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Eric Meyer &
Sara Wachter-Boettcher

DESIGN FOR REAL LIFE

FOREWORD BY Anil Dash

Publisher: Jeffrey Zeldman
Designer: Jason Santa Maria
Executive Director: Katel LeDû
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Copyeditor: Lisa Maria Martin
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TABLE OF CONTENTS

FOREWORD

I'VE SPENT MY entire adult life surrounded by people who create digital experiences—from the era of desktop software to the birth and blossoming of modern websites all the way to today's social networks and mobile apps. Two billion people now have some kind of access to internet technologies, and almost all of them are spending more and more time with their thumbs flicking across their phones. And the technology they're using has a real impact on their lives. They don't use an app to "share photos"; they use it to maintain a relationship with distant family. They don't need to do "online banking"; they need to lend a friend money to help them out of a jam. Nobody wants to learn a complicated set of privacy controls; they just want to be able to express themselves without antagonizing bosses or in-laws.

For all the advancements we've made, these more human problems are still hard to solve. Most of the bugs that people in tech talk about fixing are mundane—a few pixels out of alignment, or a search form that's slow to produce results. Far fewer of our conversations start with, How is this new feature supposed to make someone feel? or, Are we thinking of how people's personal lives can be complicated and change over time? or, What happens if our app is used by someone who's extremely vulnerable, either economically or politically?

These are the kinds of questions that Eric and Sara raise, and begin to answer, in *Design for Real Life*. They are worthy questions, and difficult ones, so we need guides to teach us how to think about issues that go far beyond the buttons on our screens. In a time when people creating technology have promised to transform and disrupt nearly every aspect of our lives, and when the people who succeed in tech have become some of the wealthiest and most powerful people who have ever lived, the need for a humane perspective couldn't be more urgent.

All of us who create technology have a wonderful, challenging obligation to ensure that our work makes lives better for everyone it touches. *Design for Real Life* gives you the tools to start making sure the technology you create is as kind and humane as your intentions.

—Anil Dash

To my mother, Rebekka, who taught me to be brave.
—Sara

To the stars by which I steer: Kat, Carolyn, Rebecca, and Joshua.
—Eric

#663399becca

INTRODUCTION

"IT IS NICE TO BE NICE."

You'll find this phrase everywhere at ThinkUp, a service that sends its users daily updates about their interactions on social media. By all accounts, ThinkUp cares deeply about its members. It doesn't sell data. It doesn't run advertising. And it has worked hard to develop more meaningful features than simply tracking faves and follower counts.

One such feature is "BFF," which sends users an email alert about the social profile they've been interacting with most, accompanied by one of five or six programmed headlines: "Peas in a pod," "Best buds," "Get a room!"

That last one gave cofounder Anil Dash pause. "I dunno..." he remembers saying to the writer. But the team did a quick straw poll, and everyone decided it would be fine.

Until the email came in:

> *You told me to "get a room" with somebody who'd been stalking me.*

Suddenly that little phrase didn't seem fine at all.

It wasn't just that one complaint. "Get a room" is the most-criticized copy ThinkUp has ever published, despite the fact that the BFF insight only goes out to a fraction of users, and only a fraction of that fraction were served the offending message. Most users just found it a little off-putting—*icky,* if you will. But that email about stalking? It got the team's attention.

Dash and his cofounder, Gina Trapani, pulled the snippet.

THINKUP IS FAR FROM ALONE. In apps and on websites and in our inboxes, we design countless messages optimized for the idealized user. We fill personas with smiling faces. We write use cases focused on simplicity and speed. We create flows that are ever more "seamless," even in the face of lives that are full of rough edges.

Most of the time, we mean well: we talk about delight and satisfaction; we emphasize that our products are personal and relatable. But making digital products friendly isn't enough to make them feel human.

Real life is complicated. It's full of joy and excitement, sure, but also stress, anxiety, fear, shame, and crisis. We might experience harassment or abuse, lose a loved one, become chronically ill, get into an accident, have a financial emergency, or simply be vulnerable for not fitting into society's expectations.

None of these circumstances is ideal, but all of them are part of life—and, odds are, your site or product has plenty of users in these moments, whether you've ever thought about them or not.

Our industry tends to call these *edge cases*—things that affect an insignificant number of users. But the term itself is telling, as information designer and programmer Evan Hensleigh puts it: "Edge cases define the boundaries of who [and] what you care about" (http://bkaprt.com/dfrl/00-01/). They demarcate the border between the people you're willing to help and the ones you're comfortable marginalizing.

That's why we've chosen to look at these not as edge cases, but as stress cases: the moments that put our design and content choices to the test of real life.

It's a test we haven't passed yet. When faced with users in distress or crisis, too many of the experiences we build fall apart in ways large and small.

Sometimes, it's a bit of microcopy that's meant to be cute and playful—until it's placed next to something that's anything but, like this Medium post our friend Kevin Hoffman wrote mourning his friend's death (**FIG 1**).

Medium clearly wanted users who only receive a few likes on a new post to feel more comfortable. But some moments simply aren't right for "fun facts." In fact, when Medium heard about this problem in late 2015, they told us they would remove the snippets immediately.

The problem isn't just inappropriately peppy copy. It's all kinds of things: the airline that pushes so many competing and confusing messages at users that buying a ticket in an emergency becomes an exercise in frustration and failure. The form that asks for information about sensitive subjects without explaining why the service needs it or how it will be used. The

FIG 1: Rather than feeling playful, Medium's "fun fact" is jarring when juxtaposed with a post about a friend's death.

hospital interface that emphasizes its world-class doctors but doesn't tell you how to find the emergency room.

It's easy to miss these problems if you haven't learned to look for them. There's no checklist for the human experience, no easy way to ensure our products won't cause harm. But as designers, writers, strategists, developers, and product people, we can train ourselves to seek out those stress cases, and vet our design choices against them.

That's what this book will help you do.

Bringing edge cases to the center

Instead of treating stress situations as fringe concerns, it's time we move them to the center of our conversations—to start with our most vulnerable, distracted, and stressed-out users, and then work our way outward. The reasoning is simple: when we make things for people at their worst, they'll work that much better when people are at their best.

It's also critical we do this now, as writer and programmer Paul Ford explains:

> *The things that you build in the next decade are going to cost people, likely millions of people, maybe a billion people depending on the networks where you hitch your respective wagons, they are going to cost a lot of people a lot of time. Trillions of heartbeats spent in interaction. [...]*
>
> *I want you to ask yourself when you make things, when you prototype interactions, am I thinking about my own clock, or the user's?*
>
> —PAUL FORD, "10 TIMEFRAMES" (http://bkaprt.com/dfrl/00-02/)

Digital products touch every aspect of our lives: friendships, relationships, work, finances, health, grief, you name it. They're how we share, how we express our thoughts and feelings.

They're *us*—in all our messy complexity.

Failing to support this reality has a cost. These accidentally awful experiences are alienating. They reinforce a user's feelings that a community or a service wasn't designed for them, that their life isn't one that matters. These reactions can create a ripple effect across their whole network and result in backlash and bad press.

We're also limiting ourselves. When we, the people who make digital products, don't take stress cases into account, we miss out on designing for people who aren't like us, people whose fears and challenges are different from our own. This can mean failing to reach—or even driving away—people who want and need digital products that fit their lives. Whether we're talking about low-income users, or those dealing with chronic illness, or those in developing nations, the world is full of people whose whole lives look nothing like the ones we, as an industry, typically design for.

There are products to be built that will work for them—if we can widen our perception of what it means to design for real life.

It won't be easy. You will always encounter someone who wants to over-prioritize their marketing message or ask for more user data than they need. But examining your product from the point of view of someone in distress will clarify your true needs, and enable you to push back on those requests. Just like designing for mobile has helped us get rid of bloated pages and endless carousels for users on all kinds of devices, this approach will help us be more focused, understandable, and empathetic to users in every emotional state.

This book is a first step in that direction. You'll find a range of techniques for working intentionally to understand the full range of people who might use your products, and the full range of emotions they may experience when they do.

In Chapters 1–5, you'll learn about the principles behind designing for stress cases, and see examples where organizations have both failed and succeeded at this. Then, in Chapters 6–8, you'll learn methods to strengthen your research and design process, and get buy-in from your organization.

When you're finished, you'll be prepared to:

- Incorporate a wider, more realistic range of people in your work.
- Lead a design process that vets new features, content, or interaction against less-than-ideal user scenarios.
- Look at your decisions through a lens of kindness, and strengthen them as a result.
- Convince others to invest in and support compassionate design processes.

Let's get started.

1 CHALLENGE YOUR VISION

On Christmas Eve 2014, I went to Facebook and was greeted by an ad promoting Year in Review, a feature I had been deliberately avoiding.

But there it was in my newsfeed. Staring out at me, framed by dancing clip-art partygoers: the face of my middle child, Rebecca, who had died of aggressive brain cancer on her sixth birthday, June 7th, 2014.

The dissonance between that profound personal tragedy and the party images created a visceral moment of shock. The copy, "Here's what your year looked like!" added its own surreal layer of horror.

—Eric

YEAR IN REVIEW is a Facebook feature that allows users to create an album of highlights—things like status updates, photos and videos shared, and places checked into. When it launched in December 2014, Facebook would prefill your album with content that had gotten a lot of reaction—that is, comments, shares, and likes. From there, you could add or remove items until you had a Year in Review you were happy with.

FIG 1.1: The module promoting Facebook's Year in Review to Eric.

Once you were done, Facebook would post the album as a status update. The default text read, "I had a great year. Thanks for being a part of it!" Again, people could change this text, though many didn't.

To see a clear picture of the designers' intent, let's break down Year in Review's design and copy elements (**FIG 1.1**):

- The celebratory clip art framing the default cover photo.
- The upbeat, familiar tone of the copy: "Eric, here's what your year looked like!"

- The default status text: "I had a great year. Thanks for being a part of it!"
- The project's very nature: to collect and present memories from the past year.

Together, these point to a fundamental design direction, which we would articulate as something like:

> *Create a product that will let people celebrate their awesome year and share it with their friends.*

But not everyone had a great year.

One man had his Year in Review ad prefilled with a picture of his apartment on fire. Another got a picture of the urn containing his father's ashes. A couple saw the sonogram of their third child, a pregnancy that later ended in miscarriage. Someone else got a photo of a friend's gravestone, memorializing their death in the 9/11 attacks.

For every one of those people, it's a safe bet that hundreds of thousands or even millions more—given Facebook's 1.5 billion monthly active users in 2015 (http://bkaprt.com/dfrl/01-01/)—were confronted with similar experiences.

Year in Review imagined users who wanted to look back at their year and share the result with their friends, and assumed this experience would bring them a nostalgic smile. Everything about Year in Review, and, more crucially, about the extra prominence of a timeline ad, was perfectly tuned to that use case. For anyone who fit that idealized persona, the experience probably worked just as intended. By every common measure, the designers at Facebook succeeded.

The failure wasn't in their design, but in the narrowness of their vision. They didn't look beyond that ideal persona, in that ideal circumstance, and ask, "How will someone in another context perceive this?" The same thing happens on design teams every day: we work from an imagined ideal, both in terms of the user and the user experience.

PLAN FOR THE WORST

Humans are not very good at thinking about worst-case scenarios. This is probably for the best: you likely don't dwell on what will happen if someone runs a red light and plows into you every time you get into a car. But the engineers who made that car *did* ask that question, and many like it. They worked to make the car fun to drive, reliable, fuel-efficient, comfortable, and as *safe* as possible.

Thus our cars have features like crumple zones to absorb impact, headrests to reduce whiplash, airbags to cushion occupants, and seat belts to prevent ejection. This doesn't make cars perfectly safe, of course—occupying a half-ton machine moving at high speeds will always carry some risk—but they're substantially less fatal than they were fifty years ago.

Engineers don't have this skill naturally; they've been trained to consider worst-case scenarios. The same holds true for programmers. Most start out trying to write programs that will do cool stuff. Over time, they either see enough crashes and security exploits that they learn how to be careful, or they formally study computer engineering and are taught to be careful. Or both.

The ability to keep in mind the core vision (create a great-looking car; code a useful mobile app) while also mitigating worst-case scenarios (car hits a tree; mobile device joins an insecure network) is something designers and developers alike need to learn—particularly when it comes to human failures. It's the ability to simultaneously work toward and *challenge* your vision—to ask yourself not only, How can I make this even better? but also, How can I keep this from inflicting pain?

IDENTIFY ASSUMPTIONS

The first step to challenging your vision is to identify the assumptions you've built into it, and consider what might happen if people fall outside those parameters.

Let's return to Facebook's Year in Review and our inferred design direction:

> *Create a product that will let people celebrate their awesome year and share it with their friends.*

This is a fine vision, but to see where it might go wrong, look at its inherent assumptions:

- The user had a great year.
- The user wants to relive their year.
- The user wants to share their year.

Now, consider the new scenarios we create by subverting each of those assumptions:

- People who had a great year, but don't want to relive or share it.
- People who had a great year and want to relive it, but not share it.
- People who had a horrible year, and don't want to relive or share it.
- People who had a horrible year and want to relive it, but not share it.
- People who had a horrible year, and want to both relive and share it.

Some of these use cases might seem surprising, but remember that everyone is different. Many people share feelings or memories to ease emotional burdens. Others might not like to draw attention to themselves under any circumstances.

Moreover, whenever you tell yourself nobody would ever act a certain way or come to your site in certain situations, that moment should raise a huge red flag in your head. Written on that flag, in block letters, should be the words UNSUBSTANTIATED ASSUMPTION. Or, for a folksier spin: WHEN YOU ASSUME, YOU MAKE AN ASS OF U AND ME. (Our dads taught us that one.)

Once you have a list of potential user scenarios, look at the ways you might categorize or arrange those contexts, and see what each reveals about the design. For example, if you were working on Year in Review, you might organize users by whether they're interested in sharing, and some reasons why they might feel as they do:

- People who want to share
  - Had a great year
  - Had a horrible year
- People who don't want to share
  - But want to relive it
    - Great year
    - Horrible year
  - And don't want to relive it
    - Great year
    - Horrible year

What do people who want to share have in common? How do they differ? You can repeat the process through other lenses, like whether they had a great year, and then whether they want to share those experiences. The more you look at your use cases in new ways, the easier it becomes to think differently about the possible outcomes.

STRENGTHEN YOUR DESIGN

With these assumptions identified, we can now adjust our design to support people whose context falls outside those assumptions. To start, let's focus on the scenarios we outlined above: organizing according to whether or not a user wants to share.

First, we have people who want to share their year. Awesome! They're the people we're already designing for. If they also had a great year, not much changes. However, for people who had a horrible year, even if they do want to share, we need to rethink some of the defaults.

Will a party theme dissuade them from completing the task, or make them angry? Would a more neutral or abstract design strike a friendly tone without imposing an assumption of celebration? For example, we could explore design elements that evoke time passing, like clock faces, hourglasses, or calendars.

