## **Research Toolbox**

Twenty-three research methods to discover what your users really want.

## Daedalus form Design solutions beyond words



## User not yet conscious of needs

These research methods are a sampling of the tools available as you work to understand your users. Each method varies by both the kind of research activity taking place, and the sort of needs you'll discover.

In some cases, all you need to do is ask. The users can articulate their needs. At other times, the research can lead both you and your users to a better understanding of what they really want. The right methods will uncover latent needs—needs the users themselves haven't even recognized.

#### **Get Creative**

Research methods that tap into the creativity of real-life 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.







### Watch and Listen

These methods show you what tasks and goals your users work to achieve help you recognize obstacles to your users' progress, which often translate into golden opportunities for your new product.

on a daily basis. More importantly, they

Ask the user

# Get a Report

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!

Test It

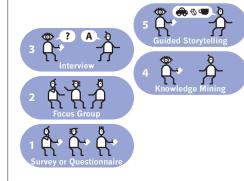
# These methods offer a practical

alternative to following users around 24/7. Instead, arrange for them to give you reports of their activities, so you just get the highlights.



## 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.



#### 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

## User can articulate needs

#### 1 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.

#### Focus Group

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

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

#### 4 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..."

#### 6 Guided Tour

Ask a participant to give you a tour of their space relevant to your concept. Pay special attention to how they customize their environment.

#### 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.

#### Web Eavesdropping

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

#### 9 Beeper Study

Issue your participants beepers or cell phones. 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 experi-

#### 10 Photo Diary

Prepare a journal for each of your participants with space to paste photographs and make notes. Issue each participant a Polaroid camera, and ask her to record her experience with regard to a certain topic.

#### 11 Adopt a User

If your goal is to reinvent an existing product, volunteer to act as technical support for someone who uses that product frequently. Each time your adopted user contacts you with a question, you will learn about how he understands the product, what he hopes to accomplish using it, and what steps he is likely to take to remedy a problem.

#### Shadowing

Arrange to spend some time following people from your target audience throughout their normal daily activities, making detailed notes about your observations.

#### 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.

#### 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 might be something as broad as choosing a bank, or as simple as logging in to verify an account balance.

#### **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.

#### **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.

#### 19 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.

#### 20 Draw Your Experience

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.

#### 21 Card Sort

Prepare your participants as described in Draw Your Experience. 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.

#### Collage

Prepare your participants as described in Draw Your Experience. 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. 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, and provide easy to adhere buttons in a wide variety of shapes, sizes, and colors. Invite a small group of users to design their own product using those components.

ThoughtForm Inc. (www.thoughtformdesign.com)

Observe the user