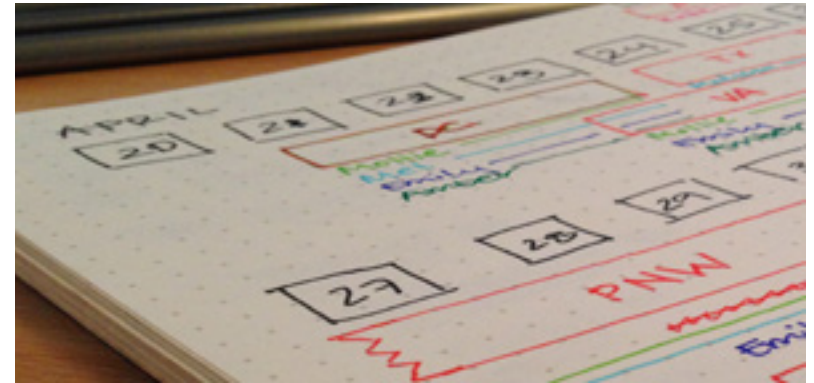


Ethnographic Research

Plan Ethnographic Research

WITH YOUR TEAM

Similar to contextual research planning, ethnographic research planning should enable you to articulate the research goals, scope, and timeline for the research activities on the project.



Define goals

Define the goals for ethnographic research. Similar to contextual research planning, start from the project statement, key hypotheses, and questions established in the framing stage to articulate the set of questions and topics to explore through ethnographic research. To do this, consider what you want to achieve from the research.

Identify ethnographic research participants

Now, your team has to decide from whom you can learn the most so that you can recruit the right participants (e.g., role, title, experience qualifiers). The ecosystem map will be helpful for determining who to interview. (See next page.)

See [this guide](#) for additional information on recruiting.

Determine where and how

Depending on who is being researched, your team needs to determine where and how the research should be conducted. Consider what types of interviews and environments you think will be most effective and how you will access them. Keep in mind that the team is likely to have to discuss trade-offs. For instance, how many in-facility observational studies would be ideal?



Ethnographic Research

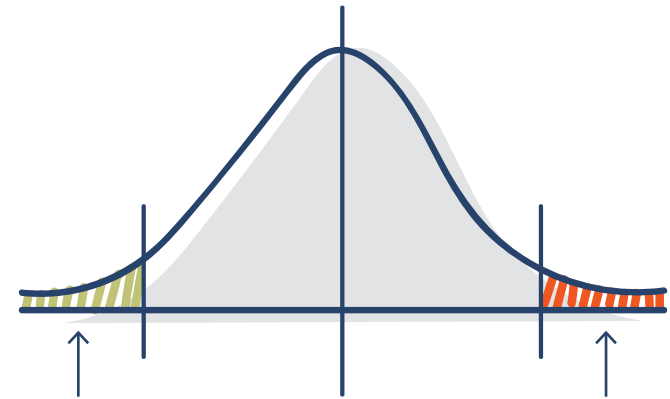
Plan Ethnographic Research

TACTIC: ECOSYSTEM MAPPING

Ecosystem mapping is an exercise in identifying and classifying the diverse range of actors who influence a customer's interaction with a product or service. In particular, the map should identify individuals with decision-making power, direct users, and other important influencers. Your ecosystem map will help you identify those people beyond just your customers who you may want to interview as a part of your ethnographic research.

Think beyond just VA. If you're examining Vocational Rehabilitation, for example, you would want to include a Veteran using that service as well as Veterans Benefits Administration employees, but would also need to expand your scope to include family or friends, fellow Veterans, private companies, or non-profit organizations that might influence a Veteran engaging with the service.

- As you identify different sets of actors, try actually mapping them by level of influence on a Veteran engaging with the service.
- Clarify which customers affect or are affected by the experience or offering. Try to qualify their influence.
- Consider internal representatives who may have direct influence on how your service is delivered or experienced by others



TACTIC: EXTREME USERS

Consider the problem you are exploring and whether certain types of people have more acute experiences related to it. These so-called "extreme customers" feel the effects of a condition or need more than others, making them easier to observe and understand quickly. Oftentimes, designing for these extreme cases will serve the much broader customer base.



Ethnographic Research

Develop an Interview Guide

THE GUIDE

Before going into the field, develop, test, and build an interview guide. Topic areas and related questions can be broad or narrow. They might be used to understand overall customer perception or analyze specific tools or interactions. In either case, it is best to start with general context setting before diving into more specificity. Remember, this is not a script. This research is generative; you want the interviewee to drive the conversation. Avoid leading questions or topics that focus only on evaluating offerings and experiences in lieu of considering what an ideal experience might be for them.

You can see an excerpt from an interview guide at right.

DOCUMENTING THE INTERVIEW

Prior to conducting ethnographic research, ensure the team understands the different roles for interviews as well as the data documentation plan. Plan on having one person conduct the interview and one person document it with notes and photos. This division of labor ensures that one person is always focused closely on the conversation and its subtleties. Afterwards, use any internal tools available to you to store raw data (e.g., video, audio and photo files, transcripts, artifacts). Your team should also align early on materials that require team production (e.g., written debriefs).

HCD TIP

Team Roles

If resources and time allow, shoot for having two team members per interview, one to lead the questioning and one to take notes. If only one person can make it, record the audio to capture notes later.

- *What triggered the first contact between you and the VA? What motivated you to get in touch?*
- *What kind of communication did you first have with the VA? Did someone or walking into an office? (Emails, flyers, Twitter, etc.)*
- *Do you have a sense of what services the VA offers? How do you feel like the VA is speaking your language? Is it easy for you, when, etc?*

FOCUS/OBSERVE LIST:

- What motivates or triggers vets to come to the VA? Or why not?
- Are veterans reactive or proactive when approaching the VA?
- How do Veterans discover what is available to them by the VA?
- Is the VA speaking in terms that make sense to veterans?

4. THE FIRST TOUCH

PROMPTS:

- *Can you remember the first time you interacted with the VA? Where were you? Did you reach out or did someone reach out to you? Was this something you planned or prepared for?*
- *Can we see any materials/forms/documents you have used in contact with the VA? (photograph)*
- *What happened? Is that what you expected to happen? Were there any surprises?*
- *What sorts of tools or resources were you using?*
- *Did you have everything you need on your end?*
- *If you think about this 'first touch', was it similar to the rest of the times you interacted with the VA?*

FOCUS/OBSERVE LIST:

- The first VA touchpoint: Where, what, when, how, who
- What's not working? What barriers and frustrations exist?
- What is working: What was good?
- What are people's goals and expectations when contacting the VA?

TRANSITION TO JOURNEY/DOCUMENTING REALITY:

In this part of the study we would like to create a diagram of your current experience with the VA. The diagram helps us better understand the many aspects of your experience. Please draw the diagram as you see fit. We can both have pens! We can use as many photos as you want. We will be taking some photos along the way for documentation

HCD TIP

Honing Your Questions

As you develop a greater understanding of your issue, adjust activities and guides to ensure you are obtaining valuable insights from the research participants. Please feel like you can go "off script" as interesting and rich topics arise.



Ethnographic Research

Interviewing

WITH YOUR TEAM

Individual interviews are key to HCD research. They enable a deep, robust view into the behaviors, reasoning, and lives of people. You should strive to meet your participants at informal locations—like their homes, workplaces, or favorite restaurants—so you can see them in context. This both makes the participant feel more at ease and allows you to see how they live, what they talk about, and what kinds of objects and items they use. This stage is squarely focused on the current state. Resist the urge to start analyzing or asking for suggested improvements. They may offer those ideas on their own, and if they do, make a note of them and ask why they think that solution would be helpful. What’s driving the suggestion?





Ethnographic Research

Different Types of Interviews

Different types of challenges and research plans will lend themselves to different types of interviews. While Individual interviews should always form the basis for ethnographic research, you might also explore other types of interviews:



Intercept Interviews

Many times you will schedule your individual interviews in advance, but even if you can't schedule interviews, you can always go out and talk to people. This often gets called an "Intercept Interview," but, more simply, it means walking into your office's waiting room or going up to someone in the grocery store and having a conversation with them. This can be daunting at first, but you'll be surprised how many people want to share their thoughts.



Group Interviews

Sometimes logistics, circumstance, or preference will lead you towards having a conversation with a group of people instead of just one. This can be very valuable, but two notes of caution: 1) These are not focus groups. Don't treat them as such. 2) Be aware of how group dynamics might shape responses. For example, if someone's boss is in the room, they may be less frank about a current state process.



Subject Matter Advisor Interviews

Interviews with people knowledgeable about your topic can be incredibly helpful. However, you should think about them more as a part of contextual research than ethnographic research.



Ethnographic Research

Observation

WITH YOUR TEAM

Ethnographic immersion involves following and observing people throughout a particular activity or period of time. These longer observations involve disciplined (and patient) observation and documentation. You might conduct longer observations of participants in key activities, to become fully immersed in their world.



TACTIC: SHADOWING YOUR CUSTOMER

Shadowing your customers for a period of time will allow you to see the experience from another person's vantage point. As you observe, take note of what you see. Use your recording device to record the answers to any questions you ask. Keep an eye out for:

- **Pain-points:** Aspects of the topic that provide them with challenges and obstacles. These could be processes, tools, mindsets, etc.
- **Workarounds:** These are solutions customers have created themselves in order to solve challenges. Inspired innovations are routinely sparked by makeshift solutions already in practice.
- **Needs:** What are the needs of VA employees as they endeavor to serve their customers?

TACTIC: ENVIRONMENTAL SURVEY

Observation of public spaces helps the team compare practices at different facilities or organizations and identify leading practices. Teams go into these environments to observe customers in their activities and to understand what different VA facilities and other organizations are doing to support those activities. For example, if redesigning a waiting area to better suit Veterans' needs, you might visit well-regarded VBA facilities, different government offices, or high-end private sector spaces.

- Identifying best practices in the customer's environment, (e.g., signage, marketing materials, spatial configuration, and staff conduct)
- Identifying new tech and tools being used
- Observing customer behaviors, choices, navigation of and reactions to the environments



Ethnographic Research

Debrief with Your Teams

WITH YOUR TEAM

Share stories of what you heard. Stories provide concrete details about specific events and are shaped by real lives, not summaries of information. This provides two main benefits. First, it allows team members to get up to speed on what different people saw and heard in the field. Second, team members can draw further nuance and meaning from the experience through listening and asking probing questions.

SETTING UP THE ACTIVITY

1. Gather the team together in a room with plenty of wall space.
2. Distribute sticky notes and markers to everyone. Set up a large flip chart (or have large sheets of paper) and a means of attaching them to the wall.
3. Tell the team to capture their notes, observations, and thoughts on sticky notes as they speak. Capture all the details of the story. (If you coded your interviews, you can use those notes here)
4. Ask each team member to share the story of the people they met. Go through one by one.
5. While sharing, team members should place their sticky notes on the wall – this forms the basis for and can begin the process of [Clustering](#) in the next step.
6. Other team members should highlight key quotes, surprises, and items of note.





Ethnographic Research

Debrief with Your Teams

TACTIC: CREATE AN INTERVIEWEE FACEBOOK

‘Facebooks’ are quick share-outs of your interviewee participants during research. They provide a convenient way to share research data with the broader team not present in the interview, and can also serve as an artifact of ‘Customer Profiles’ that will live beyond the project. The format you choose will depend on your intended use for these. The facebook should be completed soon after the interview while memories are fresh.

