UNLOCK MARKET INSIGHTS WITH DESIGN RESEARCH

Part two in "Exploring Design," a series of eBooks for product professionals on collaborating effectively with your company's design function





"How can I collaborate on research with my design team, without our stepping on each other's toes?"

"How should I leverage the skills of my designers in my NIHITO® research?"

"Can I use design research methods to bolster my market conversations?"

UNDERSTANDING MARKETS AND USERS

Product management and design share a mission: Understand the markets and users they want to serve. Ensure that proposed solutions meet the market problems and user needs.

STRATEGY

MAR

EXPLORATORY RESEARCH

Start by learning about users and their problems

In the early STRATEGIC stages of a project:

Product teams spend time with their market, identifying who they're serving and their problems. They bring that market knowledge into the organization in order to build solutions targeted to the needs of users and buyers.

Design teams with research skills gather information from the field and distill user insights for the organization. They focus on the broader context around the "why." Understanding goals and pain points empowers designers to reframe problems and craft innovative solutions.

Identify concepts of potential solutions

ABSTRACT CREATION

PROD

3



Designers have a host of mindsets and tools that help them uncover rich user context and learn more across the full product development cycle.

Identify opportunities to leverage design research in your own work.

KET

EVALUATIVE RESEARCH

Evaluate potential solutions with users

Design and construct the chosen solution

CONCRETE CREATION

UCT

EXECUTION

In the EXECUTION stages of a project:

For product teams, there's opportunity to gather market feedback on promising concepts. As the team builds out the chosen solution, user feedback ensures it's usable, meets expectations, and that the market is willing to pay for it.

Design teams have prototyping and testing tools and techniques to gather user feedback on in-progress solutions. Based on that feedback, the team can make adjustments to ensure the final product will meet user needs and expectations.

DESIGN RESEARCH METHODS

Designers employ different research methods in each phase of the design process, depending on what they need to learn about users, their problems and potential solutions.

EXPLORATORY RESEARCH

STRATEGY

Exploratory research helps you gain a better understanding of the people you might serve and the problems you might solve for them. Designers typically conduct exploratory research when looking into the possibility of developing a new product or service. You can also use it when you want to completely rethink current solutions. The techniques center on capturing the current state: understanding users' goals, context, processes and mindsets; and identifying their key problems and current approaches to solving them.

Research Mindset: Planning

Whichever technique they use, designers carefully plan their research in advance, just like product teams. They start by determining learning objectives to better structure the intended technique.

How do users think about their work and their challenges?

What do you want to know about your target audience, their current work patterns and their goals?

EVALUATIVE RESEARCH

Evaluative research gives users something to react to, so you can **gain a clearer understanding of how well the proposed solutions fit users' problems, context and expectations**. Designers employ evaluative research throughout the product development life cycle—from early user feedback on a variety of potential concepts before a solution is chosen to usability feedback on a solution that is about to be released. In later stages, you can use evaluative research to identify where the in-progress solution, or prototype, causes confusion or frustration for users and make appropriate adjustments before market release.

Research Mindset: Learning Over Validation

Users don't feel comfortable critiquing a prototype that looks complete. Build the lowest-fidelity prototype that will help you learn what you need to know.

What's the simplest prototype we can build to test our assumptions?

How can we ask for feedback in a way that allows us to learn more about the user's needs and context?



EXPLORATORY RESEARCH TECHNIQUES

USER INTERVIEWING

A powerful technique in which researchers draw information from users through conversation (ideally in the location where they experience the problems you might want to solve). Designers often ask users to tell stories that provide insight into their goals and ask follow-up questions to probe more deeply into the "why."



Interviewing Deep Dive

If you conduct Pragmatic-recommended NIHITO research with buyers and users, you're already practicing a form of exploratory research. Use design interviewing best practices to make this form of research even more effective.

OBSERVATION

Direct study of users in their workplace or home. In these settings, you can see their current process and how they deal with common problems. This technique (familiar to Pragmatic-trained product managers) allows designers to capture behaviors that users may not recall on their own in an interview.

