

This forum is dedicated to maximizing the success of HCI practitioners within the frenetic world of product and service design. It focuses on UX strategy approaches, leadership, management techniques, and above all the challenge of bringing HCI to peer-level status with longstanding business disciplines such as marketing and engineering. — Daniel Rosenberg, Editor

Product Strategy: Clinging To Assumptions

Indi Young

Assumptions are pernicious. They are particularly dangerous when they become engrained in your product or service design decisions. You don't realize when you're working under their influence, and it's impossible to recognize the situation unless you're used to asking questions ... a *lot* of questions ... naive questions ... questions that put you at risk of looking stupid. Regrettably, everyone is terrified of looking stupid. And that terror itself comes from an assumption: Ever since you were a kid, you were expected to show how smart you were. You were supposed to get good grades and have good ideas in grad school. Shouldn't this demonstration of your worth continue into the workplace? And thus no one is asking the naive questions, and assumptions continue unchecked. No one notices until your organization's offering fails to meet expectations, transactions are flat, or someone else appears with a disruptive idea.

Assumptions are made about the users of almost every service, app, and product out there. The first telltale sign is that the organization *references audiences and personas by demographic*: new college graduate, 45-year-old female with 20 years of career experience, young mother, millennial, and so on. Teams using these references easily fall prey to associating a demographic with a behavior. "New college graduates are reluctant to make decisions for a group or lead a team because they have little

experience." There may be correlation between graduation and this behavior, but being a new graduate does not *cause* any specific behavior. (Except maybe celebration.) What about student leaders or people who have gone back to school to switch careers or to get an MBA who enjoy team collaboration and decision making? They don't suddenly avoid leadership roles just because they have recently graduated [1].

The second telltale sign is when an organization *puts all its effort into refining an existing offering*, instead of branching it. It conducts usability testing on a clockwork schedule. It follows a cycle of hypothesizing, prototyping, and checking results; it does A/B testing, tries alternatives, breaks things, and moves fast. But all this effort is spent on improving the current approach. Fixing something. Making it better. Which is good, but not enough to forestall the risks stemming from assumptions. These organizations do not spend time beyond the solution—beyond the ideas

they want to provide. What's lacking is a broader understanding of individuals' intentions *beyond* the use of their tool or service. What's missing is a deep understanding of the human aspect—inner voices, reasons why, guiding principles, and the larger purpose behind the choice to take action or work toward a goal. Looking into the people you support in a scope that goes broader and deeper than what you offer will lead to new perspectives and more nuanced ways to support these broader purposes. It will lead to the multiplication of your offerings.

Another telltale sign is the assumption that *everyone is a user*—everyone could have a relationship with your organization. While technically possible, it's completely improbable. This assumption beguiles organizations into giving short shrift to the process of looking into the nuances of audience behavior. The result: a one-size-fits-all solution that doesn't *deeply* support anyone, or betrays implicit support for people who behave just like the team that created it.

If any of these telltale signs are evident at your own organization, you have not put serious effort into understanding the nuances of the people you're trying to design for. You may think you have, but you haven't gone deep enough. "Deep enough" takes time and iteration. It is an ongoing process.

ASSUMPTIONS PREVENT YOU FROM LOOKING AT THE LARGER PURPOSE

Organizations get caught up in looking at people through the lens of their

Insights

- ➔ Almost every app, service, and product is built on a foundation of assumptions, such as "audiences behave according to demographic" or "everyone is a user."
- ➔ Assumptions keep organizations from deriving a broad range of creative ideas. Looking at the way a person thinks—their inner voice—can open up myriad opportunities and strengthen creativity.



**NEW &
IMPROVED**

offering. Through this lens, they study all the tasks and steps a person takes while engaged with the offering. They study the thinking that goes on as a person uses the offering to achieve a goal. “Book a flight.” “Buy a phone.” Often organizations stop there—they don’t go outside the realm of their own offering to understand the larger purpose a person has, such as “Avoid the awful experiences I had on some past trips,” or “Make sure I don’t get swindled by a phone vendor and end up spending too much for something I don’t need.” Organizations assume it’s enough to understand only the part of a person’s mind that is engaged with them. Because of this assumption, they miss out on cleaner, stronger, diversified opportunities to support different people with different purposes.