Persona “type”
characterized by a
short phrase

Short bio of the
interviewee

1. IDENTIFY

Cynthia Walker
POST TRAINER

NEEDS

- Grow her own business, build a strong and effective
- Career development resources
- Tools/technology for business development

ATTITUDES

- You have to be able to take criticism as a coach and
- You have to be able to take criticism as a coach and
- You have to be able to take criticism as a coach and

OPPORTUNITIES FOR VA

- Offer specific, actionable advice to help them
- Offer specific, actionable advice to help them
- Offer specific, actionable advice to help them

BENEFIT USE

SUPPORT NEEDS

..... Needs and attitudes
towards a particular
experience

..... Personal quotes

..... Opportunities
for VA

TACTIC: CUSTOMER PERSONAS

Interviewee Facebooks can serve as a great artifact for your project, but there may be times where you want to opt for Customer Personas. Customer personas are fictional characters based on real people that you spoke. This serves two purposes: it anonymizes your interviewees and it allows you to present composite portraits that represent groups of people. You draw personas from the themes and patterns observed in your research data and can function as stand-ins for customers’ needs, attitudes, and motivations. Personas can help others who were not a part of your project—or who might not regularly interact with customers—build a nuanced understanding of the customers we serve. For more information, see VA Center for Innovation’s [Voices of Veterans](#).

TACTIC: TRANSCRIBING YOUR INTERVIEWS

Complete and time-stamped transcripts are your main records of interviews. Use multiple readers for each transcript as fresh eyes will often see different or interesting patterns and it helps team members build empathy with individuals that they didn’t interview. Members of your team can annotate or ‘code’ each transcript to highlight particular points or quotes. If transcripts are not an option, interviewers should take very thorough notes.



Step: Identify Insights

DEFINITION

You make sense of your field research by looking for patterns, groupings, similarities, and tensions. Research insights can come from anything you've discovered or observed up until this point.

WHY IT MATTERS

It can be messy and confusing, but is ultimately very rewarding. Analysis activities allow your team to quickly move from the point of knowing little about a given situation to the point of understanding significant patterns and relationships that expose meaningful insights worth acting on. Take a bottom-up approach and let rich data speak for itself and dictate groupings. This process is all about getting ideas and activities up on the walls and making collective, collaborative sense of the work.

WHAT GOOD LOOKS LIKE

- Robust discussion and brainstorming that leads to specific, varied types of insights, such as:
 - › Unmet needs or under-met needs and pain points
 - › Underserved customer groups
 - › New questions for potential extra research
 - › Values and beliefs
 - › Drivers and motivators of decision making
- A group of insights that are interpretive in nature, describing a pattern of observations or the reason why a set of observations is interesting

COMMON PITFALLS

- Only anecdotal descriptions
- Early conclusions about ideas
- Sweeping, unchallenged declarations of truth



Identify Insights

Analyze Patterns and Themes

WITH YOUR TEAM

In order to move from the real world of research data to the more abstract world of analyzing the information gained, your team will need to uncover the patterns and relationships that can lead to insights and inspiration. Figuring out the patterns and themes in your research can be done in a number of ways—and the best way for you is something that you can constantly refine with your team.

HCD TIP

When sharing observations and experiences from research visits, do not conclude what they mean until you get through observation gathering for all of the research visits.





Identify Insights

Clustering

Clustering one of the most common methods used in design. While we're introducing it here, this simple, interactive way of organizing information is used throughout the process to organize ideas, concepts, or, as is the case here, observations.

- 1. Capture observations on sticky notes** - After debriefing, jot down as many observations as you can up to this point. Write down any keywords or short phrases from transcripts, notes, and photos. Stick to one clear and concise idea per note; combining ideas comes later. More is better!
- 2. Cluster observations** - The collected sticky notes should be posted on a wall, and then grouped into clusters based on similarity to one another. Similarity can be defined along many dimensions, so the team may need to undertake this clustering exercise several times before finding a structure that is both mutually exclusive and collectively exhaustive of the data. Be patient with this process. Keep looking for patterns that reveal something truthful and interesting for your problem.
- 3. Characterize clusters** - When the team is satisfied with the groupings, assign each a descriptive phrase or theme that summarizes the grouping. If there are multiple themes for a cluster, consider breaking it down further.
- 4. Organize clusters** - Look across the clusters and discuss any potential relationships across them. This might inspire another round of clustering and reorganization.
- 5. Write Insights** - When you feel that you have a solid group of clusters that speak to what you heard, write the insight that describes that cluster.

HCD TIP

Team Insight Writing

An insight is a written understanding of the reasons behind an action, thought or behavior that sheds light on or helps inspire a solution. One example of this might be, "Veterans don't see value in process X in order to perform Y".





Identify Insights

Useful Frameworks

EMPATHY MAPPING

An empathy map helps synthesize observations and draw out insights while building empathy for the people for whom you are designing. The map is broken up into four quadrants to guide your team through the customer's mindset. Ask yourself, "At this point, what did the customer Say, Do, Think, and Feel?"

FIVE E'S

This model charts a customer experience with a product or service from attraction, through engagement, to extension. Use this in analysis to expose gaps or challenges in customer journeys. The five Es are: **Entice**, **Enter**, **Engage**, **Exist**, and **Extend**.



HCD TIP

Look outside. Make an effort to learn from innovators in other industries who have faced analogous challenges and found interesting solutions. This can provide a fresh perspective on familiar challenges and shed light on potential solutions.



Identify Insights

Root Cause Analysis

WITH YOUR TEAM

A root cause analysis will help you explore the potential causes that result in the problem(s) you are targeting.

TACTIC: CAUSAL LOOP DIAGRAM

You will often be dealing with issues that are part of a much larger system. One way to understand the mechanics of these systems and identify the highest leverage opportunities is creating a Causal Loop Diagram. These diagrams provide an easy way to see the causal relationships in a system, and find feedback loops that can lead to vicious (or virtuous) cycles or counterbalance the effect of your solution. To create:

- Identify the major factors that have an influence on the problem you are trying to solve
- Draw the cause-and-effect relationships between the factors (e.g., “An increased time in the waiting room increases a Veteran’s sense of frustration”)
- Analyze these causal relationships for Reinforcing Loops (A increases B which increases A) or Balancing Loops (A increases B which decreases A)

See [this example](#) of a causal loop diagram.

TACTIC: FISHBONE ANALYSIS

A fishbone analysis is a structured brainstorming tool to help you think about your problem. At the head of the “fish” is the problem statement you’re developing. Each “bone” is a potential cause. Use the following as the five main bones to spur thinking:

- **Environmental:** Causes related to environmental factors
- **Human:** Causes related to the activities of others, whether internal or external to VA
- **Tools:** Causes related to tools used in the process
- **Method:** Causes related to the types of activities performed in a process, or their sequence
- **Measure:** Causes related to the measurements captured about a process



WITH YOUR TEAM

Not all customer needs are equal, nor do customers regard every failure as equally serious. And what satisfied your customer last year would may not satisfy your customer this year. Your team can categorize and prioritize their needs.

1. Write down customer needs and divide them into three categories (preferably on colored sticky notes):
 - **Basic needs:** Necessary features or performance requirements to meet a customer's minimum expectations. They probably won't notice that you've met them, but they'll definitely notice if you don't. For example, you don't thank hotel staff for having sheets on your bed, you simply expect them to be there.
 - **Satisfiers:** This is the "more is better" category—the more of these features the customer receives, the more satisfied they'd be. Sticking with the hotel example, price is a common satisfier—usually the less a customer has to pay, the happier they are. Satisfiers can differentiators that earn government organizations respect and acknowledgement.
 - **Delighters:** These are features, factors, or capabilities that either go beyond what the customer expects, or target needs that they can't express for themselves. For example, fresh flowers in a hotel room on arrival will delight customers.

2. Place sticky notes for each type of need on a spectrum from 'need not fulfilled' to 'need well fulfilled'.

3. Think about your priorities:

- First look at any Basic needs. Even though doing them well doesn't win you many points, doing them poorly has a serious effect. If you're not meeting them, this should be the first area of focus.
- Perform the same assessment on the Satisfiers—are you doing them at all? Can you do more?
- Only look at Delighters if you are meeting all the basic needs and have covered many of the Satisfiers, otherwise it can weaken their effect. Fresh flowers matter much less if the room is filthy and cramped.



Identify Insights

Compile a Research Findings Report

WITH YOUR TEAM

Whatever the format, your research findings report should document and organize all insights in a way that makes sense and can be easily read and understood by someone who was not involved in any research. This report is key for involving leadership along the process and makes a great artifact to share and gain support. A good report includes some excerpts from your customer interviews and observations that help support the insights and color them with customer voice or images. Additionally, research or statistics gleaned from your contextual research may support some insights or be represented separately, also telling a clear story.

It can be tempting to capture every single detail—every quote, every image, every bit of context in a findings report such as this, but do not try to recreate the entire experience of participating in field research. While data archives are important and should be thorough, this report should be a summation of the work you've done up until this point and show how your team has begun to make meaning of the data. It will reflect decisions that your team has made about the hierarchy of information and its importance. Be mindful of the paradox that the more we try to share, the less we may ultimately convey.

To see examples, [click here](#).



Images will help your audience build empathy

Quotations pack a punch. Use them to tie your research directly back to what you heard from Veterans





Discover Checklist

Necessary outputs before moving to *Design*:

- **Research findings report** which includes contextual research materials (e.g., trend analysis, relevant statistics) and ethnographic research materials (e.g., interviewee “facebook” profiles, documented insights and themes)

Remember to consider these questions with your team:

- Have you covered all of the research questions you started with? If not, do you have a clear reason for dropping that line of inquiry?
- Have any new research questions emerged and did we get enough understanding to inspire new ideas?
- Have we documented all interviews well enough that we can find something if we want to revisit it later?
- Does the entire team feel well connected to the research participants and outcomes?
- Do we have an idea of some of the most essential things our proposed solutions should address? Have we identified an broad solution areas?
- Have we developed deeper empathy for our customers?

“VA’s vision for change is not only Veteran-centric, but Veteran-driven—putting our customers in control of their VA experience.”

VA SECRETARY BOB MCDONALD



Design

IN THIS STAGE

In the Design phase, The team will move from thinking about insights in the abstract and start applying them to the challenge at hand. You'll brainstorm potential solutions, iterate on prototypes, and narrow your ideas down to a few distinct, bold concepts for further development.

Different projects have different timelines. We've sketched out what Design might look like at different effort levels:

LOW

Target your resources toward developing design principles and high-level concept sketches. The goal for Design with a limited timeframe is creating compelling stories that encourage additional research investment.

MEDIUM

Complete the entire process, but aim to streamline where you can. If the concept allows, consider multiple rounds of prototyping over a more drawn out design process.
Move fast, but move smart.

HIGH

Look to spend most of your time shaping your design principles and concept sketches. Give Veterans and other users ample opportunity to inform and refine your concepts along the way from initial sketches through to mock-ups and prototypes. Spend the time testing now to ensure your solution will produce the intended results.

Steps and activities

ACTIVITIES

Revolutionizing HIV Testing

Women's Health Clinic at the Zablocki VA Medical Center, Milwaukee, WI

CHALLENGE

A "dismally" small number of women at the Zablocki VA in Milwaukee, WI had been screened for HIV in the last three years so Kathryn Havens, the Director of Women's Health, decided to determine the root cause.