SELF-RECORDING

When the researcher can't be present for observation, designers ask users to record their activities. Self-recording can take several forms, such as:

Experience Mapping

Offer artifacts that let users visually map out their current experience or work process, usually in an interview. An experience map is one such tool. It captures a target user's actions, thoughts and feelings in a given scenario.

Diary

Provide users with a diary in which to capture their daily experience with the problems you're exploring.

Mobile Ethnography

Ask users to use their mobile phones to capture their current experience and record their reflections and understanding of what they currently do.

EXPLORATORY TOOL: User Interview Guide

Conversation guides ensure that researchers cover topics crucial to their learning objectives and have well-framed questions at the ready. The guide will act not as a script but as a reference to keep the conversation going.

SAMPLE INTERVIEW GUIDE

This interview guide supports healthcare providers tracking patient care. Key topics are highlighted and have suggested open-ended questions for exploration. The interviewer can check off topics as they're addressed while remaining flexible with the conversation flow.

INTRO

"What does a typical day look like for you?"

"How do you manage your patient caseload?"

PATIENT EXPERIENCE

"What does a typical patient encounter look like?"

"Who do you collaborate with to make that experience work?"

"What kind or experience do you hope to create for your patients?"

"What stands in the way of that?"

PATIENT CONTEXT

"How do you prepare for a patient encounter?"

"What information do you like to have at hand?"

TREATMENT OPTIONS

"What sources do you turn to for determining treatment options?"

"When can you rely on your own knowledge and experience? When do you have to draw on other sources?"

DOCUMENTATION

"How do you document your patient encounters?"

"What's important to you about documentation?"

"What's frustrating about the documentation process?"

CLOSING

"If I gave you a magic wand to improve your time with patients, what would it do?"

USER INTERVIEWING BEST PRACTICES

- Open by asking them to tell a story about their experience. This provides a natural way of structuring the conversation. ("What does a typical workday look like for you?")
- Use your guide as a reference, while taking notes during the conversation.
- Stay flexible. Make space for digressions that might provide deeper insight into the user's motivations and needs.
- Close by letting them imagine the future. ("If I were to give you a magic wand, what would your ideal solution look like?")

EVALUATIVE RESEARCH TECHNIQUES

CONCEPT EVALUATION

With early-stage solutions, researchers can introduce low-fidelity sketches of concepts to gauge user reaction. Researchers open by discussing problems the user currently faces and then provide concepts for them to react to. They ask how the various concepts might fit into the user's current situation, with follow-up questions to dig into the context.



Concept Storyboard Deep Dive

If you're looking for early-stage market feedback on concepts before committing to development, storyboards help you understand what solutions might resonate and why.

USABILITY PROTOTYPES

Create prototypes that articulate a solution's interface and mechanics to gather feedback on the usability, understandability and desirability of your product before investing in the full build-out. Such research can help teams make adjustments before release, avoiding costly rework and speeding up adoption.

Paper Prototypes

Sharing low-fidelity paper prototypes of your proposed interface helps users envision how the solution could support their workflow, while still allowing you to make changes on the fly.

Clickable Prototypes

Providing clickable prototypes of your proposed interface lets you see whether users can intuit how to use the interface, without the programming overhead of building a working solution.

Working Prototypes

Depending on your product, a high-fidelity prototype of your solution with working data will help users to determine whether the solution addresses a complicated market problem.

RFAI-TIMF MONITORING

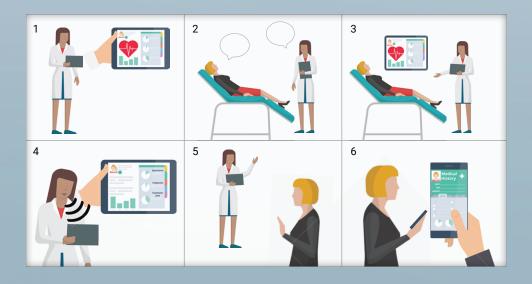
By monitoring the live application, researchers can identify where users focus attention (through eye tracking) or which design alternative leads to the desired outcomes (through A/B testing). Research insights are limited to "what" is happening because researchers can't probe the "why" behind a user's choices.