What about the default text? Instead of "I had a great year. Thanks for being a part of it!" we might consider options that don't assume a user's feelings, or their relationship to the people they share with.

That's what Facebook did when it updated Year in Review for 2015. Rather than assuming everyone had a good year, the new default copy is much more neutral:

> *Here's my 2015 Year in Review. See yours at facebook.com/yearinreview.*

Facebook also updated the ad encouraging people to try Year in Review. Rather than inserting a picture into the user's feed, the new ad uses design elements that stand on their own. The copy is more neutral and respectful as well: "We thought you might like looking back," it says—leaving room for Facebook to be wrong (**FIG 1.2**).

This change of approach came from the feedback that Facebook received after Year in Review 2014, and the lessons it learned throughout the year with another feature, On This Day. Launched in March 2015, On This Day presents users with posts they made, or were tagged in, on the same day of a past year. As of late 2015, this is how Facebook presents On This Day posts in users' timelines (**FIG 1.3**).

Note how, as with Year in Review 2015, both the visual elements and the content are neutral, instead of assuming a memory will be positive. Facebook also makes clear that it might be wrong about what people want to relive: if someone clicks the dropdown in the top right, they can choose to never see that memory again. When they do, Facebook responds with:

FIG 1.2: Facebook's 2015 Year in Review ad defaults to neutral copy and avoids mixing users' images with any celebratory design elements.

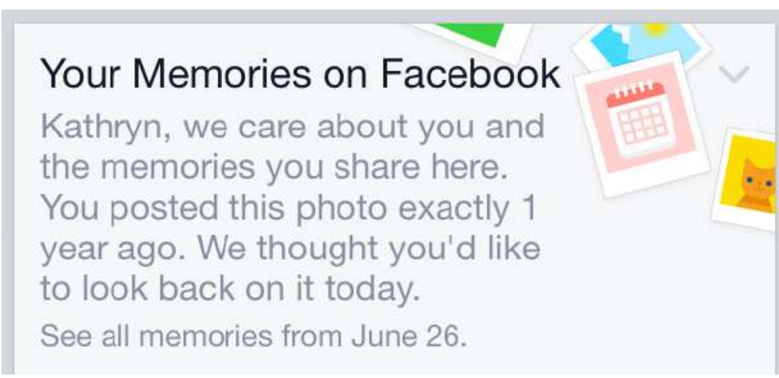

FIG 1.3: Facebook's On This Day feature.

We're sorry, we know we don't always get it right.

We've hidden this memory so you shouldn't see it in On This Day again.

Both On This Day and Year in Review 2015 show what it looks like when an organization embeds caring into its product, and is willing to own up to mistakes. While both products could still trigger painful memories, these tonal shifts make those scenarios less jarring.

Here and elsewhere in this book, you'll find that there's a lot to learn from Facebook. With a core mission of connecting people and a massive user base, Facebook is often the first to stumble into these tricky subjects—because when something goes wrong for just 5% of users, it affects more than 50 million people. As we've seen already, those stumbles are often a trigger for designers to think through a wider range of human experiences and emotional contexts, and take compassionate steps forward.

FIND FRACTURES

While products that focus on personal relationships carry the most emotional risk, we can strengthen any site by challenging our assumptions and finding stress cases.

Take Flickr. In mid-2015, the photo-sharing service unveiled extensive updates to its website and suite of applications. One of its most talked-about new features was autotagging: Flickr's image-recognition technology looks for patterns commonly found in a specific type of photo and automatically labels photos' contents. For example, if you uploaded images of a vacation to the Bahamas, Flickr might programmatically add tags like "beach," "ocean," or "boat," because the software recognizes those items based on patterns.

According to Flickr's official help thread on the topic, autotags were designed to keep up with the ways digital photography has changed:

FIG 1.4: Tags on an image of the concentration camp Dachau. Image from *The Guardian*, May 20, 2015 (http://bkaprt.com/dfrl/01-03/).

> *As we've redesigned Flickr, we've tried to make it the one place where you upload every photo and video you take, and then easily find, organize, edit, and share them. This requires powerful image search, and to deliver that, we need to be able to identify the content in each photo, whether you add tags and descriptive titles or not. (http://bkaprt.com/dfrl/01-02/)*

In other words, Flickr designed this feature around the use case of a person snapping shots left and right on their smartphone, and uploading every one of them to the site.

That use case, like Facebook's, is full of assumptions:

- Users want to upload all their photos and videos to Flickr.
- Users don't want to create their own metadata.
- Users will feel like the autotags accurately reflect their photos.

Let's look at that third assumption more closely. The reality is, not everything people upload to Flickr is quite so easy to identify. Sometimes, people visit a concentration camp—or a "jungle gym," as Flickr's autotagging originally labeled photos of Dachau's "Arbeit macht frei" gates. Another tag read "sport," as if the prisoners were at some sort of athletic camp (**FIG 1.4**).

Other examples include a photo of a black man tagged with "ape"—something Google's Photos app *also* did, two months later, when it labeled black people as "gorillas" (http://bkaprt.com/dfrl/01-04/).

Individually, we might write these anecdotes off as the sort of unthinking mistake a computer might make. But given the history of words like *ape* and *gorilla* used as racial slurs, that kind of error carries real weight.

QA FOR EMOTION

Just like Year in Review, Flickr and Google could have avoided many of these problems by challenging their visions for autotags and creating a QA process that specifically looked for places where the feature breaks in emotionally fraught ways.

First, the designers could test the feature on sensitive subject matter: images of natural disasters and destruction, sites where tragedies occurred, and injuries, to name a few. Focused brainstorming around the subject would quickly yield an extensive list of image types to test.

Reviewing the tags applied to photos like these would help reveal how often automatically generated tags fail in ways that aren't just inaccurate, but insensitive or hurtful. For example, is an image of a beachside town destroyed by a tsunami tagged with "vacation"? This QA would create a better sense not just of the frequency of mistagging, but also of its potential impact on users—an extremely useful barometer of whether the product is ready for prime time.

Next, they could identify the tags that are most likely to be hurtful out of context. To do this, they could identify the places where taxonomy is most connected to touchy subjects, such as racial slurs. Identifying which terms could be harmful when used in the wrong context could have helped Flickr and Google identify autotags that needed more refinement, or that needed to be removed from the lexicon.

This process wouldn't have shown the companies every single way their features could fail, but we suspect it *would* have changed how they saw that failure rate. A few misplaced "puppy" tags aren't likely to offend, but if you saw failures that created racist messages or mischaracterized atrocities, we bet you'd be more likely to invest in some improvements.

VALUE USERS' TIME

In theory, autotagging images should save users time—but in reality, the feature ends up making Flickr *more* work for some users, and could leave them with unwanted tags on their photos if they don't do that work.

Every time an autotag is incorrect, a user has to manually remove the tag. Manual untagging helps the system learn, but it's also a burden to place on a user—particularly those loyal users who already invest time in adding metadata. As one user said:

> *[I]t is rather aggravating when Flickr then goes through adding wrong tags to your long list of correct tags, and then asks us to go through them individually deleting the wrong ones. In my case, assuming thirty seconds per photo, they effectively want me to do three months' full time work for nothing to fix their mistakes. (http://bkaprt.com/dfrl/01-05/)*

To help this problem, Flickr introduced batch editing for autotags—so, for example, if a whole photoset of your prize-winning berry tarts got mistagged as "cookies," you could remove that tag from all the photos at once. But even with this change, Flickr is still taking something that's meant to be seamless and turning it into extra work.

Perhaps most worrisome, few people who upload every one of their smartphone pics are likely to go back and quality-check their tags. What if a portrait photographer's images were tagged with a racially charged word, and they ended up losing business or being targeted for abuse because the image went viral?

RETHINKING OUR CHOICES

The utility of autotagging is clear: having rich metadata about millions of photos opens up all kinds of doors for both users and the company—not the least of which is data about user habits and interests (which advertisers can mine). But given the failures and frustrations autotagging has caused, it's useful to ask: what if Flickr or Google had not just tested the feature better, but reconsidered how it worked in the first place?

For example, they could have opted for a tag-recommendation system, rather than an autotag system. This would give users more control over the way their images are labeled and presented to the world, while still adding metadata to a vast number of photos. Or, they could have let people opt into or out of the autotagging service, so that users (particularly power users) could maintain control over their metadata.

We're not sure where Flickr or Google would have landed if they had challenged their visions for their features: better testing, user opt-outs, or even a larger product change. But like we saw with Year in Review—and in countless websites and digital products—these are questions not enough of us are asking.

2 MAKE SPACE FOR REAL PEOPLE

OUR USERS AREN'T US. *Our users aren't us*. We hear this constantly—but as we've seen already, we're not always great at living it out.

It's not only a matter of considering extreme circumstances, though. Designing for real people is also about *making space*: ensuring our interfaces and expectations don't force users into narrow categories, prevent them from using a product in the way that best fits their lives, or make it difficult to complete tasks on their own terms.

It's about giving people enough room within our interfaces to be themselves.

In this chapter, we'll explore a few ways users need to be able to represent themselves and their needs online—and how we can adjust our thinking to support them, rather than exclude them or force them to adjust to us.

UNDERSTAND YOUR BIAS

Making space for our users begins with understanding our biases—something all of us have.

Bias works like this. Our brains take cognitive shortcuts: rather than thinking through every situation, they conserve energy by developing "rules of thumb" to make decisions. Those rules are built off our necessarily limited past experiences. As a result, we routinely make assumptions about the world, and the people in it, based on a very limited amount of data.

In *Thinking, Fast and Slow,* psychologist Daniel Kahneman says these shortcuts come from our brains' desire to do as much as possible using "System 1" thinking: quick, automatic decision-making. System 1 thinking is effortless, impulsive, and often stereotypical. In contrast, "System 2" thinking requires much more careful attention, and includes functions like focusing, comparing, counting, or reasoning—all of which take energy our brains want to conserve.

We see this at work in the *availability heuristic*: the easier it is for you to think of an example of something, the likelier you are to believe that that thing happens frequently. For example, if you know many people with impaired vision, those people are more available to your brain, and so you're more likely to estimate this user group as being large. Conversely, if you know no one with impaired vision, examples of people who are impaired will not come to mind, and you'll be more likely to discount this user group. What's happening in both cases is that the brain is performing System 1 thinking: making decisions based on what's easy to recall, rather than reasoning through the situation.

System 1 thinking isn't bad or wrong; it's human. But it doesn't always serve us well. To make design and content decisions that include the most people, we need to train ourselves and adjust our processes to invoke System 2 thinking as often as possible: to slow down, step away from our shortcuts, and consider things with real people in mind.

The first step of that process is to imagine your user. Go ahead, do it right now: picture the person using your products.

What did you imagine? Did you visualize a specific age, gender, and race? Did you imagine where they live, what they do for a living, maybe even how they feel? That's okay; most of us do.

The key, though, is not to stop there. There's real value in taking that idealized user, and then imagining someone who breaks its mold—who is different in every single way. As soon as you do, you'll engage System 2 thinking, which will allow you to unpack those assumptions your brain made at first, and increase the variety of users you can imagine. Doing this will also help guide your research process (a topic we'll discuss at length in Chapter 6).

Let's explore how doing this might change some common design decisions.

RECONSIDER "SIMPLE"

We often assume something will be "simple" for a user: "This form field will take two seconds," we might think. "We'll just make it required." But what our limited knowledge tells us is simple might be anything but for someone else. The more we identify our biases and stretch our thinking beyond them, the better our designs will work for everyone.

Take gender. We ask for it all the time: when we're onboarding new users, signing them up for a newsletter, requesting their mailing address. Often, those interfaces offer only a binary choice between male and female (**FIG 2.1**)

But gender isn't so simple. There are people who were born one gender but now identify as another. People who are in the process of transitioning between genders. People who are not—or prefer not to identify as—any specific gender. People who do identify with a gender, but prefer not to share that information. These are real people.

If we want to make space for everyone's lives and needs, we need to account for a broader range of experiences—and

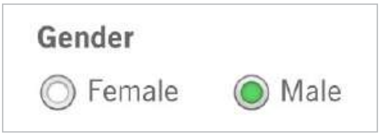

FIG 2.1: A binary gender selector leaves people out—and often isn't even needed (http://bkaprt.com/dfrl/02-01/).

a whole host of complicated feelings and emotional responses that can come along with using our interfaces.

Here's how one transgender man, who is not yet out to everyone and is just beginning to transition, explained his experience to us:

> *Every time a website asks: "Male or Female?" and offers no opt-out, no "It's complicated," I pause. I have to think about what I want to answer and why. Do I check "female" to match the name I still give and the socialization I received? Or do I check "male" and risk someone noticing the discrepancy, because this reflects myself?*

Sit with that for a moment: *every time* he's asked this question, he pauses to think. Is an honest answer going to make him unsafe? Will he risk being outed to people he's not ready to tell yet? Will it raise red flags? Will it result in further questions?

Every check of a box forces him to choose between his safety and his sense of self. Suddenly, the question doesn't seem quite so simple.

And how often does his answer matter to the product or service he's using? Be honest: probably not very often. Unless you're talking about healthcare or official government services that, at least for now, require gender information, most digital experiences ask for gender simply because *the company wants to know*.

It might not be easy to convince your company to stop asking for unnecessary information, but as interface makers, we have a responsibility: to question the decisions and desires that cause harm to our users. We might not change our organizations' minds every time, but we *can* start the conversation (something we'll discuss more in Chapter 8).

FIG 2.2: Facebook's gender selection menu gives users a chance to define themselves.

GO BEYOND THE BINARY

Removing gender doesn't always make sense, though. Gender is often a big part of how people identify and represent themselves—which means that on social sites, many people will *want* to specify their gender. In these circumstances, we can take a cue from Facebook, which overhauled its gender settings in 2014 to better serve a range of identities. Now users can choose "Male," "Female," or "Custom" (**FIG 2.2**).

If a user chooses "Custom," they can type whatever they want—but Facebook also offers a list of common choices (**FIG 2.3**).

Facebook also allows users to choose the pronoun they'd like to use for their activity: female, male, or neutral (**FIG 2.4**).

All this adds up to a flexible experience—one that gives users the space to define themselves, and accepts them for whatever that definition is.