APPROACH

Kathryn worked with her team at the VA Medical Center and Illinois Institute of Technology - Institute of Design students to use design thinking to tackle the problem. They interviewed doctors and quickly realized that doctors' dread of a long, often awkward, conversation about sexual history and any past drug use meant that few asked if their patients wanted an HIV test. The team ideated multiple solutions and honed in on two: enhanced education on HIV for the faculty and an easier process for asking the question. Now, Licensed Practical Nurses would just ask: Do you want the test?

RESULT

The new process worked tremendously, with almost 400 tests done over the next four months alone. Kathryn and her team worked to ensure that wrap around care would support women regardless of the results and they created a video to communicate their story.

"It is invigorating to work with a motivated team willing too iterate to the best solution together." - Kathryn Havens



To read more, [click here](#).



Step: Craft Design Principles

DEFINITION

Design Principles serve as the touchstone for all of your work going forward. Based on your insights, your design principles are a series of statements that a successful solution must fulfill. They are statements rooted directly in the customer insights you uncovered. Collectively, they should address a range of Veteran needs (with the breadth determined by the breadth of your challenge). You won't use all of your insights, but think about how different insights can be grouped or combined to lead to a design principle.

WHY IT MATTERS

Design Principles provide guidelines (and guardrails) for potential solutions. First, they will help to generate ideas. They will then help you to evaluate and refine your concepts before guiding decisions during the development of any potential solution—helping to ensure it is coherent and consistent, and informing the inevitable hard choices and trade-offs during implementation.

WHAT GOOD LOOKS LIKE

A design principle should be directly connected to the insights that led to it. It should be a complete statement that suggests many possible directions, but describes a future state goal, behavior, or outcome. Your principles should answer, "In order to be successful, our product/service must...". This includes:

- A short phrase that describes the essence of the principle
- An action that responds to the problem
- What that action should accomplish; a "so that..."

An example would be:

"Reduce Complexity. Minimize the time and effort our Veterans, and potentially their families, spend on repeatable tasks ...

... so that they can focus more on getting access to care and on their own lives and communities."



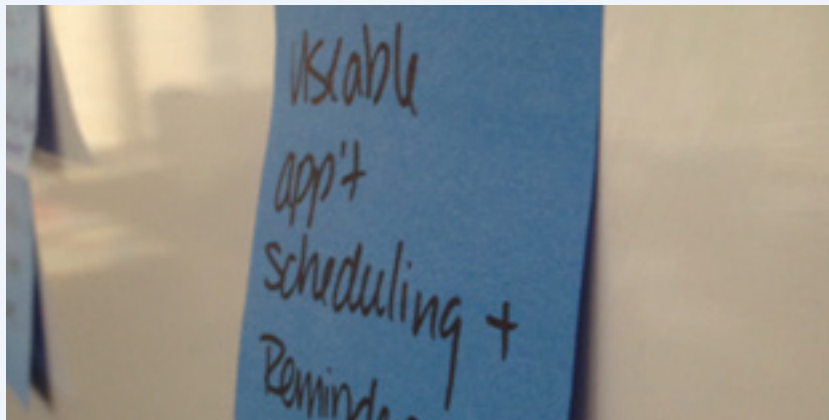
Step: Generate Ideas

DEFINITION

With your design principles as a bridge to your insights and research, now is the time to turn to developing ideas. Brainstorming and generating ideas together should be an extremely collaborative point in the process. All ideas are welcome. Think big and don't feel constrained.

WHY IT MATTERS

Without ideas, you can't address the problem. Be confident in your capabilities, the knowledge you gained through research, and the design principles you crafted. Now's the time to start thinking about solving the problem at hand.



WHAT GOOD LOOKS LIKE

An ideation session:

- Include participants representing diverse functional, geographic, and demographic backgrounds to foster rich discussion and a variety of ideas.
- Produce breadth of thinking (called "divergence") as well as some alignment and momentum for widely shared ideas (called "convergence").

Initial ideas and concepts:

- Describe ideas that meet clear customer needs
- Engender passion from the team and align with the ambition level of the project
- Remain clear enough for others in the room, and outside the room, to understand and build on
- Maintain plausible paths to overcome feasibility and viability challenges

COMMON PITFALLS

- Adversarial atmosphere created by members becoming strong advocates for their own ideas regardless of their resonance with others
- Too much evaluation of ideas early on...
- ...And too little evaluation later as ideas are turned into initial concepts (e.g., How does this concept improve the Veteran experience?)
- Ideas are too abstract to make real



Generate Ideas

Group Ideation and Clustering

WITH YOUR TEAM

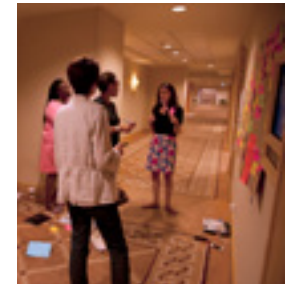
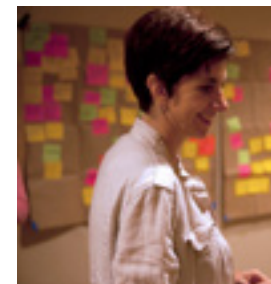
Structured ideation is the key to generating useful ideas. Use your design principles to anchor your ideas to research findings. Bring a diverse group to the session(s) to develop many possible solutions. Divide the participants into groups of three to five, with at least one core team member to facilitate. Each group should contain a diverse mix of backgrounds. The breakouts have two parts:

Part 1: Idea Generation

1. Choose a design principle for the group to focus on.
2. Spend 15-20 minutes in a “silent ideation” while each person their own ideas and describes them on sticky notes. Encourage the team to depict ideas visually instead of relying solely on words.
3. Invite one person to explain an idea to the group and place or hang it in a visible spot.
4. Build on the idea as a group by adding similar ideas or coming up with new ones inspired by the first idea; additions should be hung on the wall near the first.
5. Continue until all members have shared their ideas that address the chosen design principle.

Part 2: Idea Clustering

At this point, each group should have a table or wall full of ideas. Edit them, removing overlapping or uninspiring ideas. Then cluster and connect the remaining ideas into larger systems. Consider each individual idea system, as well as how they might work together. Use the questions and prompts on the concept development protocols to help clearly define the idea system. Remember to tie the ideas back to the design principles and the research findings.





Generate Ideas

Group Ideation and Clustering

WITH YOUR TEAM

To get the most of ideation, work from the common foundation built by the problem statement, research findings and design principles. Encourage participants to speculate, expand, and improvise with their ideas—but always from that common base. A few best practices to keep in mind:

HCD TIP

After the session, take time to reflect on the ideas and discussions that came out. Ideation is exhausting, so give your team a day to make sense of ideas before moving onto the next step: building and prioritizing concepts.

FACILITATION

- **Encourage wild ideas:** Create a safe environment to think beyond the norm and share ideas.
- **Be inclusive:** Solicit interaction from all members of the group.
- **Tie back to customer need:** As participants share ideas, keep asking them to tie ideas to needs or other research findings.
- **Balance direction and flexibility:** Provide structure to inspire relevant ideas, but let participants go off track sometimes to allow for constructive surprises
- **Probe:** Use questions and curiosity to cultivate new ideas.
- **Remain neutral:** Be responsive but not evaluative or leading.
- **Synthesize:** Listen and help connect the dots among ideas.

PARTICIPATION

- **Maintain the perspective of the customer:** Think about the new experience for Veterans or other users. How do they learn about it? How does it change their daily processes? How does it change their lives? This grounds ideas in Veteran needs and avoids just looking for applications of existing capabilities and assets.
- **Defer judgment:** Build on ideas of others while avoiding evaluation or poking holes. Encourage a mindset of “Yes, and...” when considering at ideas.
- **Be visual when possible:** Draw ideas out to allow for more detail than is possible with words. It also makes it easier to communicate the idea to others, reveals nuances and assumptions, and helps avoid ambiguity.
- **Keep it light:** Create a comfortable atmosphere for everyone.



Step: Develop Concepts

DEFINITION

To move from ideas to concepts you will weed out all but your strongest ideas, narrowing from a large number of ideas to a handful (typically three to five) of more thought-out concepts.

WHY IT MATTERS

In this step, you will begin to think more deeply about the best ideas that you have, and develop them more fully into robust concepts. You should start to ask questions like: Who is the solution for? What are the needs this idea responds to? How does it do that? Answering questions like these will help you shape them into concrete concepts that can be evaluated.

WHAT GOOD LOOKS LIKE

Once you have developed a set of strong concepts, your team should be able to answer questions like:

- What is the value proposition of the new concept?
- What is the new experience and how is it different from the current one?
- Which current capabilities and assets can we leverage? Which others will be required? How might we develop or acquire them?
- Which populations or facilities will we target first to test this concept?
- How would a first-time customer/user experience this concept?
- Which elements of the concept should we prototype and test first?
- What is the hardest part of this concept to get right?
- What are the next steps in bringing this concept to life?
- What are the critical uncertainties or risks?



Develop Concepts

Ten Types of Innovation Framework

DEFINITION

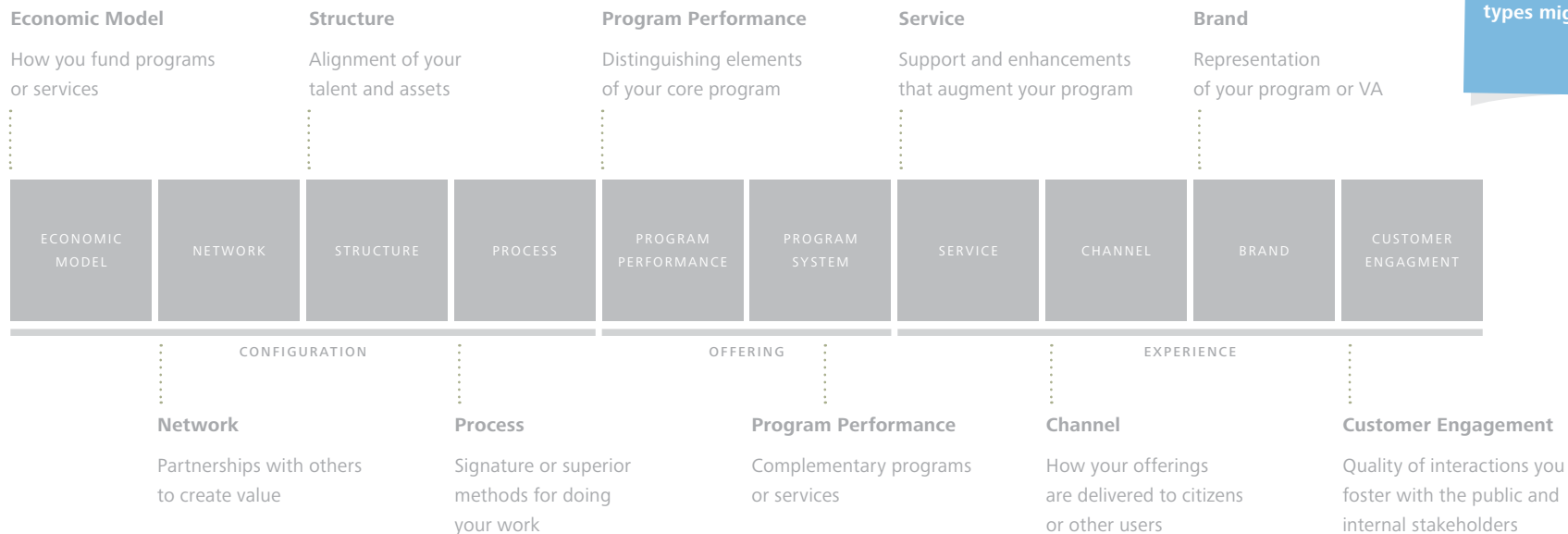
The Ten Types of Innovation framework breaks down the ten different ways that a product or service might be innovative. This tool can be introduced when thinking through, developing, or refining a concept. Mapping your concepts' components to the Ten Types can be helpful in diagnosing your innovation and examining how you might enrich it by expanding your thinking to other dimensions. For example, your concept could focus on "Program Performance," but you might realize it could pack even more of a punch if an innovative "Channel" was added as well. The most effective concepts will likely employ at least five types of innovation. For further reading, click [here](#).