Say a person has the goal of getting a new mobile phone. Most manufacturers and carriers list phones by technology and functionality. When it comes time to get a new phone, you

need to understand the meaning of what’s listed. If you follow mobile technology trends, it’s not much of a problem—you have already mapped in your head that 4G-LTE means smooth streaming video and good response time in multi-player online games for your commute. But if you buy a phone only every three years, you don’t keep up with technology trends. You must re-educate yourself about the specifications. You have to compare the specs between phones and ask yourself which level of technology will support your needs, and at which price. What if you’re a person who barely uses the phone and balks at huge monthly plan costs? Or what if you’re a day laborer dependent on the phone to find your

Organizations get caught up in looking at people through the lens of their offering.

livelihood, or you’re working out of the country and want to stay close to family back home ... or you’re homeless and need the phone to find food and shelter? Then again, at the other extreme, what if you’re a mobile developer and you’re hunting for a phone to do some testing. You probably know exactly which technology platform you’re after. Many audiences are trying to make a purchase decision *using the same phone descriptions and specifications*. People often end up needing a human assistant to tell them which phone makes sense for their purposes. It’s more than just the goal of buying a phone.

Vendors selling mobile phones list the same kind of metadata: screen size, processors, memory and storage, operating system, networks, battery life, dimensions and weight, rear-facing camera, front-facing camera, and so on. It’s acknowledged that not everybody uses all the data, but manufacturers throw it all up there. The big assumption is that there should be only one place to look at the

products. Sure, there are ways to filter, sort, or compare the products by the metadata, but there's just one digital "store" [2]. There is not a different store for developers wanting test platforms versus people looking to stay in touch with family overseas. Another assumption is that the metadata and functionality provided are enough—that people aren't wondering about other things, such as: Will this work in my building where my other phone had poor reception? Can I use this same phone when I go to another country? How long until this phone dies and I'm obliged to buy another one? How much of my time will it require to learn this new phone? Yet another assumption is that "get a new phone" simply means "buy a new phone." If you conduct even the most casual poll, you'll realize that phones change hands. Parents give children their phones. Neighbors give phones to neighbors. People wish to re-sell or trade-in their old phone. Upstream, someone is certainly buying, but there is value in understanding what goes through the minds of people who are *getting* phones from others. Looking from this one-off perspective helps you see some of the reasoning without the clutter of metadata.

The mobile phone vendors assume that one way of selling phones can serve everyone (given enough metadata), and they're focused on giving that one store more and more features, rather than understanding potential buyers' larger concerns. Instead of having just one digital store to display the products, why not invite people through different doors, depending on their intent?

Assumptions make vendors blind.

ASSUMPTIONS IMPEDE DIVERSITY

Sort out potential audiences in terms of their reasoning and greater goals to create distinct behavioral audience segments. You can consider each of these behavioral audience segments carefully; you may want to de-prioritize supporting certain segments until later. Some may align directly with the organization's goals for the year. Others may be of interest but already semi-understood because they resemble the team making the product-design and engineering decisions. In

any scenario, behavioral audience segments give you clarity of focus.

There are many different behavioral audience segments in the example above:

- *Pushing the edges*—interested in the latest technology for quality of streaming, gaming, recording, and other uses
- *Showing others*—stays up to date in order to demonstrate what's possible, enjoy better functionality
- *Checking it twice*—developer looking to test across different mobile platforms
- *Barely there*—trying to keep usage of data, phone, or text minimal, for various reasons
- *Daily pursuit*—exploring what is available locally on a daily basis, for example, jobs, food, shelter
- *Distant contact*—frequent high-bandwidth contact with people internationally.

There can be many more segments, such as those who use phones in rugged outdoor environments, often taking local readings, and there can be intersections between some of the segments. The point is that these segments come from research the organization conducts to understand the intentions and larger purposes of the people they hope to support. *The segments weren't invented or imagined*, because imagining how people think only leads to more assumptions. The research is cumulative—unlike evaluative research, it does not become outdated. Thus, the organization continuously adds to their understanding by conducting small studies every few months or every year [3].

The research can be conducted by anyone within the organization who understands non-directive listening sessions, with no list of predetermined questions. This approach allows

Instead of having just one digital store, why not invite people through different doors, depending on their intent?

