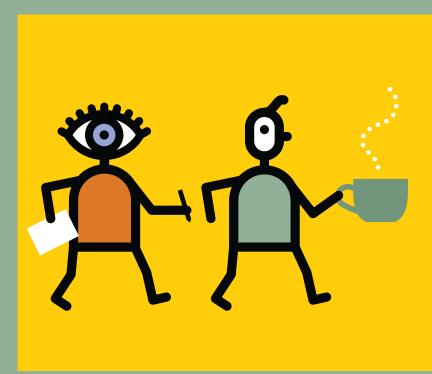
Research Toolbox

Twenty-three proven research methods to discover what people *really* want

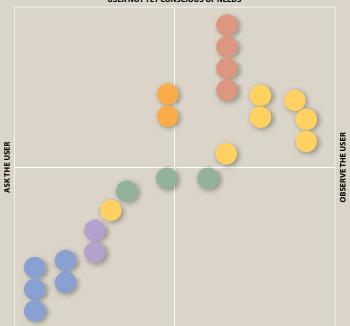


Research Toolbox

For many of us the notion of user research conjures up images of observation rooms, elaborate surveys, charts, statistics, and complicated reports. Yet there are other powerful techniques that are relatively easy to implement and can offer remarkable insights—often with little investment of time or money.

This booklet allows you to quickly explore a range of methods from simple to complex—a Research Toolbox. Although not exhaustively comprehensive, this sampling reflects techniques that designers and marketers are using to gain insights about users.

USER NOT YET CONSCIOUS OF NEEDS



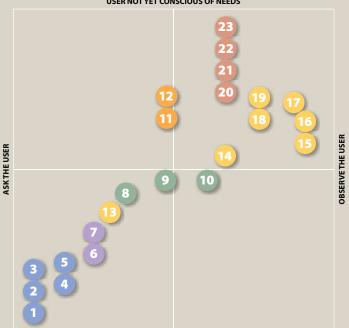
USER CAN ARTICULATE NEEDS

A Map of Possibilities

This map will help you select methods appropriate for your situation and the type of user you're investigating. In addition to having a location on the map, the research methods are color coded to show groups that employ similar techniques.

- **Tell Me.** These methods are best for gathering information quickly and directly. Use caution with these methods, since what people say and what they do are often quite different.
- **Show Me.** The places and things people interact with provide clues about what they value, what tasks they want to simplify, and what kinds of tools or technology they prefer. These methods give you access to those insights.
- **Watch and Listen.** These methods show you what tasks and goals your users work to achieve on a daily basis. More importantly, they help you recognize obstacles to your users' progress, which often translate into golden opportunities for your new product.
- **Get a Report.** These methods offer a practical alternative to following users 24/7. Instead, arrange for them to give you reports of their activities, so you just get the highlights.
- **Test It.** The sooner you start turning ideas into prototypes, the sooner you can put those prototypes in front of real users and catch your own misconceptions. Test it early, test it often—and save yourself time and money.
- **Get Creative.** Research methods that tap into the creativity of reallife users can lead to extremely valuable insights. These methods can help users express concepts or feelings that they might not be able to put into words otherwise.

USER NOT YET CONSCIOUS OF NEEDS



USER CAN ARTICULATE NEEDS

Index

Tell Me

- Survey or Questionnaire
- Focus Group
- 3 Interview
- 4 Knowledge Mining
- Guided Storytelling

Show Me

- 6 Guided Tour
- Personal Inventory

Get a Report

- 8 Beeper Study
- Photo Diary
- 10 Adopt a User

Test It

- Prototype Evaluation
- 12 Think Aloud Protocol

Watch and Listen

- 13 Web Eavesdropping
- Shadowing
- 15 Fly on the Wall
- 16 Video Observation
- 17) AEIOU
- 18 Task Analysis
- 19 Behavioral Mapping

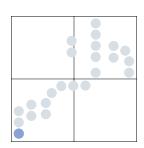
Get Creative

- 20 Draw Your Experience
- 21 Card Sort
- 22 Collage
- 23 Velcro Modeling

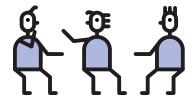
Survey or Questionnaire



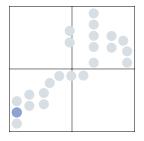
Prepare a Web-based or paper survey and distribute to participants from your target audience. Word questions carefully to avoid leading or confusing the user, and interpret the results knowing that what people say they do and what they do are often quite different. Recognize the limits of questionnaires to provide any in-depth understanding behind the responses.