HCD TIP

Understand all ten types. Virtually all projects can improve just by knowing and deeply understanding the value and subtleties of each of the types

HCD TIP

Understand what your customers really need. User research can help you know what is relevant to customers and what surprises other types might help to deliver





Step: Evaluate and Prioritize Concepts

DEFINITION

Having developed a handful of concepts, now you should turn your attention to closely evaluating each and prioritizing which one you will ultimately develop as your solution.

WHY IT MATTERS

Design involves developing a large number of ideas, many far-fetched or ideal. That doesn't mean that at the end you don't want a high-quality, real-world solution. Having moved from a large number of ideas to a smaller number of concepts, we evaluate those concepts to decide which one(s) to take forward.



WHAT GOOD LOOKS LIKE

- A prioritized concept that is desirable, feasible, and viable and has been prototyped and tested with potential users
- Concept descriptions and sketches to communicate the concept and its potential impact as well as a preliminary assessment of value

An example would be:

After starting out with a number of concepts for a new prosthetic, the VA Medical Center team uses the Balanced Breakthrough model to evaluate them based on their desirability, feasibility, and viability as solutions. They test the best concepts with Veterans, rapidly prototyping, learning lessons, and determining if they would meet the goals of the solution for Veterans.



Evaluate and Prioritize Concepts

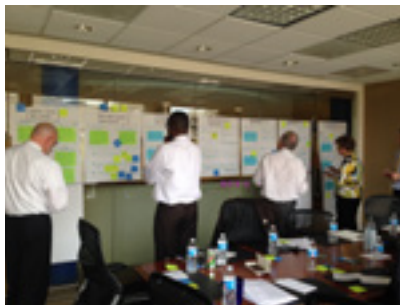
Concept Evaluation

WITH YOUR TEAM

Outline the relative merits of concepts

Compare and contrast concepts against one another. Be sure to include criteria like the strategic fit, public positioning, customer desirability, technological and regulatory feasibility and the ability of the concept to meet the organizational goals of the project. Also consider the relative effort—in terms of time, investment, and resources—required to prove the concept as well as ultimately bring it to market.

These measures will allow for a fair and strategic evaluation of the concepts. This may be achieved through collaborative examination and discussion as a team, 'pitching' favorite concepts to one another, mapping concepts and concept components across defined attributes, or creating a formal scoring mechanism with criteria clearly delineated.



Prioritize

Make a judgment as a team about which concept(s) to push forward through voting with core and/ or extended team members or conversations with leadership. This is a fantastic opportunity to run your concepts by your key stakeholders. Consider how complementary concepts might be arranged into a concept platform. With few exceptions, teams typically only bring one concept or concept platform into the Deliver stage after prioritization, as focused effort is required to continue to define concept attributes. This is especially true as concepts get bigger and more ambitious and if your team is doing something significantly new and different.

It is also important to remember that concepts that do not move forward immediately are still valuable and should be documented in a catalog for potential future development. More favorable political or organizational conditions or the eventual elimination of obstacles like high cost structures, technological hurdles, or regulations could dramatically change the promise of a shelved concept.



Evaluate and Prioritize Concepts

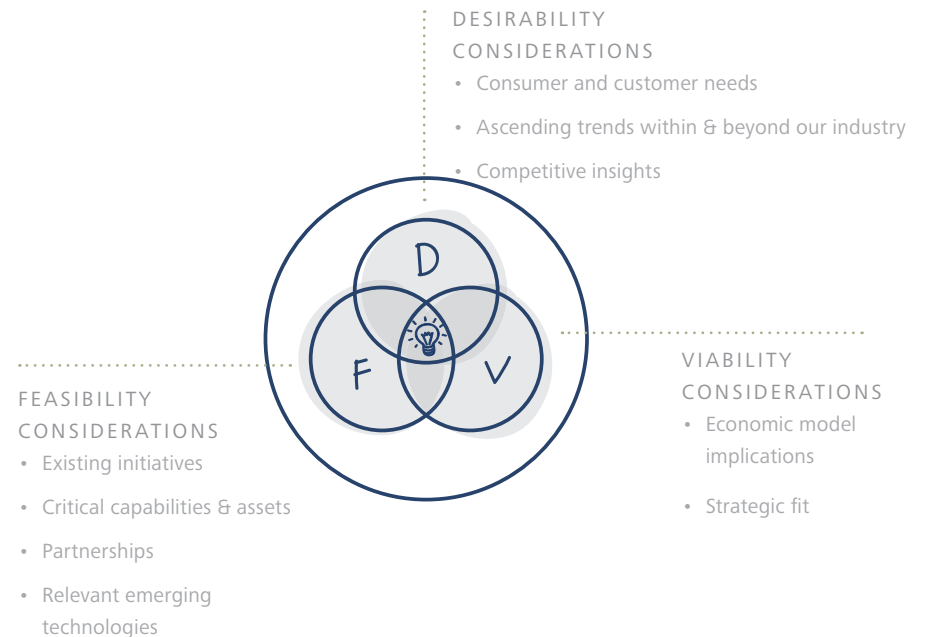
Balanced Breakthrough Model

DEFINITION

The Balanced Breakthroughs model is a framework that serves as a guide to build initial concepts into more concrete concepts with enough detail to evaluate their merit. As your team tests each idea through the following three lenses, consider what other details and components can be added to your concepts to make them stronger.

Take each concept and evaluate against 3 categories:

- a. **Desirability:** Does the concept serve the needs we identified and prioritized in the Discover stage? Does it connect with the stories we heard? Ultimately, does it improve the experience for Veterans?
- b. **Feasibility:** How might we execute the concept? What assets and capabilities must we improve or create to build it? Who else should we partner with?
- c. **Viability:** Will the new concept have a significant, positive impact on our organization? Can the concept achieve the goals we outlined during business framing? How does the new concept align with VA goals and aspirations?



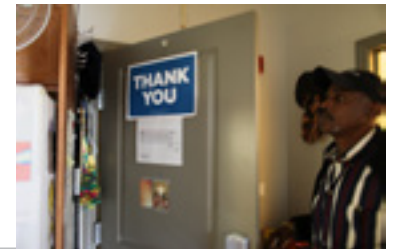


Evaluate and Prioritize Concepts

Depict the Solution

DEFINITION

At this stage, elements of the prioritized concept are likely contained in several places. It is important to document the key aspects of the concept for further refinement as a jump-start to the Deliver stage. At a minimum, a complete concept should contain:



Early depictions of the solution

Depictions should be both written and visual. Written depictions should detail how the concept will work, what the Veteran experience will be like, its features (what it is), and benefits (what it does). The features, benefits, and experience should be tied back to research findings and, hopefully, quotations. They should also address feasibility concerns such as required capabilities and assets, and legal and regulatory issues.

Written and visual depictions

Should tell the story of how the concept adds value for Veterans and the organization. Visuals can be preliminary and rough; more complete visual depictions should be built out during the last stage of the HCD process.

A first-pass at financial viability

At this stage, the financial model should be simple with a focus on value levers, opportunity sizing, and a preliminary understanding of needed investment. It will have many assumptions. During Deliver, some assumptions can be confirmed or corrected with additional research and conversations with colleagues and experts.

Beginning thoughts on the first steps to launch

Develop initial outline of how and when the new concept will get started, and potential sequencing in rollout. These will be estimates only to reveal a general timeline. Describe any critical uncertainties or risks, which may be more deeply considered in the Deliver stage or tested through prototyping to resolve.



Evaluate and Prioritize Concepts

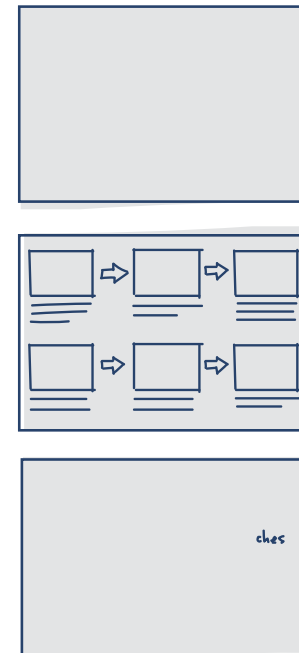
Storyboarding

DEFINITION

Storyboarding is a simple way to visually map out the sequential experience of a concept by combining text and imagery. It's a great way to communicate a new idea to other stakeholders. It's also a good way to review a concept, as the act of putting together each stage will highlight aspects you need to consider or might not have thought about yet.

WITH YOUR TEAM

1. Roughly sketch out the scenario as you imagine it happening
2. Plan who will be a part of the process, e.g., Veterans, VA employees, partner organization employees, supporters of a Veteran.
3. Act out or draw each part of the journey, making sure to document with plenty of photos or pictures
4. Use a program such as PowerPoint to combine your photographed documentation with captions explaining each stage. The goal is to tell a good story that clearly communicates the process
5. Adding in sketches is a great way to build a richer picture, especially if there are other elements involved, like the interface design on a smartphone



HCD TIP

Think about the places along the journey that can have the biggest impact on the overall experience. These are 'moments of truth' for your solution; pay particular attention to them.

HCD TIP

Make sure the proposed process is lean. Are there steps you can remove without harming (or even improving) the overall experience?

A note on sketching and illustration

You do not have to be artists here. Unlike projections, spreadsheets or analysis, concept visualizations focus on the physical, human experience and force your audience to consider details, even if imperfectly drawn, that may be missed in verbal description alone.



Evaluate and Prioritize Concepts

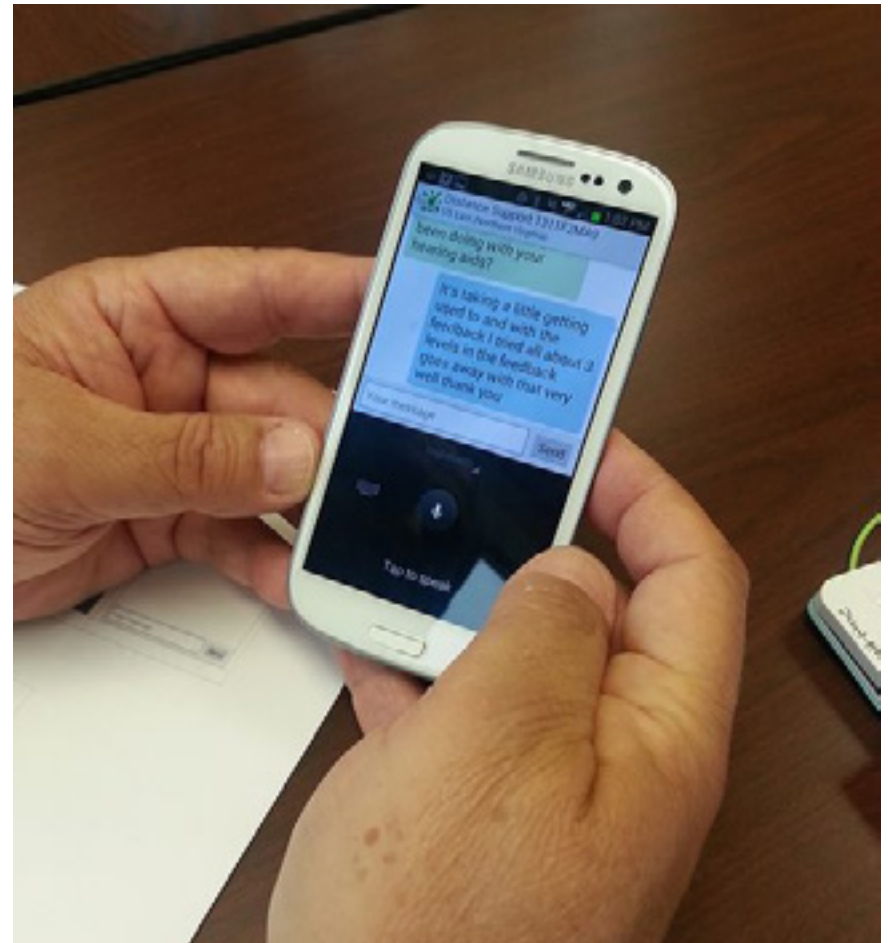
Rapid Prototyping

DEFINITION

Prototyping is a controlled experiment to test one or more assumptions or critical elements of your concept. It's a key part of the customer-testing and continuous improvement of ideas that characterize the design process. Prototypes allow you to reduce uncertainty, get deeper customer insights, limit the financial risk of failure and learn from small low-cost failures earlier in the process rather than at the end.

