Six Real People

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Abstract: While industrial designers have historically focused on the object, the future of design rests on understanding people. This represents a major shift in the profession. In attempts to understand the consumer, designers often borrow techniques from marketing, a group with a longer history of consumer connections. However, the willingness of designers to simply adopt marketing techniques for design purposes can be detrimental to the success of a design project. Marketing is not design, and fundamental differences exist between marketing research and design research. For example, a tendency for marketing groups to target simplified, average profiles of consumers can undermine the true nature of people, who are diverse and complex. Design, in contrast, needs to address diversity. While design research should encompass many aspects of user experiences, it is often limited to “ethnographic” research, which in turn is reduced to short, opinion-taking sessions. Many research efforts forgo issues such as biomechanics and usability, which are specialized topics important for design groups to understand but are not within the scope of marketing research. Our group at Smart Design has been working with a number of research techniques, including focusing on a small number of real people, not an average or imaginary profile of a person, to help innovate.

Key words: Design research, ethnography, methods.

1. Introduction

The future of design relies on understanding people. Many professional design groups are expanding their capabilities to adapt to this task as more companies realize that understanding consumers is vitally important. Companies are finding it difficult to compete simply on technology – competitors are offering equivalent technical performance. At the same time consumers have reached their threshold in craving the newest technology, opting instead to focus on “personal meaning” – asking what, in actuality, will this technology do for “me.” Understanding the person and addressing personal needs and desires therefore offer a new competitive advantage. As design research proliferates and becomes a critical part of design procedures, a large number of designers are being asked, or are asking, to participate in research activities.

Product development projects are typically undertaken by multi-disciplinary teams. Teams may include members from design, marketing, engineering, manufacturing and other fields. Of these members, marketing and design may be “closest” to the consumer, interacting in various ways to understand and respond to their needs and
desires. (With healthcare and medical projects, of course, medical researchers may also be closely involved with
the “consumer”). While cooperation among team members has good intentions, the reasons that marketing and
design exist are not the same. Design research and marketing research have fundamentally different purposes
and are not interchangeable. Working in harmony can result in merging design and marketing activities, a move
that can compromise design research. This is especially true when design groups completely rely on marketing
for consumer input. This can constrain the evolution of design research, and ultimately design itself.

Marketing research had a head start over design. Its roots in the US can be traced back nearly 100 years. In 1911,
Charles Coolidge Parlin produced the first example of a marketing research study with a 460 page report on
agricultural implements. Design research, by comparison, only started to emerge as routine practice in the late
1970s (although there are earlier examples). Today relatively few designers have training in design research, yet
they practice or utilize it routinely. Many defer to marketing groups for planning and executing consumer
research studies, and for analyzing the results.

Much design research practiced today is based on ethnography\(^1\), or observational research. This is due, at least in
part, to the fact that marketing groups often fund design research, and this type of design research is closest to
marketing’s experience and comfort zone. Design research should in fact encompass many aspects of the person-
product interface – including psychological and emotional, social, biomechanical and ergonomic, gender-related,
environmental and cultural issues. These topics can be less familiar and therefore addressed less often. However,
these topics provide opportunity for product success – or conversely, failure to address them can result in missed
opportunities in a product, hindering its success.

2. Multidisciplinary Drawbacks

While a multidisciplinary team is a minimum requirement for successful product development programs, the
methods by which teams operate can have drawbacks. A successful multidisciplinary team creates synergy, in
which each member fully understands, respects and trusts each member. Each member realizes the advantages
that the different fields of expertise can bring to the project. In its worst form, the team acts as a committee,
reducing each member’s input to the level of the weakest link on the team. Multidisciplinary teams require
consensus, and in many cases consensus means that, within a single meeting, all members need to agree. The
way to get team members to agree is to simplify. The way to simplify is to abbreviate issues, fitting them into
short phrases or sentences that, very often, can be condensed into a PowerPoint slide.

Wherein lies the problem. The methods under which a multidisciplinary team operates may have inherent flaws.
The ultimate goal of marketing or design is to create a simple message, or a simple-to-understand product, that
connects with consumers. But consumers themselves can be diverse. Any one person can be complex unto his or
her self – and a range of consumers even more complex. The unwritten need to oversimplify consumers during
the course of a design project can underestimate the diversity of real people, the complexity of the problem at

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\(^1\) Although the term “ethnography” is routinely used by marketing and design groups, in practice these groups often are
simply conducting brief, on-site interviews. In cultural anthropology, ethnographic fieldwork typically requires spending a
year or more in a remote geographic location, observing another society. Perhaps because the word sounds more impressive,
marketing and design groups often substitute “ethnography” for “interview.”
hand and even the varied needs of any one individual consumer. (The tendency of team members to oversimplify may also stem from underestimating the intelligence of the other members of the team.)