ASK ONLY FOR WHAT YOU NEED

In 1980, computer scientist Jon Postel created the early specification for the Transmission Control Protocol (the TCP in TCP/IP, the internet's most basic communication language). In that specification, he shared what he called the Robustness Principle for transmitting data:

> *Be conservative in what you do, be liberal in what you accept from others. (http://bkaprt.com/dfrl/02-02/, section 2.10)*

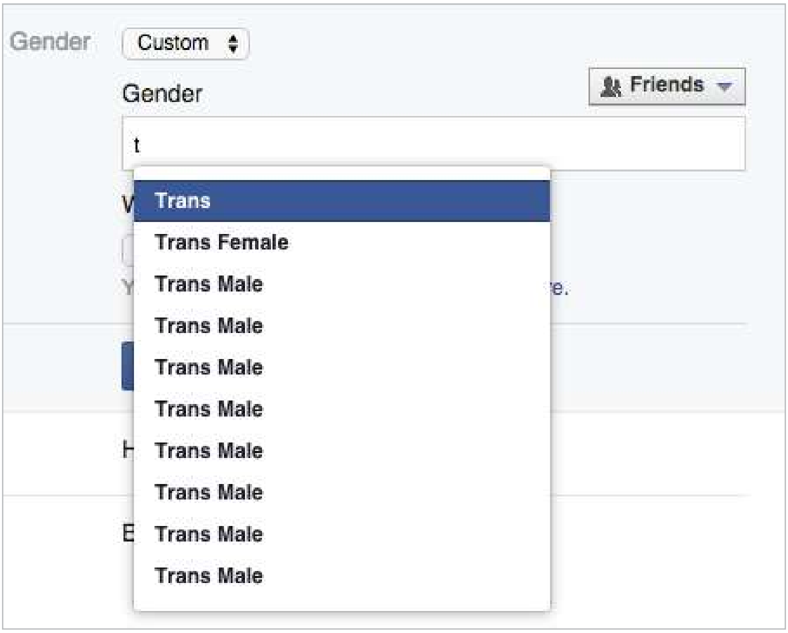

FIG 2.3: Common gender selections prepopulate a dropdown menu, but a user can type whatever they want. This is what's available if you type a *t*.

FIG 2.4: Facebook's pronoun options include a neutral option for those who don't identify as, or prefer not to be labeled as, *he* or *she*.

Postel meant that our programs should carefully follow specifications in the way they format and send data to other programs or machines, but when other programs send them non-conformant data, our programs should be robust enough to accept and parse it as is.

Lyle Mullican argues that we can apply Postel's law to user experience design. Humans and machines parse information in fundamentally different ways, he writes. But machines can, and should, be robust enough to accept human information, make sense of it, and make it conform to their more programmatic standards:

> *When you buy something over the phone, the person taking your order never has to say, "Please give me your credit card number using only digits, with no spaces or dashes." She is not confused if you pause while speaking or include a few "umms." She knows a number when she hears one. But such prompts commonly litter web forms, instructing users to cater to the computer's needs. Wouldn't it be nice if the computer could cater to the person's needs instead? (http://bkaprt.com/dfrl/02-03/)*

We can extend Mullican's thinking beyond phone numbers and credit cards to any time we interact with our users: we should be conservative in what we ask of them, only requesting the fields we actually need. But we should be liberal in what we accept from our users, rather than forcing them into our predefined categories.

Gender is a common way this plays out, but it's far from the only one. We've seen religion selectors that list only the most popular choices, or force you to select "none" if yours isn't listed; nationality fields that use outdated or disputed country names; and race/ethnicity dropdown menus that can't account for people who identify with multiple backgrounds (**FIG 2.5**). Whatever kind of information we ask users to provide, the more rigid we are about what we accept, the more people we leave out.

FIG 2.5: A dropdown menu for race/ethnicity. Users who identify with multiple races must mark the generic "Multiracial" rather than report their actual identity.

ACCEPT A BROADER RANGE OF ANSWERS

Names are another area where expectations of normal often go awry. Sara has felt this herself: some systems can't handle last names longer than fifteen characters ("Sara Wachter-Boettch" receives a lot of mail). Others can't seem to manage the hyphen. And still others refuse to capitalize the *B*.

But you know what has never happened to Sara? She has never been told her name isn't real.

Shane Creepingbear has (**FIG 2.6**). A member of the Kiowa Tribe of Oklahoma, Creepingbear had his last name questioned by Facebook more than once in 2014 (http://bkaprt.com/dfrl/02-04/). He even had to send in documentation proving that Creepingbear is, indeed, his legal name, because the Facebook employee who reviewed his profile thought his name didn't "seem real."

What does a "real" name look like? According to Facebook's help content as of fall 2015:

> *The name you use should be your authentic identity; as your friends call you in real life and as our acceptable identification forms would show (http://bkaprt.com/dfrl/02-06/).*

Shane Creepingbear met this standard. So did Lance Browneyes, whose name Facebook shortened to Brown, even after he sent in proof of his legal name (http://bkaprt.com/dfrl/02-07/). So did Robin Kills the Enemy. So did Dana Lone

FIG 2.6: The tweet Shane Creepingbear posted when Facebook rejected his name (http://bkaprt.com/dfrl/02-05/).

Hill. Yet they were denied the ability to express their real names—something fundamental to their identities.

Why? Because Facebook's perception of what's "real" was too narrow to meet the needs of actual users. As a result, these users were left out: blocked, forced to change their names, or required—sometimes multiple times—to send in proof of identity.

To make matters worse, that marginalization doesn't exist in a vacuum; it exists within a society that has long discriminated against Native people. As Creepingbear put it:

> *There's been a long history of Native erasure and while Facebook might not be enacting it with that intention, it's still a part of that long history of people erasing native names. (http://bkaprt.com/dfrl/02-04/)*

DOCUMENT THE IMPLICATIONS

How could Facebook and other sites avoid similar missteps, and better account for the diversity of its users' lives and backgrounds? Let's look at the Robustness Principle again:

> *Be conservative in what you do, be liberal in what you accept from others.*

Start with that first clause. Being conservative about the information we ask of users doesn't mean we can't ask for real names. It just means that we first need to make sure we need them, and understand the implications of asking for them.

But we don't always see the implications of our decisions at first glance. In 2014, Facebook rejected the names of hundreds of drag queens and kings, leading to an outcry from many in the LGBT community who felt the real-name policy marginalized and excluded them.

As a result, Facebook changed its policy—or at least clarified it, as Chris Cox, Facebook's chief product officer, explained:

> *In the two weeks since the real-name policy issues surfaced, we've had the chance to hear from many of you in these communities and understand the policy more clearly as you experience it. We've also come to understand how painful this has been…*
>
> *Our policy has never been to require everyone on Facebook to use their legal name. The spirit of our policy is that everyone on Facebook uses the authentic name they use in real life. For Sister Roma, that's Sister Roma. For Lil Miss Hot Mess, that's Lil Miss Hot Mess. (http://bkaprt.com/dfrl/02-08/)*

Let's take a step back and consider how Facebook could it have foreseen this "painful" outcome. One way would have been to simply make a list of the reasons for real names—or any personal data you're considering requiring—and weigh those reasons against the implications of that decision (**FIG 2.7**).

Even with this short list, we can more clearly see both the choices in front of us and the ramifications of those choices—

REQUIRING REAL NAMES WILL HELP US...	BUT IT ALSO MEANS...
Prevent accounts being created for harassment or hate speech.	Some users will be inaccurately accused of using fake names and feel targeted or excluded.
Ensure our members know the real identity of the person connecting with them.	People who want or need to remain anonymous for safety reasons may be unable to use our service.
Create a safe, more familiar feeling for users.	We'll need a system for identifying and handling profiles with fake names, which will take staff, process, and training.

FIG 2.7: Outlining the reasons for, and implications of, requesting a piece of user data can help you make better choices.

giving us a better foundation from which to evaluate the most compassionate decisions for our users.

We'll leave it to you as a reader to decide whether Facebook's real-name policy makes sense, but let's assume we've decided it should stay. That brings us to the second half of Postel's statement: "Be liberal in what we accept from others."

Let's break down the actions that led to the rejection of Native users' names in 2014, and see how this refrain can help with each of them. At the time, the process looked something like this:

1. A Facebook user flags a name as a potential fake.
2. A human administrator reviews the profile and determines whether it appears to violate the policy.
3. If so, a message is sent to the user telling them their name was not approved, and what to do next.

Until December 2015, the process to report a name was straightforward: you went to the profile of the person you

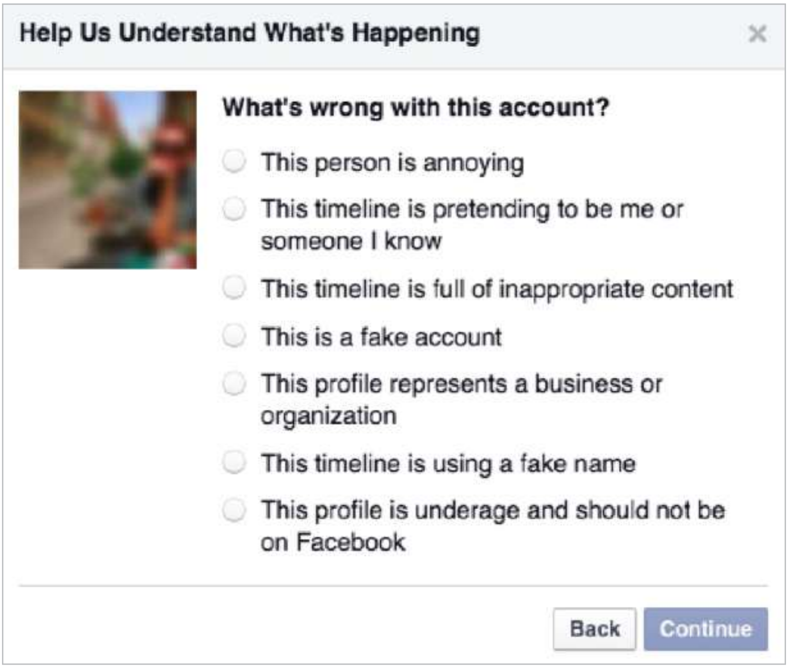

FIG 2.8: Facebook's account-reporting feature allows a user to report a name another profile is using as fake.

wanted to flag and selected "Report." From there, you were asked to select a reason for the report (**FIG 2.8**).

After selecting a reason, you chose a next step: report the profile to Facebook administrators; unfriend, unfollow, or block the profile in question; or send the person a message (**FIG 2.9**). This ease of reporting makes sense: if Facebook's aim is to connect people "authentically," then giving users the power to report abuse or fakes is critical to their safety and trust.

But when anyone can report anyone else at any time, some people will abuse the process. That's what happened to the drag queens and kings in 2014: a group intent on attacking them systematically targeted their profiles. Creepingbear has said it's

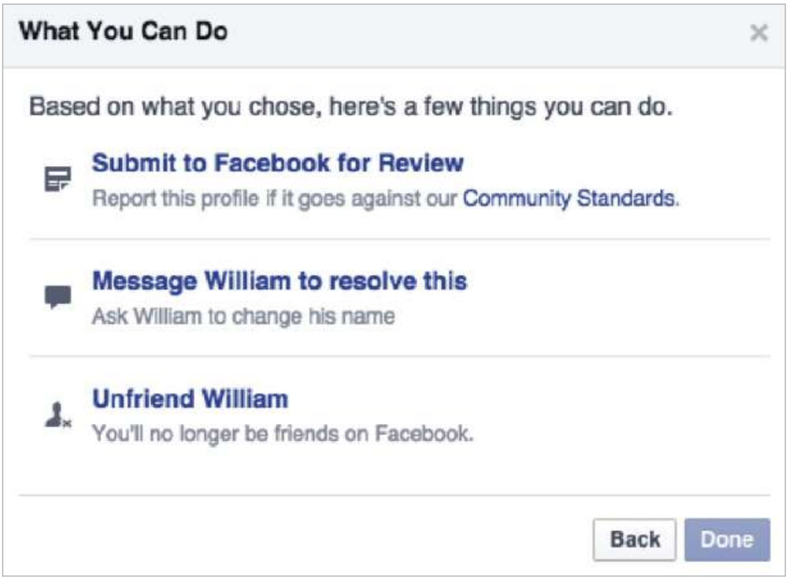

FIG 2.9: Until late 2015, the next step of the process allowed a user to select what they wanted to do about the issue: report the user's name to Facebook, or take one of several other options that kept Facebook administrators out of it.

also what happens to people like him, who openly discuss racism against Native Americans on Facebook pages.

If our goal is to be liberal in what we accept from users, then we want to allow the broadest range of real names on the site—which means we need to eliminate as many of these false reports as possible.

In December 2015, Facebook announced it was rolling out updates designed to limit those false reports. The new system asks those reporting a false name to select a reason for the report, such as "This profile doesn't represent a real person," and then to provide additional details about the problem (FIG 2.10).

Facebook has also been working on the communications a user receives when their profile is flagged. Here's what it said back in 2014, when Creepingbear's profile was targeted:

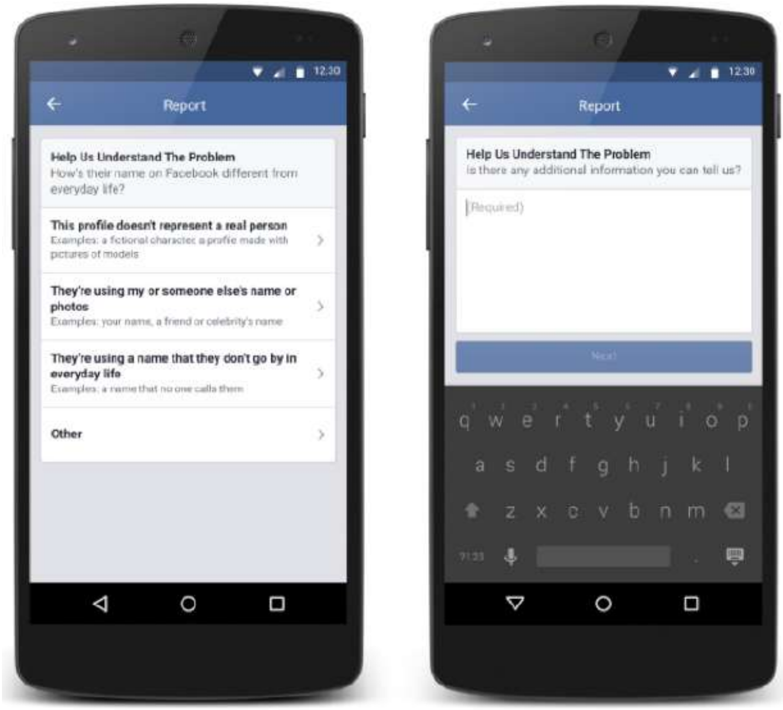

FIG 2.10: Facebook's new process asks those reporting a name to provide specific details about the problem. Image courtesy Facebook (http://bkaprt.com/dfrl/02-09/).

> ***Your name wasn't approved.***
> *It looks like that name violates our name standards.*

Imagine that you entered a real name, and then received this message. Would you feel included and welcome? Probably not. Instead, it feels alienating and condescending—like Facebook is telling you that your identity isn't acceptable. Add in the word "violates," and the overall picture feels aggressive and judgmental.

Compare that message to the one Facebook uses as of this writing:

Help Us Confirm Your Name
We ask everyone on Facebook to use the name they go by in everyday life so friends know who they're connecting with.
If [Name] is your authentic name, please choose Confirm Name to help us confirm it. If you aren't currently using your authentic name on Facebook, please click Update Name to update the name on your account.