By prototyping, you can ensure that when you go to pilot something you will have already learned valuable lessons about how your solution works with real people. Sometimes prototypes can be a simple activity just to get the conversation going on 'what's next?' when you're developing your concept.

You can see some great videos on Rapid Prototyping [here](#) and [here](#).





Evaluate and Prioritize Concepts

Rapid Prototyping

WITH YOUR TEAM

- 1. Begin with a clear objective:** What exactly are you trying to learn? Recognize the difference between the “need to knows” and “nice to knows.” What will success look like?
- 2. Identify the assumptions you want to test:** Are you testing Veteran adoption, technological feasibility, internal capabilities, etc.?
- 3. Create a prototyping plan:**
 - What do you want to learn about the concept? Why is it important? Where are the riskiest aspects?
 - What will the experiments be and what are their components? How will you judge success?
 - What are the resources you will need? People, skills, time, money, materials?
- 4. Design the experiment for learning:** Exactly what output will you collect? Will the output actually answer the objectives/hypotheses? Record any “unanticipated” learnings and share these learnings with others.
- 5. Plan the experiment within strict time and cost limitations:** Limit the assumptions being tested if necessary. It is often better to conduct many small experiments rather than a few big ones. Ask yourself: Is the scope sufficient but realistic? Should the experiment be simplified? How long will it take? What constraints on events and resources are there? Are there particular risks associated with the experiment itself?
- 6. Do the test:**
 - Review the concept while you’re extracting new learning
 - Keep the feedback loop fast and short
 - Capture the feedback using notes, photos, and video
 - Summarize the learnings and take them into the next cycle of design



Evaluate and Prioritize Concepts

Usability Testing

DEFINITION

Human-centered design works best when you pay attention to feedback and constantly check your ideas and assumptions against the voice of Veterans. At any point in the Design stage, should you need an opinion on how an idea is working, reach out to someone: a Veteran, a colleague, a relative.

Testing for usability will ensure that your concept will hold water when it is introduced to people that aren't familiar with it. Be clear with participants on what you're testing for, and how valuable their feedback is to the success of your project. This could be as large as another round of research or as small as a conversation with a colleague.





Design Checklist

Necessary outputs before moving to Deliver:

- **One prioritized concept** (or a platform of concepts) to take into the last stage
- **Early concept descriptions and sketches** that help communicate what the concept is and how it changes the customer experience
- **Preliminary assessment of value** the concept will bring the organization, including some basic financials

Remember to consider these questions with your team:

- Have we considered each lens of the Balanced Breakthroughs model in detailing our concepts?
- Have we described or visualized the concept in sufficient detail to communicate with audiences unfamiliar with our work to date?
- Have we identified the key business elements of the concept and considered opportunities across the Ten Types of Innovation?
- Did we ensure that our concepts respond to user needs?

“At the end of the day, you are a designer. Yes you, all of you. You have the power—and responsibility—to create something meaningful, engaging and useful out of this sea of information you’ve just amassed.”

SARAH BROOKS, VETERANS EXPERIENCE TEAM



Deliver

IN THIS STAGE

In Deliver, you and your team will make. You will finalize your concept and make the plans for bringing it to life. To do so, you'll tell the story of your research, outline the steps for implementation, and secure leadership support. The team will also determine how it will continuously improve the product or service going forward.

Different projects have different timelines. We've sketched out what Deliver might look like at different effort levels:

LOW

Get a proof-of-concept design in the hands of potential users as quickly (and cheaply) as possible to test key features and interfaces. Start small with pilot tests to demonstrate value before building a pitch for a larger roll-out.

MEDIUM

Complete the entire process, but focus on small scale user tests and building a compelling pitch for leadership. You may not be able to get a 100% solution launched, but by telling a rich narrative around your tests, you increase the chances of full implementation approved.

HIGH

Shoot for the moon, but in the same way NASA did - test your concepts early and often. Bring leadership along on the journey with persuasive arguments grounded in your work to date to maintain momentum throughout your implementation.

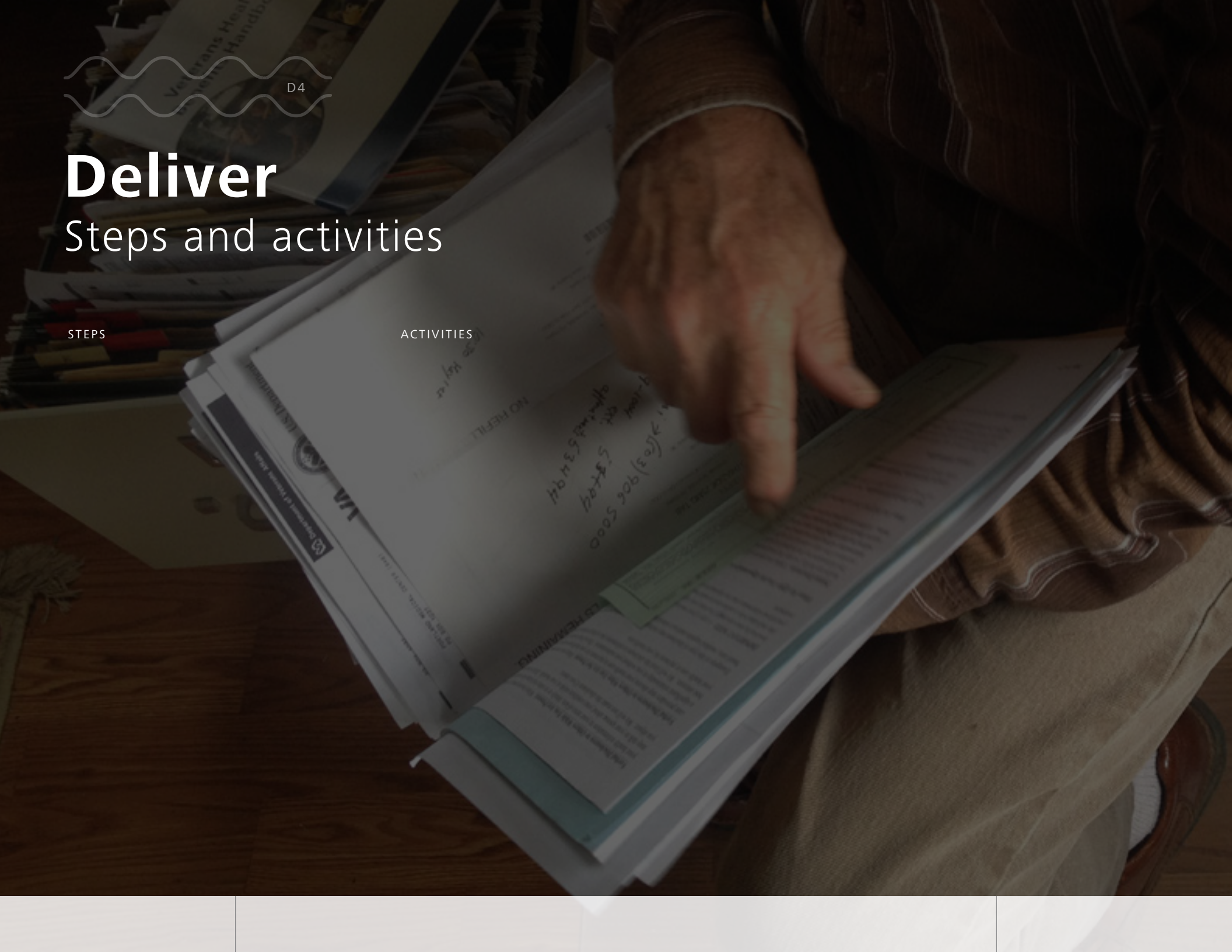
D4

Deliver

Steps and activities

STEPS

ACTIVITIES



Cancer Care Center Redesign

Veteran-Centered Design Lab, Indianapolis VA Medical Center

CHALLENGE

The Cancer Care Center at the Indianapolis VA Medical Center struggled to properly serve Veterans. It was beset with disjointed services, and the very small infusion space was often referred to as “chemo in a closet”.

APPROACH

To better serve our unique Veteran populations and understand their needs, the Veteran-Centric Design Lab implemented a two-pronged human-centered design process. They first interviewed and shadowed Veterans to better understand their journeys and experiences. Next, they facilitated a series of collaborative design workshops with an interdisciplinary team of stakeholders. The final design included facilitated stakeholder consensus, checklist of Veteran-centric elements, ideal-state healthcare delivery process, and concept drawings of the optimal floor plan.

RESULT

The design process produced conceptual designs that were transitioned to the Architect Engineer. Construction will begin in 2017, promising an improved Veteran experience at a Veteran-centric Cancer Care Center.

“Specific insights lead to positive change. For example, the Mayo Clinic’s patients prefer private infusion rooms, but in our design research we discovered (unsurprisingly) that Veterans possess a strong sense of camaraderie. This insight led to adding shared infusion spaces to our design so Veterans can socialize if they prefer. It would have been disservice to our unique Veteran population to simply copy and paste Mayo’s insights and designs.” - Chris Hughes





Step: Finalize the Concept

DEFINITION

Building on the concept description outlined in the last stage, your team will need to develop a more thorough articulation of the concept and key elements of the Veteran experience you expect your concept to fulfill. Unlike the last sketch, this piece should capture everything that the team wants to communicate about how the concept works.

WHY IT MATTERS

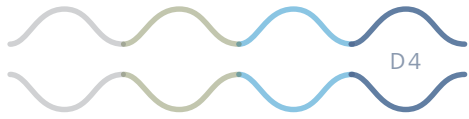
Your articulated concept will be a tool for communicating the concept to leadership and future teammates involved in implementation. Visualization, which can take many forms, is a key way to make the concept clear and shareable.

WHAT GOOD LOOKS LIKE

- **Easily Communicable:** Have the key elements been distilled into something that is easily understood by someone unfamiliar with the concept such as a friend, family member, or inexperienced user?
- **Emblematic of the Customer Experience:** Does it show the key experience touch points and key actors in the process?
- **Articulates the Impact:** Does it communicate how this changes the customer experience? Does it show why it is important for Veterans?