Designers need to consider everybody. The need for designers to focus on diversity, which is a real but also a more complex challenge, has often presented a culture clash between design and marketing groups. The goal of this work is not necessarily to design a single product to suit everyone (although that is fine when it is appropriate). The goal is to make products, technology and services available to everyone. Targeting a single, narrowly defined portion of the population will exclude people. In some cases, when the products we design exclude people with specific physical challenges, it becomes discrimination.

It is therefore a social responsibility to ensure everyone benefits from design and technology, not just make it available to just a few. This is also a good business move, since products and services that attract a wider audience will increase sales.

3. The Fall of Brands, the Rise of People

A research project conducted by Smart Design in 2004 showed that, in the US, the meaning of the word “design” is changing. People are associating the word “design” not with the physical product or aesthetics, but with the experience of using a product. It also showed that “great design” does more than meet expectations. To qualify as great, products need to exceed expectations. People expect products to work. When they do, it’s good but not exceptional. Excitement about a product or service relies on it being better than anticipated.

The ability of a product or service to excel, and to have real impact on real people, is more important now than ever before. In the past companies relied heavily on the draw of their brand to instill confidence in a consumer who is making a purchase. Prior to the ready availability of real-world information, consumers looked to brands, (or sometimes to expert reviews or consumer magazines that rated products). A company like Nikon, for instance, was a well-regarded manufacturer of cameras. Nikon was an expensive, but safe purchase. In some cases their cameras worked as expected. In other cases, certain models were disappointing. However, it could be some time after the product’s introduction that faults becomes known. Brand image was diminished, but at a slow rate.

For the last two decades designers have been promoting the idea of designing not just the product, but also the product experience. It is obvious today that experience has, in fact, become the determining factor for successful design. While it always has been important, real-world experience was not easy to assess prior to making the purchase. This has changed significantly. The internet has allowed consumers to come together. Internet reviews, as well as communication through other forms of social media, have become influential forces. In my personal experience, surveying several hundred people informally during various lectures on design, more than 90% admit that when considering a past purchase, they left a store, going home to first check reviews on the internet. More recently consumers do not even need to leave the store, because smart phones allow consumers to check the internet immediately. A large majority of people also admit to changing brands, trying new brands based on positive internet reviews. Therefore it is no longer easy for companies to fall back on their brand. Amazon, epinions and many other sites contain real people’s real-world experiences. As a result every product must excel.
The trend to focus attention on design and real-world performance has another effect. It allows new brands to quickly come to prominence. Viral marketing is spreading the virtues or vices of products faster than ever before.

### 4. Real people

The phenomenon of personal reviews and social networking represents another clash. Marketing and advertising campaigns have historically focused on aspirational images of people – perfect people or lifestyles – to attract consumers’ attention. Ads will show, for instance, a person having fun while using a digital camera. Or looking elegant or adventurous in a new car. We never see people in ads struggling with an interface, missing the photo or experiencing other forms of frustration. But we now have the internet for that, and readily refer to it for advice.

Although aspirational profiles of people have worked for marketing in the past, its time may be coming to an end. Also long past its time is the idea of design teams borrowing this approach. It was surprising to see a recent article in the New York Times (July 20, 2009) discussing methods being used by a design group of an automobile manufacturer. To understand people, the car designers focused on imaginary people. These imaginary drivers serve as “ideal consumers,” stereotypes that embody the best traits of specific target groups. The personalities are given names such as Antonella, Ashley and Joe. This method, according to the article, provides a way for the design group to “relate” to real people.

Unlike a real person the aspirational profiles, as described in the article, are one-dimensional, Antonella is a party girl – 28 years old, her life is about friends and going out to clubs. Ashley is a perfect “cool” mom. Pickup truck buyer Joe is a “hero in his neighborhood”. Antonella, Ashley and Joe are fictitious characters intended to represent a wider group. However, each group is reduced to a single (and not real) person. The approach therefore seems to disregard the fact that a definition of an “average” person, or an aspirational persona, is actually just one person. As such, it does not represent diversity – in fact, it rejects the notion of diversity, putting in its place an unrealistic ideal.