What we love about this change is that it removes the accusation: no one's saying your name *is* fake. Rather than labeling your identity as the problem, it clarifies Facebook's policy and provides clear options to resolve the issue.

If you got this message, you still might not like scanning copies of your driver's license to have your name approved. But at least you'd feel like there's space within Facebook's universe for you to exist.

In December 2015, Facebook announced that it was testing a new tool for those who are confirming the authenticity of their names (FIG 2.11):

People can let us know they have a special circumstance, and then give us more information about their unique situation. This additional information will help our review teams better understand the situation so they can provide more personalized support. (http://bkaprt.com/dfrl/02-09/)

This new process helps Facebook minimize one drawback of its real-name policy we identified earlier in this chapter: that it might turn away those who want or need to remain anonymous for safety reasons.

Paired with other changes underway at Facebook—such as giving users seven days to confirm their names before blocking account access, and improving the process for submitting documents—this new tool demonstrates critical progress toward making space for real lives.

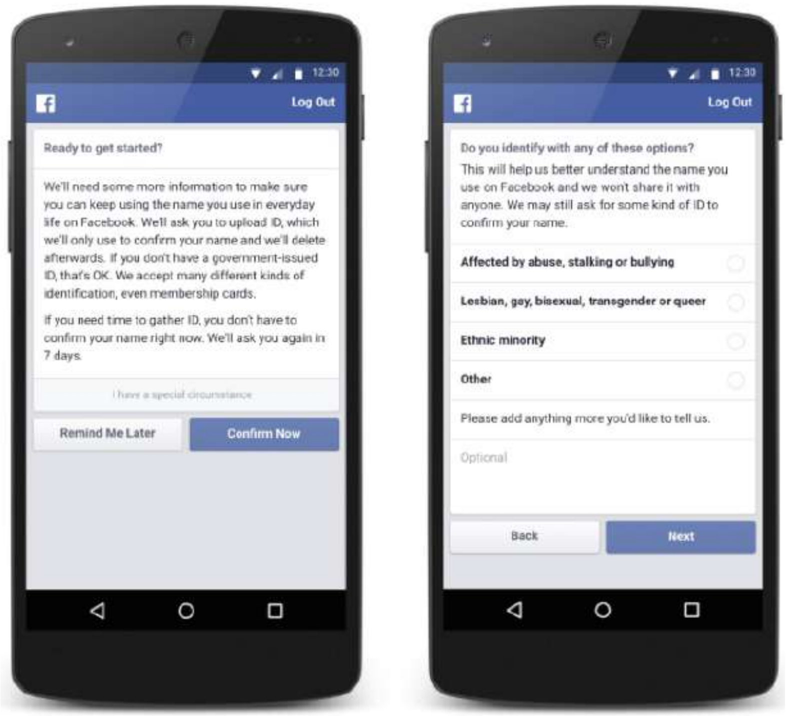

FIG 2.11: In December 2015, Facebook unveiled this tool, which will allow users to verify their identities, or to explain why they are using a false name. Image courtesy Facebook (http://bkaprt.com/dfrl/02-09/).

FIND WHAT MATTERS TO USERS, NOT TO YOU

Making space for real people also means making sure the features we build match our users' priorities—even when those priorities are different than what we imagined.

Take period tracking. Women typically have periods, and the earth has, at last count, lots of women. Women have been tracking their periods for centuries, for all kinds of reasons. Some want to find or avoid fertile windows, while others simply want to know when to expect their next period. Some women track their moods or energy levels. Still others use it to monitor other health issues, since irregular periods can point to issues like stress or hormone imbalances.

And yet, Apple Health—the forcibly installed, impossible-to-delete iOS app that claims to be the place to track your "health data"—didn't track periods when it launched in 2014. You could track your sleep quality, blood pressure, resting heart rate, steps walked, body measurements, chromium intake, and dozens of other data points. As Craig Federighi, the senior vice president of software engineering who announced the app, put it: "All of your metrics that you're most interested in" (http://bkaprt.com/dfrl/02-10/).

Unless, of course, you're interested in your menstrual cycle.

It wasn't until June 2015, a year (and more than a few critical articles) after Health's debut, that Apple added a period-tracking feature (http://bkaprt.com/dfrl/02-11/).

Why was such a basic health feature—one that's relevant to half of all users between puberty and menopause—left out of such an otherwise comprehensive list? We can't say for sure, but we suspect it's because Apple didn't challenge its vision of what "health data" included for real people. Either period tracking never came up during product-development discussions, or it did come up, but the team decided it wasn't important enough to pursue.

DESIGN TO INCLUDE

Of course, Apple's not the only app-maker around. Many menstrual cycle-tracking apps do exist—for some users, at least.

Take Glow, an app that calls itself "your best friend through multiple phases of your life." But it didn't live up to that claim for Maggie Delano, a doctoral student in electrical engineering at MIT. She wrote about her experience "as a queer woman not

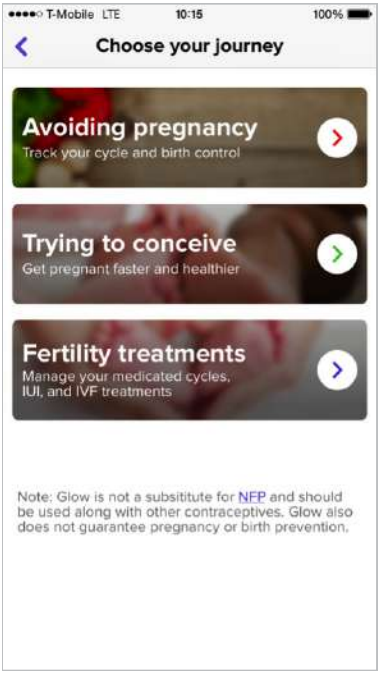

FIG 2.12: The Glow period tracker's welcome screen. These are the only three reasons Glow thinks you might use its product.

interested in having children" attempting to use Glow and other period-tracking apps on Medium (http://bkaprt.com/dfrl/02-12/).

First, during onboarding, she was asked to select her "journey" from three options, none of which applied to her: "avoiding pregnancy," "trying to conceive," or "fertility treatments" (**FIG 2.12**).

Then, the options for cycle length started at twenty-two days. Because Delano's cycle is shorter than that, the app became essentially unusable. Finally, once she set up the app anyway, she was chided for not using birth control—even though, with a female partner, her odds of getting pregnant are, well, rather low. Her assessment: "In three screens and fifteen seconds, the app has made numerous assumptions about my identity and health."

All said, Delano's attempt to track her period was alienating: a series of heteronormative questions that didn't account for her reality. She writes:

> *These assumptions aren't just a matter of having a few extra annoying boxes on the in-app calendar that one can easily ignore: they are yet another example of technology telling queer, unpartnered, infertile, and/or women uninterested in procreating that they aren't even women. It's telling women that the only women worth designing technology for are those women who are capable of conceiving and who are not only in a relationship, but in a sexual relationship, and in a sexual relationship with someone who can potentially get them pregnant.*

ACCEPT NUANCE

Glow could have skipped the assumptions about why women would track their periods and simply asked users what they wanted to track instead—something period-tracking app Clue does right during onboarding (**FIG 2.13**).

Rather than force-fit users into one set "journey," Clue bills itself specifically as a period tracker that's "made for you." One headline even reads, "It's your fertility." What Clue understands—and we could all stand to remember—is that whatever its users want to track, that's their choice, not Clue's. After all, for each person, only one use case matters: *theirs*.

REVISITING OUR BIASES

Glow clearly imagined its users as straight, sexually active, partnered women—and so the app fails immediately when used by someone who doesn't fit that mold. A gay woman, or a woman who's not sexually active, would find the assumptions about

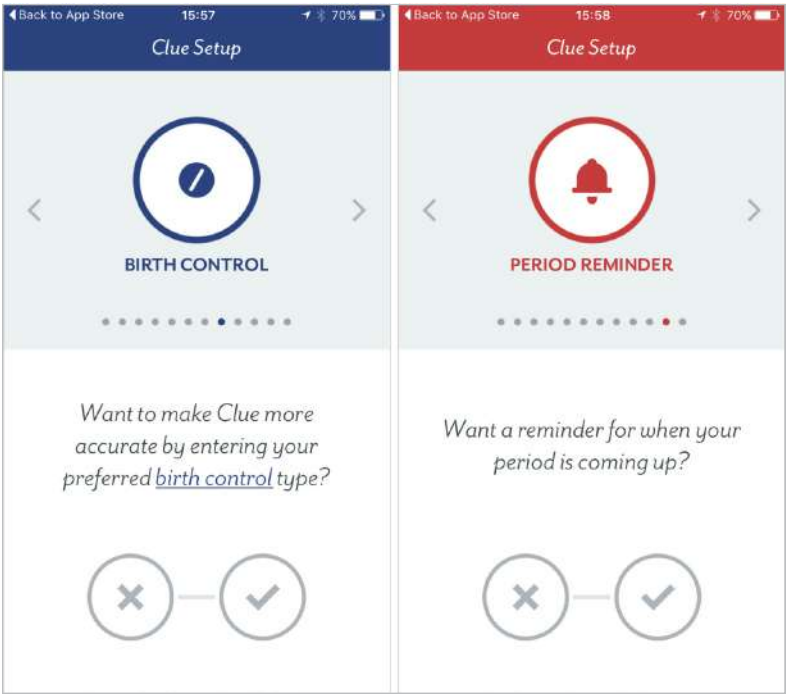

FIG 2.13: The Clue onboarding process allows you to choose what you want to track and be reminded of, without judgment.

pregnancy risk irrelevant at best, and hurtful at worst. A single, sexually active woman might feel judged by assumptions that she has a partner to share her data with. The list could go on.

Think about your ideal user again, the person you envisioned earlier in this chapter. What would be alienating to someone different from them? Which features would break?

This process of identifying and subverting assumptions is difficult at first, because it requires not just thinking differently, but being honest about where you fall short. But it's a habit your whole team can learn. And, like any habit, it gets easier the more you try.

EVERYONE NEEDS SPACE

We've talked a lot about social networks and health apps in this chapter, but don't let that fool you. Making space for your users' real selves matters, even for sites and products that aren't as obviously personal. Any time we're asking a user to define themselves, our design choices can either make them feel welcome or push them away. It takes time and practice to get it right, and we'll all screw it up sometimes. But if you can embrace these concepts in your work, you'll be on your way.

3 INCORPORATE STRESS CASES

My wife, Kat, and I sat stunned and frightened in the back of a stranger's car, barreling up the Garden State Parkway at 11 p.m., racing to reach the hospital where our daughter Rebecca was being life-flighted. All we knew was that a mass in the center of her brain had very nearly killed her that evening, and it might still.

We didn't know where we were supposed to go once we reached the hospital, so I pulled up its website on my iPhone. Not only was the site not mobile-friendly, I couldn't find anything explaining what to do in an emergency. I kept looking for a box or banner or something that would tell me what to do, where to go, who to ask once we got there. I never found it because, as I discovered later, there was no such resource. There was no page to help. Our literal life-or-death situation was completely ignored.

—Eric

THIS WAS A HOSPITAL, a place where frantic people rush through the doors every day, wanting to reach their children as soon as possible. An organization that has a department with "urgent" in its title—and yet, it had nothing saying, "If you're coming here unexpectedly, this is what you need to know."

Perhaps the hospital thought that wasn't necessary: that anyone in a crisis would have gone to the lobby or emergency entrance, and then asked where to go. But Eric and Kat were frantic—they needed reassurance about what to do. They needed a path for people in crisis.

In situations like these, we often hear, "We're designing for the 90%, not the 10%." That's classic edge-case thinking: a shorter way of saying, "That's a difficult use case that I don't want to think about." That's why we think the concept of *stress cases* is so valuable.

To see what we mean, consider how these sound:

> *"Someone trying to shut down their account in a hurry is an edge case."*
>
> *"Someone trying to shut down their account in a hurry is a stress case."*

The first feels like we can ignore it for now—and we all know how often "for now" becomes "forever" on a busy web team. The second, by contrast, feels urgent: it implies that the user has an important reason to act fast. That triggers our empathy and makes us want to help them, not ignore them.

STRESS EATS RESOURCES

Steve Krug famously said, "Don't make me think!" But when users are under stress, in a sense they literally *can't* think.

Research has consistently found that cognitive resources are finite: if you expend them on one thing, you have fewer left for other things. One experiment, which Kathy Sierra talks about in her book *Badass: Making Users Awesome*, presented testers with one of two tasks: to memorize a sequence of either two numbers or seven numbers. Afterward, the testers were offered a choice of snack: cake or fruit.

The subjects who had the harder task were far more likely to pick the cake, because they'd expended their cognitive resources, and had fewer resources left to exert willpower or evaluate nutritional choices. (See more on this study in Baba Shiv and Alexander Fedorikhin's "Heart and Mind in Conflict: The Interplay of Affect and Cognition in Consumer Decision Making" [http://bkaprt.com/dfrl/03-01/, PDF].)

When a user is in crisis, nearly all their cognitive resources are consumed by that crisis. Worrying over a loved one, or what the future holds, or any number of other things severely reduces the processing power they can devote to your site (or to anything else).

For example, we talked with a woman who was assaulted by an acquaintance. Afterward, she says, "I wasn't thinking quite right, so I was looking at websites to help me understand if I had in fact been sexually assaulted." She went to the Rape, Abuse, & Incest National Network (RAINN) website (https://rainn.org/), where she found a link that said, "Was I Sexually Assaulted?" It seemed like exactly what she needed—until the page loaded (**FIG 3.1**).

All those headings left her overwhelmed—and even worse, as she skimmed, she couldn't quite see herself in any of them. She hadn't been raped, she thought. It wasn't stalking, or abuse, or any of the other categories she saw. She says:

> *I must have reread that page ten times. And in that moment, I felt like...well maybe this doesn't fit. Maybe this isn't really assault and it's my fault.*
>
> *I know that seems crazy. Looking back, it was very clearly assault. But I was not in the right state of mind. I realize now that the page says sexual assault comes in different forms, but the way it's designed, you kind of skim over that, and there's nothing after the "types" to help people who don't identify with the listed situations know what to do next.*

Even though this woman knew to go to the RAINN website, she couldn't think critically about what she read. Her cognitive resources were so depleted by her experience and its aftermath

Types of Sexual Violence

Like 0 Tweet Share

Unfortunately, sexual violence can come in many forms. In order to better understand the wide range of personal violences that can occur, we have included definitions of different types of rape and sexual violence, as well as other kinds of violence that often arise hand-in-hand with sexual violence. Click on the title below to read more about each type of sexual violence.

Was I Raped?

How can you figure out if what happened was rape? There are a few questions to consider.

Sexual Violence

Be aware: Some states use this term interchangeably with rape. For a precise legal definition, check the laws in your state.

Rape

Rape victims may be forced through threats or physical means. In about 8 out of 10 rapes, no weapon is used other than physical force. Anyone may be a victim of rape: women, men or children, straight or gay.