Focus Group



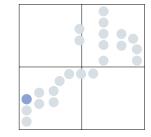
Bring together a small group of carefully selected participants to discuss a certain set of topics relevant to your concept. A facilitator should keep the group on topic and ensure that everyone contributes to the discussion.



Interview



Prepare a set of questions targeted to your concept, and ask users in a face-to-face setting. It is useful to have two researchers per interview session, so one can guide the discussion, and the other can take detailed notes.

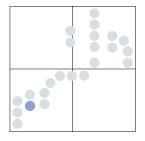


Knowledge Mining





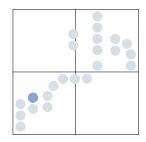
Leverage the experience of people who are uniquely qualified to offer insights—early adopters, power users, wizened veterans. Draw out their knowledge in surveys, focus groups, interviews, or brainstorming sessions.



Guided Storytelling

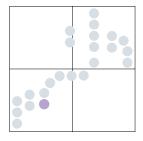


In this interview technique, ask the participant to walk you through a real-life scenario pertaining to your concept. Guided Storytelling questions often begin, "Tell me about the last time you..." Capture unique or rich language as they tell the story.

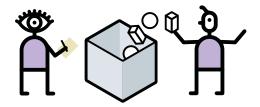




Ask a participant to give you a tour of their space relevant to your concept. Pay special attention to how they customize their environment. Use your observation skills to identify where your product is stored and how the environment of the bathroom, kitchen, or car affects the product's use.

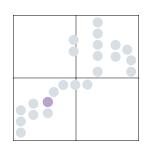


Personal Inventory



Ask participants to show you and talk about the contents of their purse, briefcase, pockets, car, or desk drawers. Your goal is to understand what people deem important enough to carry with them or store nearby, and why it makes the cut.





Get a Repor

Beeper Study



Instruct them to record what they're doing each time they are paged. (You can also ask them to fill out a brief survey or to photograph their surroundings.) Several pages per day over the course of a week yield a spontaneous sampling of the participants' daily experience.

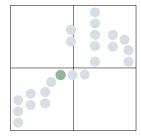




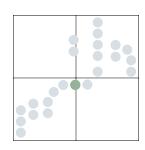
Photo Diary





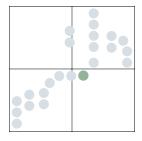
Prepare a journal for each of your participants with space to paste photographs and make notes. Issue each participant a camera, and ask them to record their experience with regard to a certain topic. As you explore the images with the consumer, probe them on why they selected the subject to photograph. The "why" explanation is important learning.







If your goal is to reinvent an existing product, volunteer to act as technical support for someone who uses the product frequently. Each time your adopted user contacts you with a question, you'll get insights about expectations and potential problems.



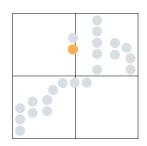


Prototype Evaluation





As early in the design process as possible, put low-fidelity prototypes in front of users for feedback and evaluation. Don't present the concept. Find out how they would try to use it without much explanation.

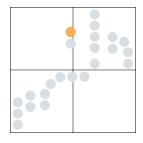


12

Think Aloud Protocol

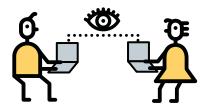


Ask your participant to complete specific tasks using a prototype of your product or a related existing product. Ask them to think out loud—to verbalize every thought—as they try to complete the tasks. Quiet participants might need gentle reminders to think aloud as they proceed.



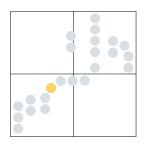


Web Eavesdropping



Spend some time immersed in Web chat rooms or discussion boards related to your concept. Monitor chatter on Twitter. To avoid disrupting the community, save questions of your own until the end of your immersion period.



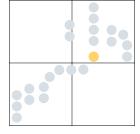


Watch and Lister

Shadowing



Arrange to spend some time following people from your target audience throughout their normal daily activities, making detailed notes about your observations. This is often referred to as Consumer Ethnography. Your notes can be used later for Behavioral Mapping (tool 19).