COMMON PITFALLS

- **Curse of the expert:** Never assume that every piece of your concept will be intuitive to others. Use enough detail to make all ideas clear, and tie back to your original research (e.g., quotes from Veterans, statistics) when you can.



Finalize the Concept

Visualize the Final Concept

Be deliberate in which visualization you choose for your concept. A few options are outlined below:

Journey and Experience Mapping

A journey map is a way of visually expressing and communicating the sequence and elements within an experience. Journey maps focus less on the mechanics of the process than they do on representing what a Veteran thinks and feels during the experience. Journey maps are powerful tools to build empathy and provide an engaging way to organize and share research findings. You can see an example [here](#).

With your team, consider:

- What are the key activity flows and touch points?
- In what ways will different types of user interact with the concept?
- How and when will information be communicated?

Platform and Process Diagram

It may be helpful to lay out a diagram of all of the inner workings and processes for your concept. It's a useful way to take in either a current state or, in this case, demonstrate all the things that need to occur in your future state concept. This will include descriptions of how distinct elements of the concept flow and fit together, which is can be more conceptual than definitive. This is a more technical output and is focused on internal structures more than Veteran experience.

With your team, consider:

- How do the different platform elements fit together?
- What are the concept components that support the experience of the offering?

Digital Wireframe

If you are creating a digital product such as a website or app, it will be helpful to understand what the experience will look like, including the digital journey. These interface layouts and interactions will illustrate features, and will be a helpful stimulus to test with Veterans throughout your process. These can be in the form of hand drawn sketches that you can talk through, or a functioning online prototype that customers and teams can test individually.



Step: Plan for Implementation

DEFINITION

As with other elements in the Deliver stage, the process of working through implementation stages often forces teams to define concepts with more clarity. You will need to determine how to make your concept real in a way that will resonate with your audience.

WHY IT MATTERS

Successful delivery of a solution necessitates planning. How will you pilot this? What capabilities and resources will you need? How much will it cost? As the owners of a solution, you need to think through the necessary steps to bring it to Veterans. By this point, you've put in the work of research and design; don't let it falter because you haven't thought through the steps.

WHAT GOOD LOOKS LIKE

- Clearly defined stages
- Coverage of essential concept components
- Dependencies and critical uncertainties considered (especially those with urgency for testing in an early stage)

COMMON PITFALLS

- Unclear timelines implied with stages
- Incongruity among different components, particularly where dependencies exist
- Failure to test any immediately critical uncertainties in the first stage (as relevant)



Plan for Implementation

Build a Roadmap

THE ROADMAP

A roadmap is a detailed view of the concept's delivery evolution, describing the state of its components at each phase of development with a high-level definition for each phase to clarify timing, rationale, and people involved.

WITH YOUR TEAM

- 1. Identify concept components with potentially distinct evolutionary paths:** Make a list of the core components of the concept and discuss assumptions about what an initial state must or could deliver and what the full future vision delivers. It may help to break the components out by different customer experiences as well for manageability and coverage of critical experience dimensions from each perspective.
- 2. Map out each component's evolution in stages:** Describe the state of each component at each stage of implementation, including intermediary stages. For higher fidelity, include any required capabilities, dependencies with other components or engagement with other initiatives and business units, and an estimated timeline for each stage.

Planning for pilots

Pilots can mean different things to different people, but regardless your concept should go through fairly rigorous user testing before deploying it on a large scale. If, for example, your pilots are typically only for a handful of people at your VA Medical Center or your Regional Office, then rapid, early pilots might make sense. If, however, your "pilot" will be for an entire region or multiple facilities, you will want to make sure that you've done rigorous usability testing with actual customers to iron out any kinks.



Plan for Implementation

Identify Capabilities and Resources Needed

WITH YOUR TEAM

Brainstorming, discussing, and analyzing different channels and capabilities will help you determine multiple possible models for delivery, as well as help you to evaluate the pros and cons of each.

Examine each solution one at a time using the following steps.

You might also split a larger team into smaller teams that focus on one solution. Make sure that there are at least two people per team.

1. **Write “Distribution” on a large flip chart or whiteboard.** Then have the team identify all the different people who could deliver the solution. Write each on a sticky note and then list pros and cons for each possibility.
 - Where, when, how, and why might a Veteran experience this solution?
 - Which actors and channels will touch the solution?
 - What other channels could be used to reach customers?
 - What is the range of possible ways this solution could be delivered?

2. **Write “Capabilities” on another board or flip chart.** List the different capabilities required for each solution. These could include human, financial, and technical capabilities. Indicate if the capability exists in your local office, if it exists within VA, or if you should partner.
 - What human, financial, and technological capabilities are required for creating and delivering this solution?
 - Which of these capabilities do we have in our current office or local VA? Which do we have nationally? And for which will we need to reach out to partners?
 - Do we need to develop any capabilities on this list?
3. For the solutions where partnering is a likely opportunity, **create a list of potential partners and then narrow it down.** List first steps to pursue those top potential partners.
 - What organizations or individuals have the capabilities we do not?
 - Do we have an existing relationship with them?
 - How can we engage them to support this effort?
4. If you had split into smaller groups, come together and present out.



Plan for Implementation Business Case

INCLUDED IN THE BUSINESS CASE

Summary of Findings: Outline the reason this is a necessary, useful effort for Veterans. Orient your audience to the problem that you are trying to solve using your contextual research and ethnographic research findings. Especially emphasize how this solution ties directly to what you heard from Veterans and other users.

Budget Projections: Provide a summary of the required investment and the impact it is likely to create for Veterans and VA. The impact might be savings in costs, increased efficiencies, or even lives saved. Remember, that parts of these will be uncertain estimations, but the purpose is to demonstrate potential and the rigor of your process and thinking in order to support decisions on how the organization will operate.

Assessment of Strategic Fit: Outline how the concept aligns with VA's goals for serving Veterans. They could tie to a facility-level initiative or an enterprise-level one. At the end of the day, they must improve the experience for Veterans. Demonstrate that value and the ensuing value for VA.

CONSIDERATIONS

1. Strategic priorities for VA

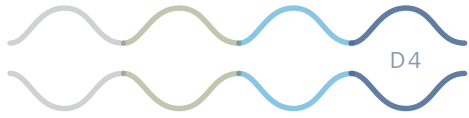
- How does the concept align with the VA's articulated strategy?
- How will it improve VA's ability to serve Veterans and/or improve Veterans' experience at VA?

2. Non-financial benefits

- Does it fill a gap in capabilities that currently exist or anticipate a future problem? Does it improve upon an organizational strength?
- How do capabilities the concept will develop help other parts of the organization?
- How will the concept help VA in light of trends in the Veteran community, the military, or society?
- How will the concept strengthen VA's position or brand?

3. Ability to Execute

- How and why are we best positioned to pursue the opportunity?
- How do our capabilities, assets, and relationships with partners enable us to succeed with this concept?



Plan for Implementation

Business Model Canvas Framework

BUSINESS MODEL CANVAS

Business Model Canvas is a framework used to develop or document business models in a strategic and lean way. It allows for an entire business model to be mapped out in one image. Expanding on the initial business case, this framework can help you strengthen the model for how the concept will operate, make money, and bring value to VA.

This can be printed out on a large surface so groups of people can jointly start sketching and discussing business model elements with sticky note notes or board markers. It is a hands-on tool that fosters understanding, discussion, creativity, and analysis.

HCD TIP

Go beyond words. Feel free to sketch images in the boxes to enhance big picture understanding

HCD TIP

If you print the framework on a large enough piece of paper, use sticky notes to populate the building blocks. This allows elements to be mobile and flexible within the framework





Step: Pitch and Execute the Concept

DEFINITION

With an articulated concept and a roadmap in hand, you will create a compelling final pitch to both build excitement and communicate requests of VA leadership and colleagues.

WHY IT MATTERS

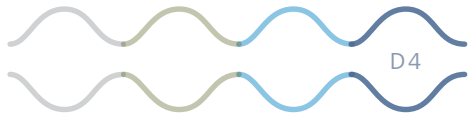
To implement, you'll likely need to win leadership approval and secure funding. To make the case for both, you'll need a clear explanation of the value of your solution—from why it's important to Veterans to how you'll roll it out efficiently.

WHAT GOOD LOOKS LIKE

- Extra detail on the factors that will make or break the concept
- A strong narrative that will create an emotional connection to the concept and the needs behind it
- Consideration of the three lenses of the Balanced Breakthroughs model

COMMON PITFALLS

- Focus on fringe details at the expense of articulating the essentials
- Overly complex explanation of the concept or its value proposition
- Insufficient evidence for the customer or business viability



Pitch and Execute the Concept

Build the Pitch

WITH YOUR TEAM

Now is the opportunity for your team to take all the work you've done up until this point and package your findings and recommendations for how to proceed with your concept. This will be invaluable to socializing your project. Be explicit and what you need to move it forward. The team will need to:

-
- 1. Summarize the research story:** Begin your pitch with a forceful narrative of the Veteran needs to which your concept is responding.
 - 2. Clarify the value proposition:** Introduce your concept with a simple and straightforward value proposition that answers the question, "How does this solution improve the experience for Veterans?"
 - 3. Refine the concept articulation:** Create tangible experience scenarios that show both how the concept works and the benefits it provides Veterans.
 - 4. Select the critical elements of the business case:** This could include Veteran experience, efficiency, cost of delivery, or other ways the concept will create value. Include financial projections if you have them, but avoid making them the central focus of the presentation.
 - 5. Outline the implementation plan:** Pull the most important milestones of the implementation plan (e.g., roll out of critical elements of the concept, required investments) and outline them concisely. Include immediate next steps and what your team needs from leadership and colleagues.
 - 6. Test and refine presentation materials:** Review the key messages with team members to surface any concerns with the story. Update the materials as needed and capture any important talking points that will help improve the presentation for a final, larger audience.



Pitch and Execute the Concept

Summarizing the “Elevator” Pitch

WITH YOUR TEAM

Your “elevator” pitch should provide a compelling, summarized case that describes how your concept meets strategic priorities and provides key benefits for both Veterans, your district or facility, and broadly for VA. This includes all the components you articulated in building your pitch: a clear value proposition to customers and VA, concept and experience visualizations, business rationale, and the roadmap and next steps. Consider the following questions:

- What is the problem?
- Why should your audience care?
- Who else is trying to solve this problem? What isn’t working?
- What insights or design principles support your concept?
- How does your concept provide value to our Veterans?
- How does your concept provide value for VA overall?
- How does your concept actually work?
- What are the most critical first steps to making it real?

HCD TIP

Use the artifacts you’ve created and the rich data you gathered to help others to understand how you went from problem to solution.

HCD TIP

Be deliberate about how you socialize your work. And be clear that everything ties back to what you heard from Veterans.





Step: Track and Learn Going Forward

DEFINITION

As you begin to implement and deliver on your solutions, be sure to track necessary metrics and learn from successes and failures.

WHY IT MATTERS

Human-centered design thinking doesn't stop when you roll out the product or implement the new service. You want to continuously improve and to do that you need to track the appropriate metrics to gauge your impact, learn from them, and adapt as necessary.

WHAT GOOD LOOKS LIKE

- Clear and understandable metrics for success
- Practical methods for collecting metrics
- Process for iterating on the design and refining your trajectory and approach as you gather information



Track and Learn Going Forward

Evaluate Outcomes

WITH YOUR TEAM

Evaluation enables an assessment of your solution's impact and can inform the next round of goals and designs. It helps guide investments and provides an opportunity to assess and plan for the future.