Acquaintance Rape

Acquaintance assault involves coercive sexual activities that occur against a person's will by means of force, violence, duress, or fear of bodily injury. These sexual activities are imposed upon them by someone they know.

Child Sexual Abuse

Sexual violence of children often includes incest as a subset of this form of sexual violence. While there is a substantial amount of overlap in the two types of violence, for the purposes of this website we have separated them in recognition of the different needs that victims of each type of violence may have.

Child Abuse

Child abuse takes place when a child is harmed by someone else physically, psychologically, or by acts of neglect.

Dating and Domestic Violence

Dating and domestic violence occurs in all socio-economic, educational, racial, and age groups. The issues of power and control are at the heart of family violence.

Drug Facilitated Sexual Violence

Drug facilitated sexual violence is the type of sexual violence in which drugs or alcohol are used to compromise an individual's ability to consent to sexual activity.

Military Sexual Trauma

Military sexual trauma (MST) is a technical term that refers to the psychological trauma experienced by military service members, as a result of sexual assault or sexual harassment, as classified by the Department of Veterans Affairs.

Hate Crimes

A hate crime is the victimization of an individual based on that individual's race, religion, national origin, ethnic identification, gender, or sexual orientation.

Incest

Incest is the type of sexual contact that occurs between persons who are so closely related that their marriage is illegal (e.g., parents and children, uncles/aunts and nieces/nephews, etc.).

Male Sexual Violence

Men and boys are also the victims of the crimes of sexual violence, sexual abuse, and rape. In fact, in the U.S., over 10% of all victims are male.

Partner Rape

Partner rape includes sexual acts committed without a person's consent and/or against a person's will when the perpetrator is the individual's current partner (married or not), previous partner, or co-habitator.

Sexual Exploitation by Helping Professionals

Sexual exploitation by helping professionals involves sexual contact of any kind between a helping professional — doctor, therapist, teacher, priest, professor, police officer, lawyer, etc. — and a client/patient.

Sexual Harassment

Sexual harassment includes unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature that affects an individual's work or school performance.

Stalking

The impact of stalking can be profound and life altering. Individuals who are stalked often change many of their behavior patterns and have strong emotional responses to the stalking.

Stranger Rape

3 major categories include Blitz Sexual Assault, Contact Sexual Assault, and Home Invasion Sexual Assault.

Adult Survivors of Childhood Sexual Abuse

These may include feelings of fear, guilt, and shame. Abusers have been known to tell children that it is the fault of the child that they are abused, shifting the blame away from the abuser, where it belongs, and placing it on the child.

FIG 3.1: Types of Sexual Violence page from RAINN, early 2015 (http://bkaprt.com/dfrl/03-02/).

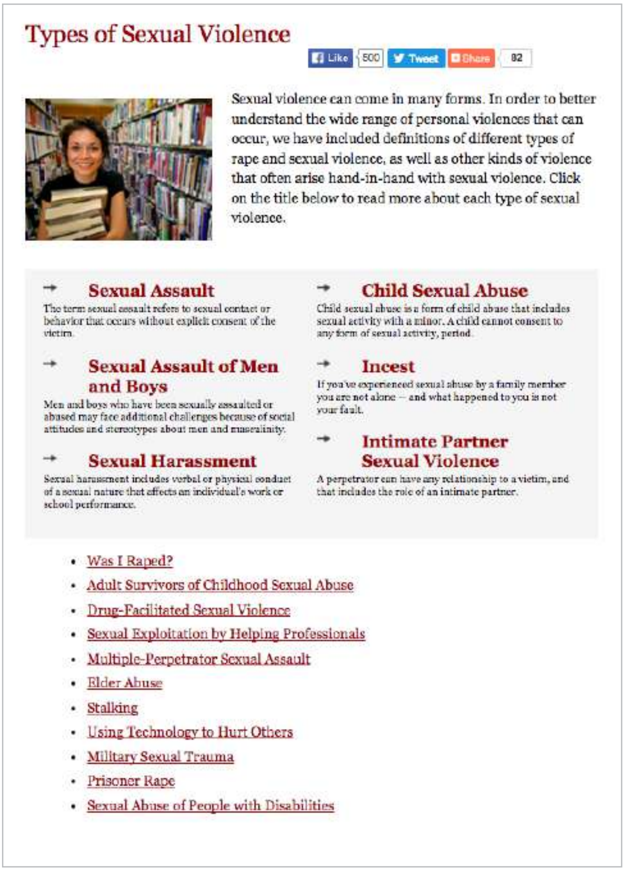

FIG 3.2: Types of Sexual Violence page from RAINN, September 2015 (http://bkaprt.com/dfrl/03-03/).

that she "was not in the right state of mind" to realize that her assault *counted*. She felt ashamed and even more alone.

The good news is that RAINN has since clarified and shortened this page. As of September 2015, rather than listing a huge number of very specific types of assault, it displays a few broad, inclusive categories—so a user can immediately map almost any situation to one of them. Topics covering more specific types of abuse, such as military sexual assault, appear lower on the page, with less visual priority. The result is a page that's easier for any user to skim, understand, and see oneself in (**FIG 3.2**).

EVERYDAY STRESS CASES

To paraphrase Karen McGrane, *you don't get to decide when a user wants to access your site; they do*. If someone comes to a site or app in a moment of crisis, we bet they have a genuine need to be there—and that is the exact moment we don't want to let them down.

The truth is, stress cases exist for all kinds of products and services—even ones you likely never associate with crisis. Here are just a few scenarios that are more common than we'd like to imagine:

- A person who has received a threat from a previously unknown stalker, and needs to delete or make private every public account as quickly as possible.
- A university student whose roommate has declared they intend to commit suicide, and needs information on what to do.
- Someone who has discovered their mortgage's auto-pay has failed two months in a row, and is afraid they'll be foreclosed on.
- A person working two jobs whose only car was damaged in an accident, and is trying to submit incident information to their insurance company late at night, after they've finally gotten off work.

Stress cases aren't only about crisis—they apply when something mundane goes wrong, too. For example, imagine you and your whole team have been planning for months to attend a professional conference. Now the conference is a week away, the travel arrangements have all been booked, and nobody can find any confirmation that anyone ever registered for the conference. Now what? A lot of nonrefundable flights and hotel reservations are at stake, not to mention the expected benefit of attending.

Nobody on the team is in danger of injury or death—though in some work environments someone's job might be on the line. Regardless, the immediate question is: Does the conference's site help in this situation, or does it make things harder? Is it clear how to get in touch with the *right* person, as quickly as possible, to figure out whether the registrations ever happened? Or, if there's a better and faster way to confirm that online, does the site make it obvious to find and easy to use?

Contextual crises come in all shapes: a parent who realizes their child's birthday is a couple days away, and the very special present they ordered hasn't arrived yet. A woman whose sister gave birth a week earlier than expected, and needs to book flights right away to meet her brand-new baby nephew. An incoming university student who realizes the financial aid application deadline is sooner than they thought, and is trying to find out what they need to do next.

Another form of contextual crisis is one we're all too familiar with: a technical failure. This can be anything from a missing or disabled plugin to severely limited bandwidth—things that frequently prevent JavaScript from loading, for example. (See Stuart Langridge's "Everyone has JavaScript, right?" for more [http://bkaprt.com/dfrl/03-04/].)

Maybe the user is in a public library with archaic PCs running Internet Explorer 6. Maybe they're one of the almost 60% of mobile web users around the world who are on EDGE networks. (That was the network speed before 3G, you may recall.) Maybe the battery on their device is almost drained, so their time is extremely limited. Maybe the CDN provider had an interruption of service, causing half the page's external resources not to load.

We can't predict every possible scenario, but bringing these sorts of contexts into your process is a necessary and incredibly useful step.

PERSONIFYING URGENCY

Before we can address these scenarios, however, we need to imagine users who are capable of being under crisis. *Personas* enable us to do just that—if we create them with real people in mind.

Personas—fictional, archetypal characters that represent the users of a site or product—help us see a design from new perspectives, make decisions, and uncover blind spots. But personas often have their own blind spots, obscured by the bright light of a thousand happy stock photos (**FIG 3.3**).

For all our efforts to concoct diverse background stories and reasons for using our designs, we frequently only create idealized personas: attractive people happily interacting with our products and completing tasks. We feel better just by looking at them.

If we're honest with ourselves, most of our users are probably just as distracted and short on time as we are. They have a million things to get done today, and coming to our site or using our service is just one of them. Bills have to get paid, dinner has to get made, the house needs straightening, the kids are fighting again, and on and on. The personas we create often don't leave the door open for these imperfections—and so we never imagine them in crisis scenarios.

A STUDY IN STRESS

Sara recently worked with one organization that *did* start imagining its users under stress: a big-box home-improvement retailer—the kind of place where helpful staff members advise do-it-yourselfers on everything from flower beds to faucet installation to major renovations.

The company extends its brand online by publishing hundreds of highly detailed how-to guides, each providing step-by-step advice for planning, shopping for, and completing home-improvement projects. Written in an upbeat, you-can-do-it tone, and filled with demos and images, the guides are designed to make readers feel prepared and empowered to

Deborah M.

Deborah is a physically active, single urban professional who loves to shop on weekends, but doesn't always have the time to get out to the stores—training for half-marathons, biking, and her gym routine consume a lot of her free time. She works as a financial analyst for an investment firm, specializing in fraud detection and forensic auditing.

Deborah, or "Debbie" to her family, is comfortable shopping online, and is looking for a site with a great user experience combined with a clean aesthetic look to match her own.

Age	29
Title	Financial Analyst
Salary	$95,000/year
Education	College graduate, MBA
Hobbies	Running, biking, yoga, travel, seeing live music

"That moment when an analysis comes together, and the numbers suddenly make sense, is like a running high."

Shopping Goals

The right item at the right price: Deborah often shops with a specific item in mind—whether it's a watch, a purse, running shoes, evening wear, or household supplies. When she knows what she wants, Deborah becomes very task-focused, and doesn't want to be distracted by ads or special offers. She's also very price-conscious, and will quickly drop a purchase if she feels like the price is being hidden, manipulated, or is out of line. If she thinks a site is "playing games" with pricing, it will lose her trust very quickly.

Browser window shopping: On the other hand, there are times Deborah would like to see what the latest offers are, as if strolling down a street and looking in shop windows. This is a more relaxed, open mode of browsing, where special offers and ads aren't as much of a negative. She'll still react badly to pricing games, though.

FIG 3.3: Many persona documents look like this: smiling people leading ideal lives, rather than real people with real stresses.

complete their projects, and excited about what the results will look like.

In early 2015, the chain decided to improve these guides and started researching ways to make them more valuable. They tested layouts with users. They built more video demos to provide better hands-on guidance. They adapted for mobile. And they started looking at how products and calls to action were incorporated into the page.

While working on this content, they realized something: all those how-to and buying guides were written from the same peppy perspective of someone who's looking forward to their project: *a shiny new stove! A cute new patio!* That's useful for some customers, but many people end up at the retailer in panic: a water heater dies unexpectedly and the customer needs to replace it *today*. The fridge gives out and they're dumping spoiled milk down the drain. The toilet breaks and…well, you get the picture.

These purchases aren't the stuff of DIY dreams. They're the stuff of stress, frustration, and anxiety. Plus, a sudden major purchase is a financial hardship for many customers—as is taking time off work to deal with the issue.

STRESS FIRST!

You're probably familiar with "mobile first," where you start by considering what you need for a good mobile experience, and then enrich that baseline for desktop browsers. The team at the home-improvement retailer took a similar approach, rethinking content through the lens of "stress first."

They did this using a *journey-mapping* activity, a technique we'll talk about more in Chapter 7. Journey mapping made the team walk through a task, end to end, from the perspective of a user—noting their questions, feelings, and content needs along the way. This helped them consider the different triggers that could make a customer seek project or product-selection help. In the process, the team realized they could cluster their use cases into two general categories: "urgent" or "upgrade."

Some projects are always upgrades—no one has a sudden, critical need to build a three-season flowerbed. Others are most often urgent, like replacing a water heater or fixing a toilet. And then plenty others could go either way, like a new fridge: you might have been looking forward to redoing your kitchen for years, or you might be mopping up a puddle of water while frantically checking to see how much room you have on your credit cards.

The retailer can't always know which group you fall into. But by challenging its vision of what a customer looks and acts like, the store was able to really think through its design and content, and incorporate stress cases into its strategic plan for these guides:

> *We will be the **go-to resource** that DIYers of **every skill level and budget** rely on to complete their projects and purchases. We'll do this by publishing **clear, dependable** content that takes the **guesswork and stress** out of home improvements and upgrades, and makes users feel prepared for their projects, confident in their choices, and proud of their results.*

In addition to this high-level strategy, Sara and her client's team created specific guidelines to help writers and designers put these principles into action, connecting the dots between vision and execution. Here are a couple:

> *To serve every skill level and budget, and make users feel prepared and confident, we will…*
>
> - ***Prioritize helpful, realistic estimates** of time, skills needed, and budget ranges.*
> - ***Provide at-a-glance help** like shopping lists and quick reference tools.*
>
> *To increase clarity and remove guesswork and stress, we will…*
>
> - ***Use plain language:** short sentences and paragraphs, simple words, and straightforward directions. Our customers come with all backgrounds, and our content shouldn't alienate or confuse any of them.*
> - ***Write for the urgent case.** Many customers come to us in a panic: a critical appliance breaks, plumbing clogs, the roof springs a leak. These customers might be suddenly anxious about finances, stressed over missed work, or any number of challenging circumstances. When we write to the user who's experiencing an emergency, we'll be more honest, more direct, and clearer for everyone.*

This led to a series of changes that would better serve these urgent cases, and also improve the guides for anyone:

- Calling out installation availability and time frames at the top of relevant articles.
- Setting financial expectations up front by providing estimated cost ranges.
- Writing specific, contextually helpful subheads for easy skimming.
- Creating one-sentence summaries of what each section of copy covers, and keeping them exposed even when that section is contracted.
- Rewriting the tone of guides that might apply to urgent cases to be reassuring, not just excited.

As we're writing this, the retailer has started revising its most-visited guides, and tweaking its templates to reprioritize information. They don't have all the answers yet, but with this new vision guiding them, they're eager to keep incorporating more use cases in their work.

CRISIS IN CONTEXT

Just like the home-improvement chain realized that some projects are never urgent, some are nearly always urgent, and some fall in between, every organization needs to consider all the contexts its personas' scenarios might happen in.

Consider the children's hospital again. For a twenty-four-hour public facility like this, you might imagine a handful of time-based contexts: morning, lunchtime, afternoon, and late at night. As you place each persona's scenario in each of these contexts, you start to see that a person might react very differently in one context than in another.

Some personas may not even appear in some contexts. At the children's hospital, for example, things will feel very different at midday, with staff headed to and from lunch and a lot of outpatient visitors, than at midnight, when most of the lights are off and public spaces are empty.