EVALUATIVE TOOL: Concept Storyboard

In early-stage concept evaluation, you can create a storyboard to communicate how your proposed solution might work. If you have several solutions in mind, create a storyboard for each and ask users to compare and contrast. Through this research, you can gather market input on the perceived value of different solutions before committing resources to bring them to market.

SAMPLE CONCEPT STORYBOARD

These storyboards support conversations with healthcare providers, like doctors and nurses. By asking interviewees to read the storyboard aloud, researchers can watch for their emotional response and ask them to explain how the solutions would fit with their need to track patient care.



GETTING FEEDBACK ON PROTOTYPES

- Have users read the storyboard aloud or complete a task in the clickable prototype. Look for excitement or confusion along the way.
- People have a strong desire to please their interviewer.
 Create a safe space for them to provide honest feedback.
- Watch for your own bias. Avoid "leading the witness" to your desired conclusion.
- Ask open-ended questions about how solutions might fit with their experience. Remember to follow up with "why?"
- Be open to learning that your proposed solution won't work for users. Take the opportunity to learn how it could be improved.

NEXT LEVEL: COMBINING RESEARCH TECHNIQUES

Any given research session might combine both exploratory and evaluative research techniques, depending on what you already know and what you want to learn. It's important to be intentional about your research structure.

DISCOVERY CONCEPTUALIZATION: MAI	ON SOLUTION- RKET FIT
•	ETECHNIQUES rompts and activities

In your early NIHITO research, leave ample space for exploring the user's context and goals before presenting solution ideas. Spending time exploring the user's story will lead to opportunities you might otherwise miss. True innovation often happens when you listen to opportunities outside of your assumed problem area.

MARKET PROBLEM DISCOVERY

Before you have identified potential market problems to solve, most of your research will be exploratory.

SOLUTION CONCEPTUALIZATION

Once you have defined the key market problems to solve, return to the market to get feedback on potential solutions. This often starts with an exploratory interview and closes by asking the user to respond to several concepts.

FEEDBACK ON SOLUTION-MARKET FIT

Once you've chosen a solution concept, build refined prototypes to test for market fit. It's good practice to start with a few exploratory interview questions to better understand the user before moving to evaluative techniques like prototyping.

ACTIVATE DESIGN RESEARCH

Now that you've learned about different types of design research and a few tools to support different learning objectives, you might be wondering ... what now?

There are two ways to navigate research terrain. You can:

PARTNER WITH DESIGNERS



- Determine design resources, capabilities and interest
- Collaborate on interview guides
- Conduct NIHITO and user interviews together
- Synthesize and find patterns in research together

- Make space for user research at different moments across the lifecycle
- Create research objectives before heading out into the market on NIHITO
- Employ conversation guides that discover the "why" behind answers
- Begin to experiment with gathering market feedback earlier with lower-fidelity prototypes

BORROW DESIGN MINDSETS AND TOOLS





Partner with designers to create innovative solutions to your market's problems.

Register for our new course, *Design*!

PRAGMATIC TO BS

Could your team use support crafting its research objectives and conversation guides?

Sign up for a Market Discovery Lab!

Read the first eBook in this series, "**Exploring Design**," to discover key design practices and capabilities, learn how they map onto the Pragmatic Framework[™], and understand the design function at your own organization.



PRAGMATIC

—INSTITUTE-

ABOUT PRAGMATIC INSTITUTE

Pragmatic Institute provides comprehensive training, education and certification to product managers, product marketers, designers and data practitioners globally. With a commitment to excellence and a dedication to continued education, Pragmatic Institute's full-service offerings enable organizations to grow revenue, go to market faster, improve customer satisfaction ratings and harness the power of their own data.