- Engage as many stakeholders as possible in the creation of your evaluation and learning plan. Determine what success looks like from their different perspectives.
- Discuss and determine the appropriate qualitative and quantitative measurement methods.
- Develop a plan going forward for data collection, incorporation, and presentation.

HCD TIP

Don't view evaluation as a hurdle or as something unnecessary. It's a continuation of the design process and an opportunity to learn and improve.

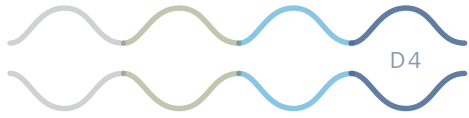


HCD TIP

Remember the evaluation process is iterative and continuing, and results in an opportunity to reflect on your design challenges and possibly create new ones.

HCD TIP

Consider how to record this information to distribute to your team and relevant stakeholders.



Track and Learn Going Forward

Tracking Against Metrics

WITH YOUR TEAM

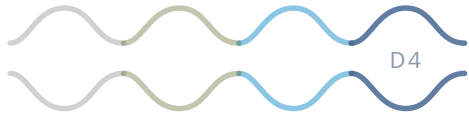
Indicators let you measure the effects of your solutions, determining the level of success and identifying areas of concern or opportunity.

- Focus on your stakeholders and steps and list the information your team would like to learn from each.
- For each stakeholder and step, examine what different types of indicators you would want to track. There are four general types of indicators:
 - › **Leading:** Indicators that suggest an impact months or years down the line
 - › **Analogous:** Indicators that would logically lead one to conclude whether the goal is being met
 - › **Awareness:** Indicators that gauge whether or not Veterans and other users are aware of a product or service
 - › **Engagement:** Indicators that gauge whether or not Veterans and other users are engaging with a new product or service
- Try to include constituents and other stakeholders in this process



HCD TIP

Don't just look for positive and intended consequences. Challenge yourself to look for a view of the full impact.



Track and Learn Going Forward

Create a Learning Plan

Your team can create a learning plan to continue collect stories and learn from customers during and after your solutions are implemented, especially in the beginning. The stories you collected throughout the process informed your understanding of the problem and feedback can improve your ideas. Marrying design and evaluation will allow you keep making the designs better.

WITH YOUR TEAM

- Revisit the stories you gathered in the Discover phase. Discuss what the situation was for the participants in your initial research. What do we expect to happen in their lives if our solutions work?
- Develop an approach to collect more stories during and after implementation. If possible, identify a demographically similar group that will not be affected by your ideas and collect information for comparative purposes.
- Determine how you will integrate both quantitative and qualitative methods in to your Learning Plan.
- Encourage your team to see design and evaluation as unified. Evaluation creates the opportunities for greater understanding, stronger insights, and improved designs.



Deliver Checklist

Necessary outputs before completing the project:

- A clear **articulation of the concept**
- A **business case for investment**
- A **roadmap** that outlines next steps
- A refined **final pitch** to deliver to leadership and colleagues
- Metrics and a **Plan for Learning** and Iterating on Concepts

Remember to consider these questions with your team:

- Did we properly acknowledge both the potential value created by, and the risks inherent in, our concept?
- Can we simply and clearly communicate essential elements of our concept to a fresh audience?
- Do the visualizations help make the concept feel real and easy to imagine in the real world?
- Have we vetted the assumptions and key tenants of our business case with colleagues across different functions?
- Have we discussed our implementation plan with colleagues upon whose expertise we will need in the near future?
- Does the final pitch do justice to the work we've put in over the past several months?
- Do we have a method for collecting, analyzing, and incorporating new information once we've implanted our solution?



Appendix

Templates

STEEP Framework

[BACK](#)

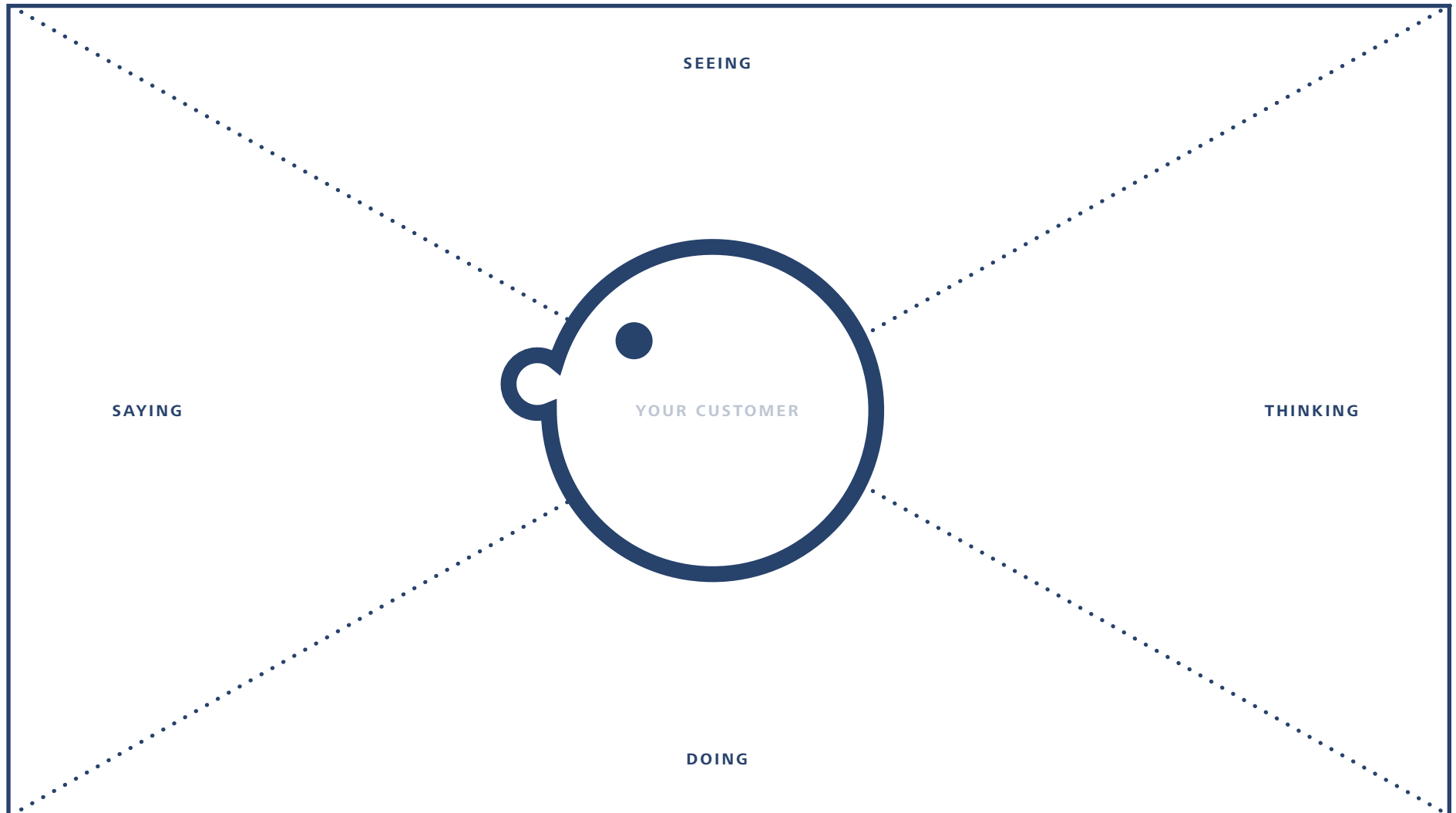
When doing contextual research, this will help your team gain better insight into a topic if you gather information around all five factors.

	SOCIAL	TECHNOLOGICAL	ECONOMICAL	ENVIRONMENTAL	POLITICAL
COLLECTED RESEARCH					

Empathy Map

[BACK](#)

This framework is a way to build empathy for your customer through multiple lenses. The map is broken up into four quadrants to help your team imagine an experience from the customer perspective.



5 E's

[BACK](#)

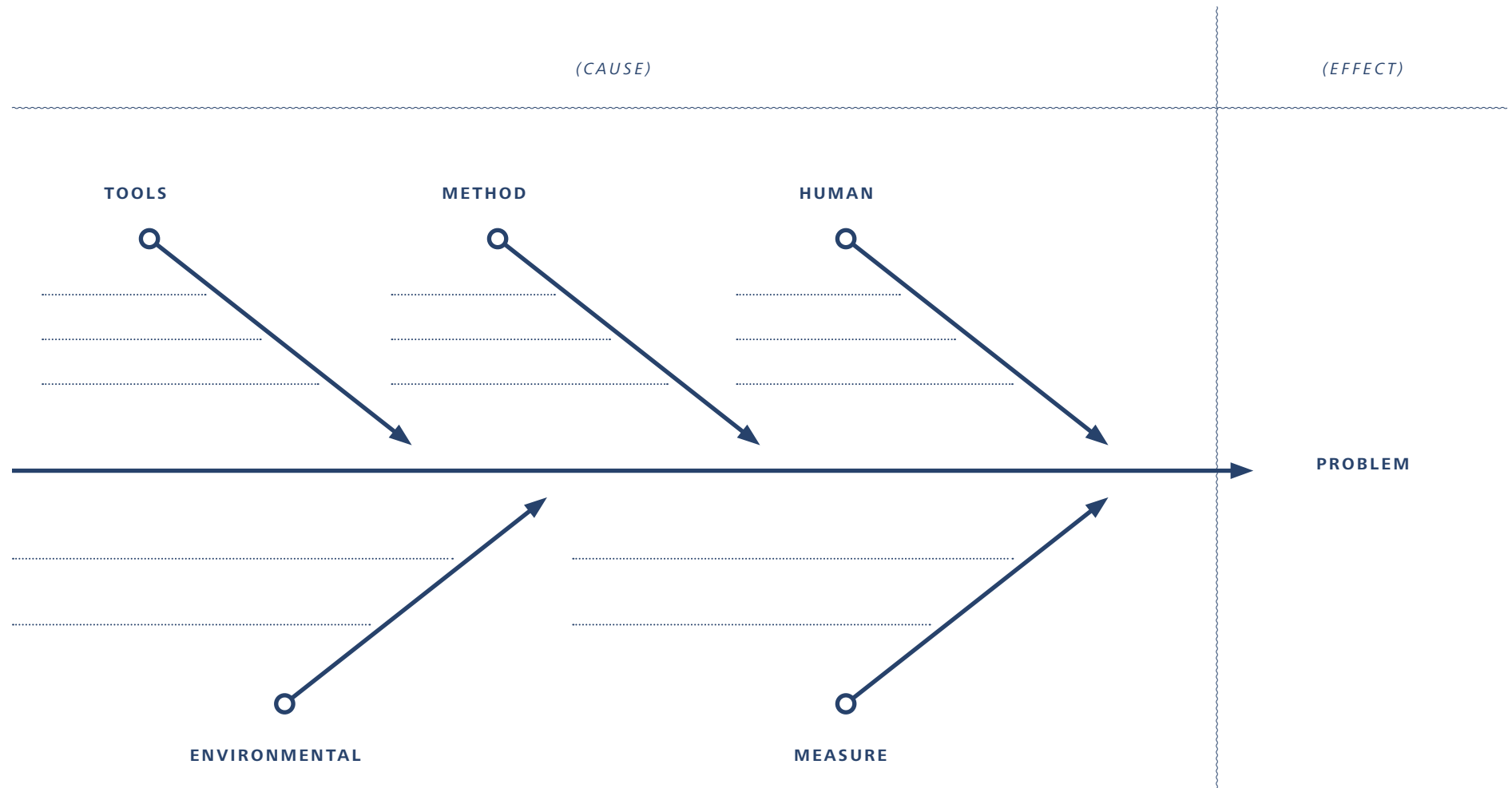
This framework is a way to expose gaps or challenges in each steps of a customer journey.