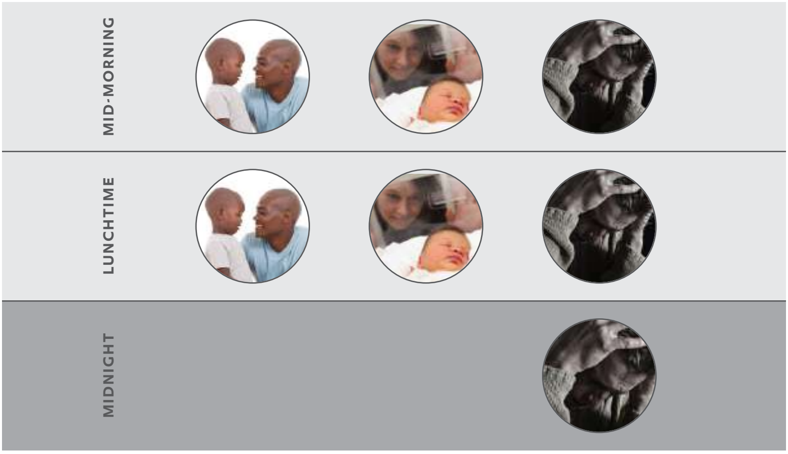

FIG 3.4: Placing personas within different potential contexts—here, varying times of day—can help you identify stress cases.

Let's play this out. Take three personas and their scenarios: a patient coming for a routine checkup, someone visiting a sick relative, and the parent of a child brought in by life-flight helicopter. Now look at three times of day—morning, late afternoon, and midnight. By slotting each persona into each context, we have nine potential combinations, but only seven realistic scenarios (**FIG 3.4**).

What we can see is that two of the three personas won't even be in the hospital at midnight: there are no routine appointments, and visiting hours are long over. The only persona who might experience that context is the one in crisis.

Now, suppose you're designing the UI for the hospital's elevators. You have the option to play recorded announcements when the doors close, so you decide to use cheerful kids' voices. It tests out great; everyone thinks it's a cute, heartwarming touch. But let's think about that decision from the viewpoint of each persona in each context. From a glance, we can see that this decision will fail at midnight.

This literally happened to Eric and his wife when they arrived at the Children's Hospital of Philadelphia. Imagine:

they were in a dimly lit, mostly deserted hospital, in shock and terrified. Suddenly, a chorus of chirping kids' voices broke the silence. It was like a moment from *The Shining*, and came across as user-*hostile*.

What all this points to is not to eliminate the kids' voices, which work for most use cases and contexts, but to consider *when* to turn them off. In the middle of the night, there are really two likely personas present: people in crisis, and the staff. The people in crisis are more likely to find the cheery voices jarring than soothing and friendly. And we're pretty confident the staff would be happy to have the kids pipe down for a while.

As we've seen, identifying and mapping out stress cases shows fractures in our work that we might miss, leaving them open for someone in crisis to stumble into. By thinking through these scenarios, we get better at prioritizing information, removing fluff, and staying focused on our users.

4 COMMUNICATE CONTEXT AND INTENT

I was filling out a new-patient form online for my doctor's office when I saw it, sandwiched somewhere between "Do you smoke? and "Has anyone in your family had a stroke?":

Have you ever been sexually abused or assaulted?
Yes __ No __

That was it: no context, no explanation, no box to tick for, "Well, yes, actually, but it's a long story from a long time ago, and it's not why I'm here." Just a tidy little binary for something that didn't feel tidy at all.

"So, you were sexually assaulted," my doctor said partway through our appointment. It wasn't a question, but she paused expectantly.

"Yes."

I waited, uninterested in trotting out my story for a stranger. "I'm sorry that happened to you," she said finally, moving on with her checkup. I stared at the ceiling, thinking about that checkbox. So simple, so impossible:

Yes __ No __

I don't know why that question existed. I don't know who asked for that information, where it was going, or how they intended to use it. Was it collected for statistical purposes only? Were they trying to identify victims who needed help and care? Was I going to be asked about it every time I had the flu or needed a prescription filled?

—Sara

WHEN WE ASK USERS to share information, we're asking for their trust. But it's hard to trust a site when you're not sure about the intentions of the people behind it. Why do they need your data? How will they use it? What will happen once you provide it?

In Sara's case, someone probably had good intentions when they added that question to the intake screener: they may have wanted to provide better medical care, statistics, or support. But they didn't communicate what those intentions were. The result was a form that left her feeling uneasy and exposed—her history in a database and out of her control.

That loss of control can have major emotional consequences for users, particularly when personal information is unexpectedly made public. That's what happened in 2012 to University of Texas college students Bobbi Duncan and Taylor McCormick. The students, both gay, had used Facebook's privacy settings to conceal their orientation from their parents, but it didn't matter: Facebook posted an update to their profiles saying they'd joined the Queer Chorus, without them or the choir director who invited them intending it to appear. Duncan's father was furious, and threatened to sever ties with her (http://bkaprt.com/dfrl/04-01/).

We can't know precisely which information is sensitive for any given user. What we *can* do is be honest about our intentions. We can ask users only for what we truly need, and be clear about what we'll do with what they give us. And we can provide context, explaining why we want information and disclosing when and how a user's actions affect what happens next.

BE INTENTIONAL

Income level, real name, mailing address, salutation, level of education: as we saw with gender, digital products demand these things and more from users all the time—whether that information is necessary or not. Often, the reasons we ask are frustratingly simple:

- "That's what everyone asks."
- "That's what we've always done."
- "We didn't really think much about it."

What's missing is *intention*: making a specific, purposeful choice about what we're requesting and why. That lack of intention creates real damage for our users, because every bit of personal information we request:

- Makes tasks seem more daunting, especially for users experiencing stress or crisis. This makes them more likely to abandon the process or have a negative experience.
- Creates more space for the user to start asking *why* we want that information. This erodes trust, which can also lead to them abandoning the process.
- Increases the chance of things going wrong, because every new bit of information we request creates new opportunities for error.

Let's examine one common form field: salutation. Typically, this is handled via a dropdown of "Mr.," "Mrs.," "Dr.," and so on. In early 2015, a pediatrician in Cambridge, England, discovered that the security system at her gym refused to let her into the women's locker room—because the third-party system was programmed to treat anyone with a title of "Doctor" as male (http://bkaprt.com/dfrl/04-02/).

Of course this is ridiculous. The firm that created the system should have caught the error before it shipped—in fact, it should have recognized the bias in that spec before a line of code was written. And of course nobody who worked at the gym meant to create even the appearance of insult; they had no idea the flaw was in the system until their customer ran into it.

The problem is that the salutation this doctor provided on her membership form was fed into a system where it served as a proxy for something else: gender. But why did her gym ask for her salutation in the first place? Odds are good no one ever called her "Doctor" while handing her a towel. If the membership form had skipped salutation entirely, the bug in the security system and the resulting offense and bad press might have been avoided. That piece of data, which seemed so trivial, was a much bigger risk than anyone at the gym imagined.

How many of us have set up a form without really thinking about what's on it, or what will be done with the data once it has been captured? Being as intentional as possible is the best tool we have to prevent errors and biases.

Form and survey specialist Caroline Jarrett, coauthor of *Forms that Work: Designing Web Forms for Usability,* recommends building intentionality into our work through a *question protocol* (http://bkaprt.com/dfrl/04-03/). The protocol is a tool for systematically evaluating each question you want to include, asking:

- *Who within your organization uses the answer*
- *What they use them for*
- *Whether an answer is required or optional*
- *If an answer is required, what happens if a user enters any old thing just to get through the form*

As Jarrett says, this process will reveal the real cost of a form field:

> *A question protocol can help to create a discussion about the true business value of each question a web form asks. If you know exactly what decision your organization will make based on the data a web form collects, you can quantify the value of that decision and weigh it against the cost of collecting the data.*

The protocol makes your decisions intentional, because it forces everyone involved to ask: What's the intent? Why are we making users take this step? What will be done with the information? Do we need this information, or are we asking because "it might be nice to have"? Being intentional in what we ask and how we ask it also values the user's time, by not making them spend any more than necessary.

BE TRANSPARENT

Every piece of information we request is a tiny window into a person's life—and windows function best when they're transparent.

Consider the University of Texas story from the beginning of this chapter. The base problem was that back in 2012, Facebook wasn't explicit about the consequences of certain actions. If a group administrator added a member, Facebook would automatically notify the new member's network that they'd joined the group—without warning either party, or asking whether they wanted to make it public.

More recently, however, Facebook has done an excellent job communicating context when it comes to gender. After users select "Male," "Female," or a "Custom" gender, they can also choose who may see their gender: "Only Me," friends, friends of friends, or everyone.

If they choose "Custom," an additional option also lets them select a pronoun to go by: feminine, masculine, or neutral. If a user changes their preferred pronoun, a callout box tells them their pronoun choice will be visible to the world, even though their custom gender identification may be private (**FIG 4.1**).

That copy provides crucial context for people who are changing their gender identification, but aren't ready for the whole world, or even their friends and family, to know. It gives them a clear warning before making the change, so they can either back out or move ahead fully informed.

Another example of communicating the implications of a user's action is on the card-blocking screen of the Simple mobile

FIG 4.1: If a user changes the pronoun they want to go by on Facebook, they're warned that their preferred pronoun will be public, before the change is published.

banking app. This is where a user goes to deactivate a lost or stolen bank card (**FIG 4.2**).

Notice the text at the top of the screen: "This is a reversible process." More information follows, but that simple sentence makes it instantly clear that if you're not sure where your card went, you can block it without worrying that you're about to lock yourself out of your account until a new one arrives.

The benefits are twofold. Most obvious, if a Simple customer realizes their card isn't with them, they can block out of caution while they retrace their steps. If it turns out the card just fell to the floor of their car, they can simply unblock it and move on.

This translates into a benefit for Simple, too. The more people feel comfortable blocking card access in cases they aren't sure about, the less likely Simple is to suffer fraudulent withdrawals in cases where a card has been stolen. All that, from just five words in the right place!

FIG 4.2: Simple's card-blocking feature makes it clear that if you place a block on your account, you can undo it later (http://bkaprt.com/dfrl/04-04/).

BE PRECISE

Whenever you're asking someone to give you information or complete an action, you can never go wrong by telling them what you plan to do with their information, as well as how their actions may affect them later.

Eric experienced this while working on the *A List Apart* Survey, which, from 2007 to 2011, asked web practitioners detailed questions about their demographic information, salary, specialty, and other professional data. A few years into the survey, the team added an optional question: "What's your postcode?"

The intent was to use the information to create a high-level visualization of where respondents lived and worked. But a lot of respondents filled in bogus information, and a few weren't kind about it. ("Sod off" was one of the gentler responses.) The reaction made total sense: even though the question was optional, it created a feeling of distrust for many survey-takers, especially those whose postcodes defined their location to within a few blocks, as is the case in many countries.

The next year, the question stayed, but with a short explanation:

> *This data is for statistical purposes only. It is completely optional.*

That cut down on the aggrieved replies, but it still wasn't enough. By the last survey, the message read:

> *This data is for statistical purposes only and will never be shared in conjunction with your other responses. If it makes you uncomfortable for any reason, simply skip it.*

That's better, though if we were to rewrite this today using the lessons from this chapter, we'd say something like:

> *We ask this so people can create geographic visualizations of where respondents are located. When we publish the raw data from the survey after its completion, postcodes (like IP addresses) will NOT be included in that data set. It's possible we might publish very limited data sets that pair postcodes with a single other response, such as job titles. If the question makes you uncomfortable for any reason, please skip it. If you have questions or concerns, please contact us.*

That's...quite a lot. It fulfills the need to be transparent, but even with all these extra words, it's still not precise, and the length of the explanation is already a red flag. Would it survive Jarrett's question protocol? Is this a case where the value of keeping the question is lower than the benefit of the answers? Had we written this book a decade earlier, Eric would likely have dropped the question from the survey.

WHEN IT MATTERS MOST

Being intentional is always important, but as we've seen, there are times when a lack of sensitivity and transparency has particularly emotional effects on our users. How we walk matters a lot more on a high wire than a sidewalk.

Kate Kiefer Lee, MailChimp's communications director and coauthor of *Nicely Said: Writing for the Web With Style and Purpose,* has talked about "touchy subjects"—things that are likely to cause stress or make a reader uncomfortable. In her article "Don't Poke the Bear," she writes that touchy subjects "aren't limited to the obvious offenders like money, religion, and politics. They're not limited to highly visible crisis-management messages crafted by professional writers, either" (http://bkaprt.com/dfrl/04-05/). Instead, she has found that common touchy subjects include:

- Error messages
- Warnings
- System alerts
- Financial and privacy-related updates
- Legal agreements

For example, if a customer's transaction fails, it's not the time to say something like, "Hey, your credit card was declined. Too many big nights out, eh?" It's a moment of frustration, and though we might think humor will ease the stress, it's more likely to come off as mocking.

In addition to these subjects, here are some other settings where it makes sense to keep things very simple, clear, and neutral:

- When asking for information people often treat as matters essential to identity, such as gender, race, ethnicity, or sexual orientation.
- When asking about relationship status or family situations (parents, siblings, children, etc.).

- When a request might make someone feel judged or shamed, such as asking their weight.
- When actions can limit access to money or services.
- When a user is struggling with a login process, particularly if they've experienced repeated failures.

All these scenarios are, or could easily become, stress cases—moments of frustration or even fear. Asking about sexual orientation could become instantly irritating if none of the options reflect the user's actual orientation. An action that cuts off a bank account could leave a user without any financial access; if they didn't realize that was a likely outcome, it will almost certainly induce a great deal of stress.

That's one of the reasons Simple's card-block feature works so well. There are no distractions or attempts at humor or branding. Instead, its sole focus is on explaining what's happening in a straightforward, reassuring tone.

OUR KNOWLEDGE IS LIMITED

We'd love to know our users' contexts: what they're doing, what they're thinking, what they're feeling. It's the dream that launched a million budget-busting personalization projects. But the truth is that no research in the world will tell us everything about our users' contexts. We can't know which things will strike a nerve for which people, when.

As author Roxane Gay has written about the trend in "trigger warnings"—editorial notes that warn readers of sensitive content to come—it's impossible to prepare for every trigger your users might have. Hers include:

> *When I see men who look like him or his friends. When I smell beer on a man's breath. When I smell Polo cologne...*
>
> *This is the uncomfortable truth—everything is a trigger for someone. (http://bkaprt.com/dfrl/04-06/)*

Gay was sexually assaulted as a teen, but it's not necessarily, or only, images of assault that she finds triggering. It's a nuanced, hyper-specific set of experiences: smells, sounds, facial features.