The need to invent idealistic, imaginary people in order to allow a design group to focus on people is unfortunate. Equally as troubling is the current trend of design groups or multidisciplinary teams to invent “personas” in order to simplify and gain team consensus. Design can be a powerful force, and the willingness of design teams to follow the lead of other groups, and disregard real-world complexity, waters down the power of design.

Our group, Smart Design, was established in 1980 with the idea that design should be about people, not things. Design should also consider the needs of a wide range of people, not a homogenized “average”. People are diverse. Just as important, any one person can find his or her self in a diverse number of situations. In past projects our rejection of an average person or stereotype as a target, replaced with an understanding of diverse needs of many people, has led to a variety of innovations in product design. It has therefore been our point of view, for a long time, to reject the notion of “average” or “ideal” and consider the real world.

This approach to design led to our creation of a concept called “Six Real People,” a method that focuses design efforts on a range of real people. The idea is simple. Identify six real people, each of whom the design team
wishes to accommodate (or impress) with a new product – then design that product so that it does, in fact, impress all six.\(^2\)

Curiously, while we have seen marketing groups focus on a single fictional character as their ideal target, they intuitively may balk at the idea of designing for six people. Our counter-response is that, in reality, it is extremely difficult to design a product that six real people really love. In contrast, an imaginary person is an easy target. We have seen other design groups develop products or services for an imaginary person (or persona), and have also noticed that the imaginary person seems to automatically love, in the design team’s minds, the final proposed solution. Six real people, on the other hand, will have real and contrasting views.

A second benefit emerges from designing for six real people. We have found our design team discussions to be much warmer and human. Previously when we referred to consumers as “they” (such as “I think they will be able to identify and press this button”) our conversations were speculative and vague. When our conversations concern real people, we have sharper focus and substantially more empathy. For instance we will say “I think George can do it, but I’m not sure Laura can.” We speak about individuals that we have come to know. As a result of these conversations we may quickly modify the design to accommodate George or Laura. Another major advantage is that we can then invite George or Laura to try the prototype, observe him or her using it and get his or her opinion. The Six Real People approach is not simply about the number of people, but how it imparts a human quality to the design process. Real people present a greater but more rewarding challenge\(^3\).

5. Implementation

We have used the Six Real People method on projects that range from household appliances to professional medical products. The approach has been extremely valuable in developing products that provide personal meaning. The biggest challenges in implementation come not from carrying out this method of thinking, but in convincing others to break away from past, borrowed practices. Since design needs to address diversity, an average person limits design’s view. Even small numbers of people can, in reality, represent diversity, and can help a design team understand real needs and opportunities.

Designing to accommodate small numbers of people does not limit innovation or success. On the contrary, in our experience it has been at the root of both. As mentioned, the six people who participate are six people who we want to accommodate, and understanding their real needs and desires has enhanced, not restricted, acceptance of the resulting design for a wider range of people.

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\(^2\) While our title uses the number six, the number in actually may be six, nine, twelve or more. Six, however, has an interesting connection. With six billion people in the world’s population, six people represents 1/1,000,000,000 of the world’s population. If we can’t design a product for that small percentage, perhaps the team should start over. For purposes of this paper I’ll continue to use the number six, although the actual number may be greater.

\(^3\) While the selection of people has an effect, we have found that a selection of any six people is superior to a project that does not take a real-person approach. The six are simply people who we want to accommodate. While a varied range of people can be helpful, as well as a mix of males and females (as appropriate to the project), the selection criteria can vary.
For example, in a recent project we developed a medical syringe and package for use at home by patients with rheumatoid arthritis. This problem typically affects the hands, significantly decreasing strength. While we worked with more than forty patients in early stages of the project, we eventually focused on six patients, who worked closely with us during every subsequent stage of development. In doing so we were able to delve much deeper into their day-to-day needs than would have otherwise been possible.

This method is not meant to replace all forms of design research activities. Early in our project an expanded group of people was enlisted for quantitative studies in both biomechanics and in perception. Another group participated in a later validation study, after our group of six led us to a final design recommendation. The results showed the new design to be accepted by an overwhelming majority of patients. The design team pointed to the understanding of real people’s needs, and continued personal focus on our small group of users, as responsible for the outcome. Our understanding of the ergonomic needs of our small group of patients resulted in a design that makes the syringe easy for all patients.

The underlying message lies in the fact that designers have a great opportunity to develop methods of understanding people that are not simply borrowed from other fields. Design research has been slow to evolve due in large part to product design’s heritage. Design research is relatively new within the field of design, and while its importance is widely acknowledged, its practice is ready for new and innovative methods that will undoubtedly serve to advance the power of design.