	<div>ENTICE</div> <div>Before it begins</div>	<div>ENTER</div> <div>As it's starting</div>	<div>ENGAGE</div> <div>As it's happening</div>	<div>EXIT</div> <div>As it's ending</div>	<div>EXTEND</div> <div>After it's over</div>
EXPERIENCE GAPS AND CHALLENGES					

Fishbone Analysis

[BACK](#)

This tool can help your team rethink your problem statement. At the head of the “fish” is the problem statement you’re developing. Each “bone” is a potential cause.



Customer Needs Assessment

[BACK](#)

This tool can help your team map out the customer needs you synthesized and begin to categorize and prioritize them to narrow down your ideas.

DELIGHTERS



SATISFIERS



BASIC NEEDS



NEED NOT FULFILLED

NEED WELL FULFILLED

--	--	--	--	--

Business Model Canvas

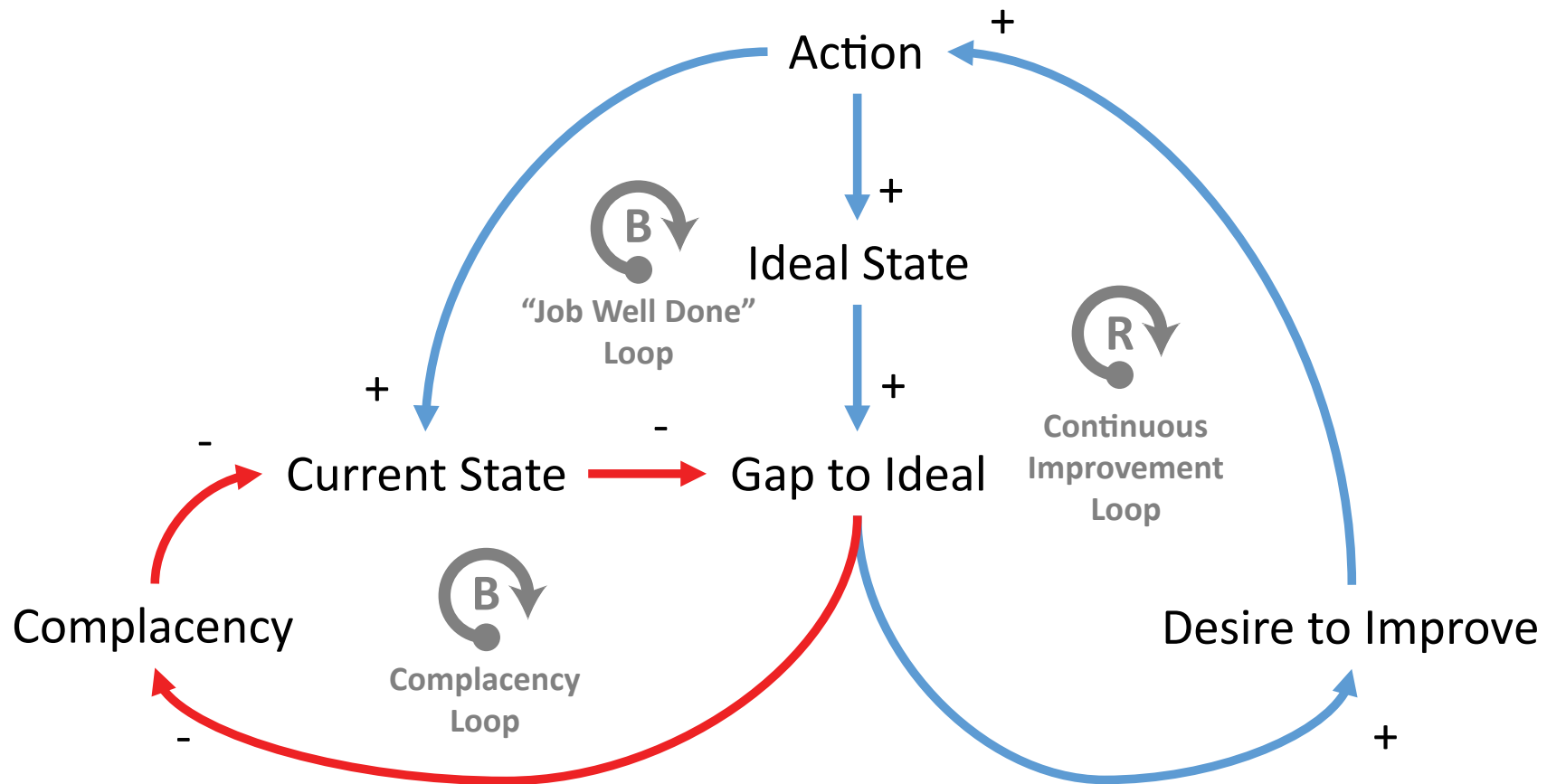
[BACK](#)

This framework can help you strengthen the model for how the concept will operate and bring value to VA. It is traditionally used for revenue-generating business models, so use your discretion on what components are suitable for your organization

WHO HELPS YOU <i>KEY PARTNERS</i>	WHAT YOU DO <i>KEY ACTIVITIES</i>	HOW YOU HELP <i>VALUE PROVIDED</i>	HOW YOU INTERACT <i>CUSTOMER RELATIONSHIPS</i>	WHO YOU HELP <i>CUSTOMERS</i>
	WHO YOU ARE & WHAT YOU HAVE <i>KEY RESOURCES</i>		HOW THEY KNOW YOU & HOW YOU DELIVER <i>CHANNELS</i>	
WHAT YOU GIVE <i>COSTS</i>			WHAT YOU GET <i>REVENUE & BENEFITS</i>	

Causal Loop

This provides an example of a causal loop diagram. These diagrams provide an easy way to see the causal relationships in a system, and find feedback loops that can lead to vicious (or virtuous) cycles or counterbalance the effect of your solution.



Appendix

Resources

Additional Resources

If you're interested in learning and exploring more, a whole host of books and resources exist to further your thinking. Below, we've listed some as a starting point.

INTRO TO HCD	Design Thinking Comes of Age	Kolko
	Change by Design	Brown
	Design Thinking	Brown
	Design without Designers	Norman
	The Design of Business	Martin
INNOVATION	Ten Types of Innovation	Keeley, Pikkell, Quinn, and Walters
	Value Proposition Design	Osterwalder
	Business Model Generation	Osterwalder
	Naked innovation	Paradis and McGaw
HCD METHODS & PROCESSES	101 Design Methods	Kumar
	Innovating for People	Luma Institute
	The Field Guide to Human-Centered Design	IDEO
	Communicating the New	Erwin
	Sketching User Experiences	Buxton
	Prototyping: A Practitioner's Guide	Warfel
DESIGN RESEARCH	Just Enough Research	Hall
	Interviewing Users	Portigal
	The Convivial Toolbox	Sanders
SERVICE & BEHAVIOR DESIGN	This is Service Design Thinking	Stickdorn and Schneider
	Service Design: from Insight to Implementation	Polaine, Reason, and Løvlie
	A Practitioner's Guide to Nudging	Ly, Mazar, Zhao, and Soman
SYSTEMS THINKING & CHANGE	Systems Thinking for Curious Managers	Ackoff
	Innovation as a Learning Process: Embedding Design Thinking	Beckman and Harry
	Fifth Discipline Field Guide: Strategies and tools for building a learning organization	Senge
	Cultures and Organizations	Hofstede

Appendix

Additional Case Studies

Compensation & Pension Exam Discovery

Veterans Experience Office Team; Nationwide

CHALLENGE

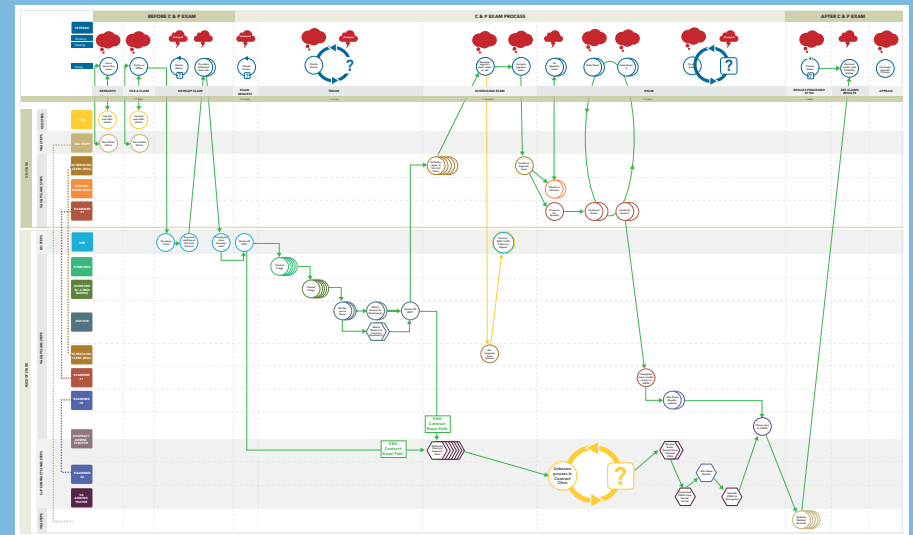
The Veterans Experience Office team wanted to explore and improve Veterans' initial experiences with VA. That still left dozens of interactions, processes, and moments they could examine. They needed to tighten their focus and frame their challenge if they were going to discover and create something meaningful.

APPROACH

To do that, the team turned to Veterans to understand where our customers thought they should focus. They relied on dozens of letters and emails that leadership had received from Veterans. Reading through them, hearing Veterans in their own words, the team realized there was a "screaming need" to look at the Compensation & Pension Exam from Veterans' perspectives.

RESULT

By framing their problem around something discrete, the team could focus their work on direct, in-depth research with Veterans before, during, and after their C&P exam and on the doctors, physicians, and other professionals administering the exams. Through their interviews and observations, the team developed a powerful journey map and service blueprint outlining their findings and key pain points in the process.



"There was this screaming need from Veterans to look at the Compensation & Pension Exam." - Sarah Brooks

Thank you!

Please contact any of the following people if you have questions:

Amber Schleuning, VA Center for Innovation, amber.schleuning@va.gov

Sarah Brooks, Veterans' Experience Team, sarah.brooks@va.gov

Chris Hughes, Veteran-Centered Design Lab, chris.hughes@va.gov

So we can practice what we preach and continuously improve, we'd love your feedback on this toolkit. You can write some [here](#).

Disclaimer of Endorsement:

Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government, and shall not be used for advertising or product endorsement purposes.

Disclaimer of Hyperlinks:

The appearance of external hyperlinks does not constitute endorsement by the Department of Veterans Affairs of the linked web sites, or the information, products or services contained therein. For other than authorized VA activities, the Department does not exercise any editorial control over the information you may find at these locations. All links are provided with the intent of meeting the mission of the Department and this document. Please let us know about existing external links which you believe are inappropriate and about specific additional external links which you believe ought to be included.

Disclaimer of Liability:

With respect to documents available from this server, neither the United States Government nor any of its employees, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference from this Web page or from any of the information services sponsored by the VA to any non-governmental entity, product, service or information does not constitute an endorsement or recommendation by the VA or any of its employees. We are not responsible for the content of any "off-site" web pages referenced from this server.