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the conversation to get deeper than preferences and explanations, down into the reasoning and guiding principles that illustrate how a person thinks as they try to achieve a larger purpose. This level of active listening is where you develop cognitive empathy, whereas preferences and explanations portray only the “shell” of a person, not their inner voice. When you delve this deep into a series of minds, patterns of reasoning and reactions emerge. When different researchers can replicate these patterns, then the results can be trusted. Insights about how to branch or change your offerings result from the patterns.

ASSUMPTIONS CAUSE REACTIONS; REACTIONS INCREASE RISK

Assumptions can affect the people you support in negative ways. In the mobile phone example, vendors assume there are two basic audience segments: the technology-savvy and everyone else. Existing mobile phone stores support those who are technology savvy, but others are left feeling frustrated that the choice of a phone is not clear and easy. Instead, all the knowledge-gathering is time consuming. Worse, the knowledge itself will fade from memory and grow stale over the years, so it does not act as a foundation the next time that person must choose a mobile phone.

By providing different experiences that support the larger questions and purposes of each type of person, an organization can create supportive, positive experiences. It's human nature to talk about extreme experiences, good or bad. Situations where people feel they are receiving mediocre, minimum-threshold levels of support to achieve only short-term goals lead to silence. It would be better if customers spread the word about how well supported they felt to others who may have the same larger purposes as themselves. Positive experiences also lead to return customers.

Instead of thinking it's risky to change the single digital store approach, compare it to the risk of provoking a negative reaction [4]. The digital store has its roots in physical

spaces. The cost of brick-and-mortar stores discourages experimentation and prevents creating different experiences to cater to different types of audiences. Digital stores haven't evolved from their brick-and-mortar roots. There is an assumption that what has worked in the past still applies. Obviously, with a digital approach, there is more flexibility, but no one has taken advantage of this opportunity. Since there is more empathetic upside in acknowledging different behavioral audience segments, there is low risk in setting up different stores. Instead of measuring key performance indicators solely by the number of sales, measure also the number of people who say they will probably buy in the future or who may switch their allegiance back to you the next time. Set clearer and more nuanced objectives and measurements [5] based on your research.

ASSUMPTION-HUNTING UNLIKELY AT MY ORGANIZATION

Sometimes the act of stepping back from your work and questioning who it's for won't fly at your organization. There are lots of reasons why. If your organization doesn't condone this kind of questioning, hire an advisor or consultant for an hour or two—for the same cost as a few participant stipends. Ask that consultant to sign an NDA and then let them ask the questions about assumptions that you might already have been thinking yourself. Record a few questions and observations to pass along. Tell your superiors it is a customary part of user research to get a quick professional verification. Some of the questions and observations might get decision-makers thinking. Just adding an outside, expert voice to your own can be enough to gain consideration. Moreover, in case the concepts meet with derision, you will remain in a position of plausible deniability. This kind of protection is what consultants are for.

FORM A HABIT OF QUESTIONS

Assumptions can be discovered and dispelled fairly easily. It just takes recognition that assumptions are

costly, and discipline to keep asking questions and exploring the broader perspective to provide certainty.

Recognition can be gained by checking your organization for the telltale signs of assumptions and spreading the word internally. If this is not convincing enough, you can work toward recognition of the problem by bringing in experts' articles, workshops, and advice.

The second piece, asking questions and exploring individuals' deeper human intentions beyond the scope of your offerings, can be achieved with a cycle of listening sessions with the people you intend to support. These sessions can be formal or informal. Start this cycle with the mindset that it will be continuous, because the stories you collect will never go stale, and those stories will influence which stories you want to find out about next.

If your organization can do these things, you might end up being the ones to disrupt your own market.

ENDNOTES

1. The experience design community had a Twitter discussion about the use of demographics in personas, which is summarized in my article “Describing Personas”; <https://medium.com/@indiyoung/describing-personas-af992e3fc527#.u74kbody6a>
2. In a brick-and-mortar store, similar data appears on product displays, and displays are often physically grouped by brand.
3. See this article about deriving value from research through iteration: Boxes and Arrows, “How to determine when customer feedback is actionable,” by Naira Musallam, Nis Frome, Michael Williams, and Tim Lawton; <http://boxesandarrows.com/how-to-determine-when-customer-feedback-is-actionable>
4. The book *Design for Real Life* by Sara Wachter-Boettcher and Eric Meyer asks product teams to pause before each design decision to consider the array of possible negative scenarios and reactions.
5. See Christina Wodtke's articles and blog posts about OKR's at elegantstack.com.

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