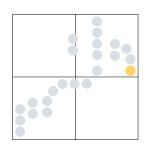
Natch and Listen

Fly on the Wall





Choose a location relevant to your product concept. Carefully observe how people interact with each other, with the environment, and with existing products, processes, or technology (i.e., watching smokers in a bar or do-it-yourselfers in their workshops).

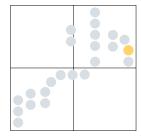


Watch and L

Video Observation



Arrange to record the activities of a given space over a period of time. Leave the camera long enough for participants to get comfortable, and scour the footage for insights into behavior. View the footage in time-lapse to reveal patterns of activity.



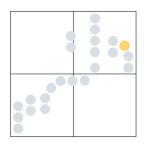


AEIOU

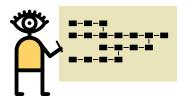


In any observational setting, use lists and sketches to record the activities, environments, interactions, objects, and users. The process of recording each of these components in detail often reveals breakdowns in the system, which translate into opportunities for your new product.

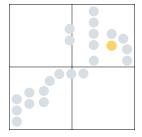




Task Analysis



List and diagram the steps your participant takes in order to achieve a given task. The task or ritual may be as broad as trying to quit smoking or as simple as brushing their teeth.





Behavioral Mapping

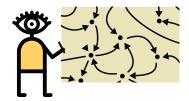
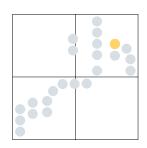
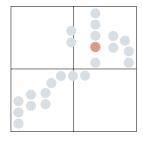


Diagram a given space, and record the movements and activities of people within that space. This careful observation can reveal breakdowns, coping mechanisms, and frequently repeated behaviors—all of which can signify opportunity for a new product, process, or technology.



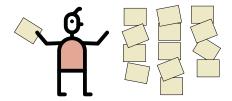


Prepare your participants by asking them to record their habits or feelings with regard to a certain topic for about a week. At the end of the week, provide an inviting array of drawing tools, and ask them to visually express their experience and feelings. Listen carefully to the stories they tell as they describe their illustrations.



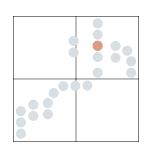


Card Sort



Prepare your participants as described in Draw Your Experience (tool 20). Provide a small deck of cards using words and/or images relevant to your concept, and ask your participants to arrange the cards in ways that make sense to them.

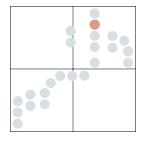
Get Creative





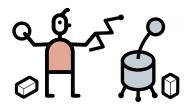
Collage

Prepare your participants as described in Draw Your Experience (tool 20). Invite a small group of participants to build collages from provided materials. A mixture of ambiguous words, images, stickers, and shapes allows the participants to project their own meanings. Ask them to present and explain their collages.



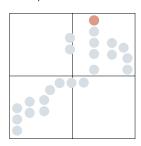


Velcro Modeling



Prepare your participants as described in Draw Your Experience (tool 20). Assemble a toolkit of components common to the kind of product you hope to design. For example, if you're designing a remote control, provide various shapes that might act as the body of the remote. Also include plenty of easy-to-adhere buttons, allowing the users to configure their own product using those components.





The research methods described in this little book can help you learn about real people in the real world. Understanding what people really do, what they think, and what they value most can help you create better products, services, and experiences. These insights can also show how to create better communication tools.

You don't have to use all these methods. Depending on the scope of the project and what's at stake, you might just need one or two. Use them at the start of a project to uncover hidden needs. Later, many of these same techniques can be used to collect feedback about your prototypes and drafts.

For additional copies of this book, contact us at info@ThoughtFormDesign.com.

This book was adapted from a summary of research methods developed in 2005 by ThoughtForm Inc. and Daedalus. The book was written and designed by ThoughtForm.

ThoughtForm is a communications consultancy and design firm that specializes in making important information clear, vivid, and engaging. We're a team of people who work together to plan, write, design, and produce solutions to communication problems. Founded in 1980, we have lots of experience designing brands, interactive media, print communications, environmental graphics, and packages.

www.ThoughtFormDesign.com

Daedalus provides a full slate of research, product design, human factors, engineering, and manufacturing transition services to medical, scientific, consumer, and industrial product companies. The Daedalus team has helped bring hundreds of successful products to market for companies ranging from startups to the Fortune 50.

www.daed.com