

Design Research

METHODS AND PERSPECTIVES

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Mini focus group A slightly smaller gathering of 6 to 8 consumers (occasionally fewer) who are led in a tightly scripted discussion by a trained moderator, usually for 1 to 2 hours. The same considerations of topic noted for focus groups apply for mini groups; however, since mini groups involve fewer people, they provide the opportunity for deeper discussions and questioning that is more specifically tailored to each person in the group.

1-on-1 interviews One person interviewed by a researcher who is following either a tightly scripted guide or a loose outline. The duration of these interviews can range from 20 minutes to 1 or more hours. Individual interviews are ideal for learning exactly how each person feels and thinks about a topic or design, without concern for the influence of others (except the moderator's influence, which really can't be avoided). It's my personal preference for most topics related to design evaluation.

Dyads Two friends interviewed as a pair by a moderator following an outline or lightly scripted guide, usually for at least 1 hour. Dyads, or "friendship pairs" as they are sometimes called, are a powerful forum for exploring issues that are difficult for people to articulate or for interviewing people who may be uncomfortable participating in research. For that reason, dyad interviews are frequently used with children and teens. The discussions tend to be animated, insightful and very candid (people usually feel uncomfortable telling lies in the presence of a friend). However, these are difficult interviews to conduct. Less experienced researchers will lead them as though they were conducting two separate interviews at once. The more experienced practitioners know that the best dyads reflect the true interactions between friends, coached along by the researcher.

Super groups 50 to 100 or more people are gathered in a large auditorium to view ideas, products, designs or other exhibits presented on a large screen. One or two moderators lead the group from a stage. Usually, respondents are given devices which allow them to respond to and/or rate what they are shown. These groups tend to be short and highly focused since it's difficult to keep such a large group controlled for very long. While this approach provides rapid feedback from a large number of people, the questions must be very structured and there's no room to vary. Occasionally, smaller groups of people are selected to attend breakout sessions after the super groups.

Triads Three people who are either similar to each other or are different in a specific way, interviewed by a moderator following an outline or lightly scripted guide, usually for about 1 hour. Triads provide the depth of 1-on-1s with a bit more breadth. If all the people in the group are the same, the dialogue can be generative (like focus groups). If they differ in some way—for example, if they are all IT professionals but from different sized companies—then their responses can be seen in comparison. Triads are more like 1-on-1s than focus groups, but they run the risk of group influence. They tend to be more appropriate and cost-effective for business-related topics than for consumer subjects. They're pointless if all

three participants are distinctly different because the interview will then take as much time as three 1-on-1 interviews with less benefit.

Party groups A group of people who all know each other gather together in one person's home and spend 2 to 3 hours conversing with each other and the moderator on a chosen topic. For sheer fun, party groups are my favorites, but they tend to work best for consumers (not business people) and for singular topics that benefit from deep, thoughtful and candid discussions. The researcher gets to see where and how people live, which can often add important dimensions to the topic. There's no backroom for clients, so either the client participates in the group or they watch video later. While party groups can generate exceptionally good insights, they are very hard to arrange and to manage. They can go badly astray if babies, household emergencies or excessive alcohol is present.

Online discussion groups Still in its infancy and plagued with problems, this approach takes any of the methods described above and attempts to conduct it virtually. Currently, it primarily supports a text interface, which omits crucial body language that any good researcher needs in order to properly interpret what he or she hears. This context also favors fast typists—definitely not a representative group. As video conferencing matures and is integrated into online groups, they will become more practical and useful.

Ethnography

While focus groups were spawning this range of offspring, other qualitative methods began showing up and gaining credence. Thanks to influence from social scientists and academic professionals, the term "ethnography" starting popping up in design discussions in the late 1980s. At the time, one of the most common questions I got from clients was, "Just exactly what is ethnography?" I'm sure many others heard the same inquiry and we all tried our hand at crafting a reasonable response. In the context of design research, I found it most useful to define it as a research approach that produces a detailed, in-depth observation of people's behavior, beliefs and preferences by observing and interacting with them in a natural environment. In retrospect, I imagine that made it sound like I'd be wearing a safari jacket, stalking adult homeowners or teenaged fashion mavens with my field binoculars. In fact, it was just a first stab at a process that was in transition from its anthropological roots and hadn't yet been refined for a commercial market.

The growth and refinement of ethnography as an effective design research method owes a great deal to the few clients who risked their careers supporting this new approach. At the time, most marketers, product developers and designers were not trained to understand or ask for this type of information about people. When they got it, they rarely knew how to use it. To complicate matters further, there were no real standards or benchmarks to measure the quality of the work or to determine how much study was enough. Very few established research firms could afford to develop this new discipline, so its progression rested heavily on the

efforts and investments of small entrepreneurial companies who believed in it. Along with my company, Cheskin, other important initiators of ethnography as a design research option were The Dublin Group, E-Lab, Fitch and IDEO. For a more in-depth discussion of the roots of ethnography and its current implications of design, see Tim Plowman's chapter later in this section **30 PLOWMAN**.