That's true for all of us, in all kinds of circumstances: we all have history, and that history is personal in the strongest sense of the word. Perhaps it's being asked for your marital status while you're going through a divorce. The number of children you have if one of them died. Where you grew up if you were raised in the foster care system. Or casual copy that assumes your family is a certain way, as one woman pointed out to us:

> *One of the things I struggle with is the mythology of motherhood. "Just like mom used to make!" "Have you called your mom lately?"...There is always this assumption of warmth and closeness. I grew up with a mom who routinely hit me and called me names... I can forgive her now and have compassion for her, but I still get triggered when I hear cavalier references to what moms and motherly relationships are like.*

If we tried to avoid every possible trigger for every possible person, we'd never build anything at all. But by being intentional about what we ask of our users in the first place, and communicating the context for every interaction as clearly and transparently as possible, we'll greatly limit the ways we can harm or traumatize them, and also make it easier for them to forgive us when we do.

After all, users don't expect us to be perfect. They just need us to understand that they're not either, and to help them get things done anyway.

5 CULTIVATE COMPASSION

We've spent the last four chapters sharing story after story of organizations struggling—and sometimes succeeding—in their efforts to support real people. Along the way, we've learned some things: how to reflect on our biases, find the fractures in our work, be intentional in what we ask, avoid alienating or traumatizing, and, ultimately, meet the needs of more users, more often.

In this chapter, we'll see what happens when an organization brings all those principles together, and creates a space where users can define themselves on their own terms. We'll also explore what it means to connect our principles into an ethos of compassion, and how that can change the way we approach our work, our colleagues, and our users.

PUTTING PRINCIPLES INTO PRACTICE

PatientsLikeMe (http://bkaprt.com/dfrl/05-01/) is a social network centered on something many people never thought they'd be social about: their health. Users can meet others with similar medical issues, compare symptoms and treatments, discuss how their conditions affect their lives, and track their health over time. Founded by MIT engineers in 2004, the site now serves more than 380,000 members with 2,500 different conditions, using a unique business model: instead of selling advertising, PatientsLikeMe explicitly, and transparently, partners with researchers, pharmaceutical companies, regulators, providers, and nonprofits, giving them access to real-world data that clinical trials can't provide.

PatientsLikeMe began when the brother of two of its founders was diagnosed with amyotrophic lateral sclerosis (ALS), and they wanted to find ways to help him live a better life. At first, the site focused on connecting people who were clinically similar: users with the same condition, in the same stage of illness, experiencing the same symptoms, and undergoing similar treatment plans. The goal was to help users connect around not just illness type, but specific issues like shopping for assistive devices or managing side effects of medication—creating space for conversations like, How did you pick a wheelchair? or, How are you modifying your home so you can keep living there?

In 2013, PatientsLikeMe undertook a large research project to better understand how its audience used the site, and what they wanted from it. Through ethnographic research—talking with users in their real-world environments—and site analytics assessments, the design team, led by vice president of product and user experience Kim Goodwin and design director Kate Brigham, realized something was missing.

"We had focused too much on clinical similarities," says Brigham. The team learned that users weren't just looking for *medical records* like them. They wanted to find *humans* like them. Clinical history mattered, but it was only one part of each member's story.

Veterans with post-traumatic stress disorder said they wanted to connect with other veterans. Patients who were interested in alternative treatments tended to clash with those who were focused on traditional medicine. Across the board, people sought connections that went beyond the clinical and into the personal.

Once the team realized that clinical vectors didn't tell the whole story, they took action.

CHALLENGE YOUR VISION

First, the design team acknowledged that a person's health goes beyond symptoms and medications to include their identity and feelings, too. "We explicitly asked people to describe, 'What would a patient like *you* be?'" Brigham says. Many responded that they wanted to meet people of their same age and gender—because they felt like those users would best understand their lives. The team also found that users were connecting around shared interests and values, like religion or children. PatientsLikeMe then made these interests part of users' profiles—both in what you can tell people about yourself, and in the filters you can use to find other patients, well, like you (**FIG 5.1**).

MAKE SPACE FOR REAL PEOPLE

Then, PatientsLikeMe made sure its systems and forms made space for their users' real lives—and in real life, people don't always have precise answers to every question about their health. While the company would like to have complete and accurate data sets, forcing people to enter data fields, such as when a treatment or symptom started, won't work, says Brigham:

> *People get incredibly frustrated if they feel like they have to lie. If you have a required set of questions, users have to give an answer, and it makes them feel uncomfortable when they don't know and have to make something up. We also don't want people to feel like they have to tell us information they're not comfortable sharing. Everyone has different limits.*

FIG 5.1: PatientsLikeMe profiles include fields that reflect the interests users told them mattered, not just their health conditions.

INCORPORATE STRESS CASES

The team also researched users in crisis, such as those who've recently been diagnosed. They found that major diagnoses, like cancer, tend to overwhelm people, making it hard for them to process the information they receive. (In fact, some hospitals have note-takers in the room to make sure patients go home with all the details straight.) This led PatientsLikeMe to seek ways to "trickle" information to new users, rather than pushing everything at once.

For example, as of this writing, PatientsLikeMe is working on ways to connect new users with people who've had the same condition for a while, so they can answer questions and calm nerves. However, it doesn't connect them to people who are extremely sick, because the intensity of those patients' experiences can add to a new user's stress.

COMMUNICATE CONTEXT AND INTENT

PatientsLikeMe's business model is based entirely on data: it de-identifies and shares users' health data with partners that are studying illnesses and the populations they affect. This means PatientsLikeMe needs to be extremely up-front about three things: why it asks for the data it does, why the format of that data matters, and which pieces of data will be shared with partner companies.

Unlike many other sites, PatientsLikeMe first asks users their sex: which reproductive system they were born with. Then, as an additional option, users may select a gender: the social label they identify with. Sex has only two options, while gender gets a range of choices. Here's how the site explains it:

> *We offer more options for gender identity because male and female labels don't feel right to everyone. We ask for sex assigned at birth because that's a key piece of information used by medical researchers to inform new discoveries.*
>
> *The impact of gender identity on specific health conditions is still poorly understood; collecting information about it will help us look for patterns by gender as well as sex in the future.*

Other questions that have proven tricky include ethnicity, race, and education level. Users initially weren't sure why the site wanted this information, and weren't always keen to provide it. But by explaining these factors' connection to disease and research, PatientsLikeMe provides users with context about why this information is relevant, and how it might be used (**FIG 5.2**).

As we mentioned earlier, PatientsLikeMe never pushes users to fill out more fields than they're comfortable with. Instead, it allows people to leave almost all fields incomplete, even if it means the resulting data doesn't meet the requirements of partner companies.

But PatientsLikeMe still needs to gather the information its partners need, so when it identifies an information gap, it hosts a targeted data drive to fill it. These drives reach out to members who have a specific condition, asking them to add desired information to their profiles; the request also explains which partner is asking for the data and how they will use it. "We want people to understand the questions we are trying to answer, and the data we need from them to be able to do that," Brigham says.

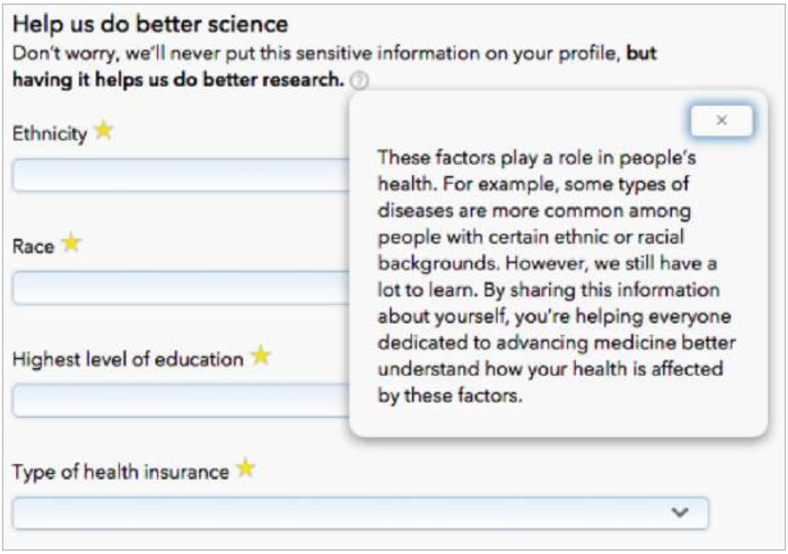

FIG 5.2: PatientsLikeMe is clear about how information in a user's profile will—and, just as critically, will *not*—be used.

User data doesn't just benefit partner companies; it also helps the PatientsLikeMe community. "We have an internal saying: 'Give something, get something,'" says Brigham. "Whenever a member shares data, they should be able to learn something in return." As PatientsLikeMe establishes findings, it shares them with members, so everyone knows what has been learned.

COMPASSION IS THE CORE

When we look at PatientsLikeMe—and everything we've covered so far—we start to see a single concept emerge, one worth exploring further: *compassion*.

Our industry talks a lot about empathy, but when we say compassion, we're talking about something deeper. Perhaps content and user-experience expert Karen McGrane said it best in her 2013 Information Architecture Summit closing plenary:

We're pretty good at being able to kind of get inside somebody else's head and sort of model their task, model how they are thinking about a problem. But that cognitive empathy, that's actually just one level of empathy.

There's actually a much deeper level of it that you would call compassion. What that means is that you have genuine emotional feeling for the struggles that someone is going through and you are spontaneously moved to help them because you feel them. (http://bkaprt.com/dfrl/05-02/)

Compassion is more than being nice. It's accepting people as they come—in all their pain, with all their challenges—and not just feeling empathy toward them, but doing something with that empathy. It's recognizing that users facing stress and crisis need more than our sympathy. They need our help.

We can see this concept at work throughout PatientsLikeMe's ten design principles, an internal document the team uses to guide its work:

Every member wants us to:

1. ***See me as a whole person.*** *My doctors often don't. That's part of the problem.*
2. ***Come with me on my journey.*** *In different times and places, I need different things.*
3. ***Help me capture my truth.*** *It bugs me if I can't accurately reflect my own experience.*
4. ***Let me define who is like me.*** *They share my experiences and values.*
5. ***Help me feel in control.*** *Life feels out of control; I need to know I'm in charge.*
6. ***Put my needs first.*** *Address my needs before demanding I address yours.*
7. ***Inspire confidence.*** *Show me that PatientsLikeMe is worthy of my effort and trust.*
8. ***Build on what I already want to do.*** *I already spend time on my health, so take advantage of it.*

9. ***Prioritize.*** *I have limited energy; show me where to put it.*
10. ***Minimize my work.*** *I may have dexterity, fatigue, cognitive, or memory challenges.*

These principles codify everything PatientsLikeMe has found out about its members and their needs, transforming those insights into a framework that puts compassion at the heart of every decision. Such guidelines humanize users, describing their challenges and making it easy to empathize with their feelings and frustrations. But rather than simply helping designers get into the user's shoes, like a persona might do, these principles go further. They empower the design team to *do something* to help, even when it limits PatientsLikeMe's own options.

That's why we like to think of compassion as a spirit of generosity: assuming that our users have it tough, and being not only willing but happy to let go of our own desires to make things easier for them.

EVERY PRODUCT NEEDS COMPASSION

Many people associate "compassion" with industries like healthcare or social services—the "caring" professions. But every company can benefit from compassionate design. As MailChimp's Kate Kiefer Lee says, "We don't know what our readers and customers are going through. And our readers and customers are people. They could be in an emergency and they still have to use the internet."

For an example of compassion at work, let's revisit *A List Apart* (alistapart.com), where Sara was the editor in chief from 2012 to 2015. The magazine has always worked hard to attract new writers—it's tough to find people prepared to invest time in crafting thoughtful, deeply edited essays. Editors reach out to people who give talks at conferences or post smart stuff on their blogs. They eye Twitter conversations that cover the magazine's topics. They email past authors encouraging future submissions.

And yet, submissions were always slower than anyone would have liked.

Finally, Sara started looking closely at the message *ALA* was sending. Here's what she found on the About page:

> *MAYBE YOU CAN BE ONE OF US…*
>
> *…the few, the proud, the ALA contributing authors.*

And on the Contribute page:

> *So you want to write for A List Apart Magazine.*
>
> ***What we're looking for***
> *We want to change the way our readers work, whether that means introducing a revolutionary CSS technique with dozens of potential applications, challenging the design community to ditch bad practices, or refuting common wisdom about, say, screen readers.*
>
> *If your article can do that, we want to see it.*

ALA wanted to elevate its authors—to make them feel special, to know that writing for *ALA* mattered to the web industry and the world. It told potential writers their writing would *challenge*, *refute*, and *revolutionize*. That seemed like a nice idea…until the people Sara hoped would submit their work told her another story about *ALA:*

Intimidating.
A big deal.
Scary.

Oof.

The truth is, submitting an article makes most people feel vulnerable. Drafts are read and discussed by a team of experienced practitioners and authors. Many get rejected. All of them get critical feedback.

That process is scary for anyone, but it's scariest for exactly the kinds of authors *ALA* was hoping to attract: people with fresh, interesting voices who were passionate about their ideas and invested in their work. People whose writing was personal—which can make the writing more powerful, but also even more difficult to share.

These writers didn't need an ego stroke, and they didn't need any more messages about how elite *ALA* was. Just like PatientsLikeMe's users, what they needed was compassion.

GET UNCOMFORTABLE

Approaching our work with a spirit of generosity is difficult, because we have to give something up along the way: our own egos, agendas, and time. We have to be confident enough in what we are doing to be honest about what we're asking for, and why. We must leave our own comfort zone, rather than ask our users to leave theirs.

A List Apart didn't want to be unwelcoming, but it was—because it wanted to look like it had *plenty* of amazing authors, thank you. Publicly stating that *ALA* needed submissions felt a little like admitting to sitting by the phone waiting for someone to ask you to the prom.

But to reach more prospective authors, *ALA* had to set that fear aside, and communicate from a compassionate place instead. As of this writing, here's the revised Contribute copy:

> ***Write for Us***
> *Yes, you. We're always looking for new authors. If you've got an idea that will challenge our readers and move our industry forward, we want to hear about it. But you don't need to wait for an idea that will redefine web design. Just aim to bring readers a fresh perspective on a topic that's keeping you up at night.*

Yes, you. It's almost nothing—two tiny words. Yet they speak directly to that doubter, that person who's thinking, *Maybe I'm not good enough*. The words reach out and give them a hand up, right when they need it.

It's not just a copy change that happened at *ALA*. As the magazine cultivated compassion in its work, it opened the door for a steady stream of conversations—about topics like more inclusive editing practices, such as moving to the singular *they* instead of *he* or *she*. In short, compassion is something we all need to *practice*, not something we *are*.

BE COURAGEOUS

When you look at compassion through this lens, it's really an act of courage: the courage to be clear about your intentions rather than to obfuscate; to accept users as they come, even when you have to work a little harder to make them comfortable; to acknowledge your own weaknesses as an organization, rather than pretend you've got it all together. It takes confidence in what you are, and what you do, to set aside your ego long enough to help your users succeed. It's a confidence many organizations don't have.