Ethnography is still evolving in the commercial realm, but it's come a long way. Like focus groups, ethnography has generated progeny of various shapes and sizes that help round out its offering.

Field ethnography A person or group of people are observed by a researcher while they go about their normal lives. The duration of these observations can range from 1 hour to several days or weeks. Field ethnographies are ideal in early exploratory stages when a firm needs to learn more about the people for whom they are designing. However, traditional ethnographies take time; they rarely work well in a rapid paced development program.

Digital ethnography This is a more recent variation on traditional ethnography, using digital tools to speed the process without compromising the quality of the work. It typically follows a similar approach, observing people as they go about their lives, but uses digital cameras, PDAs, laptops, virtual collaboration sites or other technology to record, transmit, edit and present the information.

Photo ethnography A person is given a camera (still or video, film or digital) and asked to capture images of his or her life and describe them with accompanying notes. The images are returned to the researcher who then reviews them and learns from both the visuals and the related notes. This approach is highly useful when the presence of an ethnographer would drastically alter people's behavior (such as at a teen's party), or when it's not appropriate or cost-effective for others to be present (such as when someone is bathing, dressing or traveling). While this approach is engaging for both the researcher and the participant, its difficulty is often underestimated. Organizing and managing thousands of photos is a science requiring careful planning and strict guidelines. Interpreting thousands of photos is an art requiring years of practice, a keen sense of observation and a high level of consumer understanding to begin with. In other words, this approach is for pros.

Ethnofuturism This is a very young but rapidly growing variation that marries digital ethnography focused on daily activities and small details of cultural significance with a futures perspective that looks at major trends influencing and changing culture as a whole. It's most applicable for technology products that call for understanding of both the individual user's perspective and the "big picture," but also may be effective for other products whose success depends at least partially on trend movements.

"Real world" ethnographic enactments First popularized by MTV in their Real World series, this approach builds an environment for a person or people and then monitors them within it. It's been used by several technology companies

hoping to understand how people's lives will change when their homes become filled with new digital appliances and distributed computing ©41 DISHMAN. For those who have the budget and the time, this is both a fascinating and highly accurate method of research.

Personas These are scenarios or profiles created to inspire and guide design. They are typically visual and textual descriptions, but ideally, they are the results of studying real people. This approach was heavily used by advertisers in the 1980s and 1990s, but was popularized for technology design by Alan Cooper in his book *The Inmates are Running the Asylum* [1999]. Personas are less effective if the audience is diverse—by definition personas are narrow descriptions. They're best suited to homogenous audiences or niche markets. ©70 DON, PETRICK

Participatory Methods

As designers and product developers learned to benefit from direct consumer feedback, they started crafting their own qualitative approaches. I'm personally indebted to the work of Liz Sanders, who pioneered "participatory" design methods while at Fitch and then later at her own company, Sonic Rim [www.sonic-rim.com]. Participatory methods involve consumers in the development of the products, services or brands they hopefully will eventually buy. They are inherently flexible, taking whatever shape they need to suit the designer's needs. The most common methods are not necessarily the best, but they are probably the easiest to conduct with consistent quality. With all forms of participatory design research, the challenge is to keep people's input fresh and representative. The temptation to turn consumers into designers is hard to resist, but that's a quick way to doom this type of qualitative research.

Development panel Groups of people are contracted for a period of time to evaluate and give feedback on various aspects of a product or service as it's developed. Their input can be offered in person, over the phone or online, but it's important that they have a good sense of what they're evaluating. I prefer to know as much as possible about the members of a development panel, so I typically start one with a thorough interview and photo ethnography. The panel members' feedback can often be improved by providing them with simple means of indicating their design preferences. Liz Sanders often used a felt board with cut-outs that could be rearranged. Others have let members draw, send photos or visuals, create collages or even make brief movies.

In-home placement People are given a product or provided with a service at an early stage of its final development and asked to use it as a part of their daily lives and then provide specific feedback on how it performs. This is a method that was perfected by mass marketers of consumer food and beverage products, but it's proving very useful for a wide range of designers. It's somewhat similar to software beta tests, but in this case, the people participating often have no previous experience with the product or service they're using. As such, they can be a

good test market for how normal people will react to the product or service when it's fully launched. This is a sophisticated method that takes great discipline to use. In most cases, for it to really be beneficial, the company must be willing to revamp its product or service if needed, even though they've already invested significantly in its development.

As I hope this brief historical recap shows, the field of qualitative design research has become much richer, more refined and more effective over the past decades, largely due to the efforts of innovators and the clients that were willing to experiment. You'll hear from many of them in the following chapters as they illustrate the many diverse dimensions of this practice, including a few very new ones like "Informance" 39 JOHNSON, 41 DISHMAN, 49 LAUREL. I hope you find, as I have, that this discipline is a complex, enticing and inherently exciting field. Quantitative research never deserved to be thought of as boring, and it becomes more brilliant every day as new strategies and techniques emerge from the innovative efforts of the design research community.