One that does is MailChimp. The email marketing company has always prided itself on having a lighthearted, playful brand. What the company slowly realized, says Kiefer Lee, is that the humorous approach "works in a lot of situations, but in others it's a disaster." Those potential disasters were frequent: error messages, spam-compliance warnings, even a tongue-in-cheek comment about unsubscribes—"Who needs 'em, anyway?" All said, as MailChimp customers included more and more different types of people, its humor seemed like more and more of a problem.

No one at MailChimp wanted to stop being funny. But what the team realized is that humor often has a cost: it can hurt feelings, cause confusion, or get in a user's way. So instead of having a knee-jerk response when people weren't laughing along with them—instead of telling users to "lighten up"—MailChimp had the courage to reevaluate its own brand. When it did, it realized that *funny* mattered a lot less than *helpful*. It was time to change the way it communicated.

"Over the years we've moved to a more neutral voice, where we are much more straightforward," Kiefer Lee says. "We lean on design more now to add playfulness. For example, when we were redesigning our site, we started using more bright colors and photography." Sure, everyone would love to crack more jokes. It takes confidence to instead say that we care about our users more than our own desires.

COMPASSION ISN'T CODDLING

People often mistake compassion for "being nice," but it's not. At *A List Apart,* the editorial team still says no when a submission isn't a good fit. At MailChimp, Kiefer Lee's colleagues are still quick to tell spammers, even the unintentional ones, that they can't send more email.

The point of compassion isn't to soften bad news or stressful situations with niceties. It's to come from a place of kindness and understanding, rather than a place of judgment. It's to tell the truth in such a way that you're allowing others to tell their truths, too.

PRACTICING COMPASSION

As we've seen, compassion is a tricky thing to get right, and we'll sometimes miss the mark, no matter how hard we try. But we can do plenty to make our organizations, and the digital experiences they produce, more compassionate.

In the rest of this book, we'll show you how to take these principles of compassion and use them to influence every stage of your work. By the end, you'll be prepared to plant the seed for compassion wherever you are.

6 LEARN FROM USERS

> *If you want your users to fall in love with your design, fall in love with your users."*
>
> —DANA CHISNELL, researcher for the United States Digital Service and cofounder of the Center for Civic Design

WHEN WE LOVE, we see people as whole: dynamic, multifaceted, and individual. We don't question how they can be angry and yet hopeful at the same time. We understand those responses as human. We accept them, acknowledge them, and work with them.

So how can we learn to love each of our users—users who are in a million contexts and circumstances, many of which we'll never know about? The answer is in going to where they are, physically *and* emotionally: meeting them in person whenever we can (and remotely when we cannot), and seeking to understand their lives in real, empathetic ways.

We do that through user research.

We're not experts in every type of user research out there (and there are many). Instead, this chapter shares a few types of qualitative research—some of which you might already practice—and explains how to use them to better understand your audiences' challenges and touchy subjects, and ultimately design for real people.

MEET YOUR USERS

The first step to better understanding your users is simple: listen to them. You don't have to recruit people in crisis to hear valuable information, either. You just need to go beyond asking what users think about your product's features or the tasks they need to complete on your site, and instead start "embracing how other people see the world," as Steve Portigal, author of *Interviewing Users,* puts it.

This will prepare you to ask questions that create a window into your users' lives, interests, anxieties, and feelings—and when you do that, you'll start to see them not as market segments, personas, or tasks, but as *people*. Once you're in the interview, Portigal's advice includes:

- Remember that being interviewed isn't easy. It's unnatural to have someone record what you say and do.
- Open the interview. Say something like, "So, to start out," and ask the participant to tell you about themselves or their job. This gets them into the mode of answering questions.
- Ask basic questions, even when you already know the answer. When you present yourself as the novice, it invites the interviewee to be the expert—making it less likely they'll skip over information or make assumptions about what you need to know.
- Be careful about talking about yourself. While connecting with an interviewee is a wonderful thing, avoid sharing your own opinions and experiences. The interview isn't about you.
- Let silence happen. It's tempting to jump in too quickly when a user doesn't answer right away, or answers but doesn't go into detail. The extra pause can give them enough time to open up or flesh out an answer.

When it comes to questions, Portigal arranges his into three categories:

- **Questions that gather context and collect details,** such as asking about sequence ("Can you describe a typical work-day?") or specific examples ("What was the last movie you streamed?").
- **Questions that probe what's been unsaid,** such as asking for clarification, asking "why," or asking the interviewee to explain a system as if they were teaching it to a new person.
- **Questions that create contrasts in order to uncover frame-works and mental models,** such as comparing processes or approaches ("What's the difference between sending your response by fax, mail, or email?").

Critically, you want your interview questions to lead to what Portigal calls the *tipping point:* the moment when the conversation changes from question-answer, question-answer to question-story, where the participant uses your question as a launching point.

FIND THE FRACTURES

If you're trying to hear about ways your product could go wrong, we've found the tipping point to be even more important. When people move from giving pat answers to telling personal stories, they tend to edit themselves less, and leave in the emotional details that can show the way toward your product's weaknesses.

You can't force a user over the tipping point, but you can nudge the conversation there by asking questions that get them thinking and talking about their feelings, their history, and their lives. Here are a few questions we like, and when we like to use them.

“Can you think of a time when…”

You probably can’t and shouldn’t interview users in the middle of a crisis, but you can ask questions that uncover how they view stressful situations. One method is to ask them to recall a time when they had to complete a task or make a decision in a moment of panic.

If you were researching a travel-related product, you might ask people if they’ve ever had to book a trip during a family emergency or similar panic period. What was that like? What was most difficult about making choices when they were stressed? How did it differ from their typical process?

When you ask about the past, the key is to get at a *specific* instance—like, “Last year, my mom was rushed to the emergency room and I hopped on a flight home to Salt Lake City that night…” not, “When I feel panicked, I tend to…” The more specific the user’s story, the more likely they are to report actual feelings and challenges instead of generalized ideas of what they *think* they’d want or expect. For example, the user who rushed to their mother’s bedside might recall how they were so frantic that they kept worrying they’d selected the wrong date for their flights, which could help you remember to make flight dates, times, and locations extremely prominent right before a user selects that final purchase button.

“How did you make that decision?”

Another tool for getting people to open up about their history is to ask them to break down choices they’ve made and explain their thinking.

Say you’re interested in learning about potential users of a grocery delivery service, and an interviewee says:

> *I’ve been on a tight budget since I went back to grad school, so about nine months ago I started packing a lunch every day. I hate bringing lunch, and I hate grocery shopping, but I feel like I have to.*

You might think it's time to talk about your product—after all, your user has already moved on to groceries, and that's what you're here to research! But if you want to dig deeper, this is a great moment to pause and better understand their history and connection to the topic.

Try asking something like, "How did you decide to start packing lunch? Walk me through what you were thinking." This is when the door opens to a more personal story—such as a user telling you how he was made fun of for his brown-bag lunches as a kid, because his family couldn't afford name-brand snacks and his mom always packed carrots instead of pudding cups. As an adult, he felt eating out every day was a tiny treat: a way to know that he'd made it. But when he looked at how much he was spending, he realized he could easily save $150 a month by sucking it up and packing a lunch. It's boring, and he's tired of it, but he's not sure what else to do.

A story like this could help you ensure the messaging in your grocery delivery app doesn't assume people are using the service solely to save time, or that everyone using it loves to cook—messages that might leave out someone who hates shopping, but needs to keep their fridge stocked so they skip eating out.

"What does that mean to you?"

Imagine interviewing a potential user of a new period-tracking application that seeks to offer a better experience than the one we learned about in Chapter 2. At some point, the participant says, "My periods have always been really irregular; it makes me feel like I'm a weirdo." She has just presented a barrier to using your service: her own sense of shame. But why does she feel that way, and could your service help her, instead of alienate her? One way to find out is to ask about the meaning behind her words. You might respond:

> *You said your period makes you feel "like a weirdo" just there. Can you tell me what "being a weirdo" means to you?*

Why do this? Because homing in on a specific word can help the interviewee focus on the emotions and expectations she associates with your product. For example, what if she typically gets her period every three weeks—or five weeks? Now you can see the cracks in messaging that focuses on the "monthly" angle. You might also realize that your design system only works for cycles that are, say, 22–34 days long, and that you need to make sure the interface can handle people whose needs are different.

"What would you like to see happen?"

You'll often hear advice not to ask people what they *want*, because they won't be able to imagine anything other than what they've already seen. We disagree—at least, sort of. While asking people to describe the nonexistent product of their dreams won't work, you *can* ask people to tell you about their vision for the future.

Sara learned this question when she worked at a rape crisis center giving educational presentations on sexual abuse to middle school kids. At nearly every school, at least one child would disclose that they'd experienced abuse, and Sara or her teammate would take them aside and talk. Asking "What would you like to see happen?" was a powerful tool to get kids to see that their thoughts and feelings mattered. She couldn't promise that whatever they said would come true, but she could acknowledge they were humans whose feelings deserved to be considered, and she could do her best to honor the spirit of their answers.

User interviews are the perfect opportunity to create the same feeling: to let your audience know that you're listening, and that their preferences, opinions, and feelings count, even though they probably won't be implemented verbatim. We recommend asking this question when you're talking with a user about something that frustrates them today, whether with the site or product you're working on, or beyond it.

Notice the question isn't worded to get them to describe a *thing* they want; it's worded to get them to describe an *action*—a situation they want to change, or a feeling they'd like to have. This is intentional. People might be bad at describing specific products on the fly, but they're excellent at communicating what they wish their lives felt like.

"Tell me more about that."

> *When you ask someone directly what they want, it is very possible the answer you receive will be what they think you want to hear."*
> —ERIKA HALL, Just Enough Research

Many times, interviewees will assume you only want a quick answer. They'll worry about wasting your time on stuff that "doesn't really matter," so they'll cut themselves off just as they get to the juiciest bits: motivations, fears, frustrations, and anxieties.

Your job is to make them feel comfortable slowing down, and confident that you want to hear all the details—even the ones they don't think are relevant.

That's why "tell me more about that" is such a magical phrase. It doesn't lead the interviewee in a specific direction, other than toward more depth, which leaves a door open for them to go wherever they'd like with their answer. It also shows that you've been listening, because you're looping back to something they said earlier.

For example, Sara recently interviewed young women about their involvement in and opinions about gender equality issues. Here's an excerpt from one conversation:

> ***Interviewee:*** *We need to look at women's issues as all women's issues, not this one group of women and how we can help them. We need to change the framework of what a woman voter is, and there's a lot of ways to break that down. We have to speak to them.*
>
> ***Sara:*** *You mentioned "changing the framework of what a woman voter is." Can you tell me more about that?*
>
> ***Interviewee:*** *Right now it is segmented two ways: the married woman with kids who is voting based on different issues than the single woman who is in her twenties or thirties. That person is portrayed as a white, straight, middle-class woman...*

> *The Hillary [Clinton] campaign video was a good way to change how we see what a voter looks like. They present all of these different groups… If we are looking at what a woman voter looks like, it isn't capture-able by one person anymore.*

The interviewee hadn't planned on explaining what she meant about women voters. But Sara could tell by the urgency in her voice, the call for change, that she was frustrated by this "framework." So instead of moving on, Sara asked for more. And she got it: a clear description of the limited way the interviewee sees women voters being categorized now, and a specific example of a more inclusive way of looking at them.

This technique takes both time and experience. Make sure you're building enough time into your interviews to go off script and follow up on an interesting comment. And interview more often: the more you do it, the better you'll be at identifying the threads you want to pull on a bit harder.

GO TO THEM

One of the most valuable ways to ensure your interviews present a realistic, nuanced look at your users' lives is to go to them: visit them at home, work, or wherever they might use your product or service. What does their day look like? Are they sitting quietly in a spacious office, or are they trying to cram online tasks in between chasing a toddler, answering customer phone calls, or running from appointment to appointment? Is their home a Pinterest-ready retreat of calm, or is it messy, run-down, cramped, or dated? Do they have the latest devices and a fast connection, or a PC far past its prime connected to rural satellite internet?

Researchers call this technique *contextual inquiry:* you visit a member of your target audience wherever they're likely to use your service. Then, through a combination of observation and interview, you have the user share their process for completing a task, using the equipment they typically would. That task could be something general, like "Show me how you manage your finances," or more specific, like "How do you register for this event?"

We've been in contextual sessions at workspaces, where users showed us the series of sticky notes on their monitors listing all the passwords they need to log into a site, expressing frustration at how difficult it was to remember anything in the context of their extremely busy days. We've had users show us around their office's manufacturing floor, with loud noises punctuating the conversation every few seconds. They weren't interested in reading long-form educational articles in that environment. And we've had people show us their luggage setups and travel itineraries, describing the exhaustion and loneliness of being on the road during a busy sales season.

We've also spoken with researchers who visit users at home—including users who are elderly or disabled and rarely leave their bedrooms, or those who live in a chaotic apartment filled with extended family.

Moments like these are powerful because they immerse us in another human's world: they help us to internalize what they're saying, because we can see and feel it. They remind us that no one is using our services in a truly ideal state: distraction-free, on the latest equipment, while emotionally content, and with as much time as it takes.

BROADEN YOUR VISION

> "*Do we care enough to find out what the experience is of people who are not like us?*"
> —WHITNEY QUESENBERY

When researchers Dana Chisnell and Whitney Quesenbery partnered to launch the Center for Civic Design in 2013, they recognized something: the most powerful, valuable research they could do wasn't with users who were the most average, but those who were most at the fringes. In this case, that meant people with low literacy skills and low income. Because these users lack resources and security, Chisnell says, they tend to be under more stress at all times, which also makes them more likely to be sick than those who are highly literate and earning a living wage.

As we've talked about throughout this book, those users would have been easy to write off as "edge cases." Instead, Chisnell and Quesenbery decided to focus on low-income, low-literacy participants for a study about electronic ballots. If they could make a voting system that worked for these users, they felt confident it would work for people without those stressors in their lives.

What they found in the process was illuminating. Low-literacy users tended to skip copy sections that looked too long, so instructions were much more likely to be read when they were inline with the form, rather than in a section to the side. Many of these users weren't familiar with touchscreen devices, so conventions like tapping and swiping—things we often call "intuitive"—needed to be made explicit. Interface messages, such as a confirmation that you wanted to change your vote, needed to be clear and explanatory, yet also short enough for a low-literacy user to read instead of dismissing them.

Through interviews, paper prototypes, digital prototypes, and eventually testing the final product with this audience, Chisnell became committed to a new way of researching. She told us:

> *I came away from that study thinking, why are we testing with anyone with high literacy? Designing for people with low literacy would make it easier for people who are distressed, distracted, sleep-deprived, on medication, whatever. If I could build this into everything, I would.*

Now, this precise approach might not work for *everything*. Civic design needs to work for the broadest audience possible, but if you're trying to reach a specific group—such as "law students" or "people who are shopping for a new car"—it may not make sense to only do research with low-income, low-literacy users. What *does* make sense is to get beyond what your team first perceives as "ideal" or "average."

One way to do so is to adjust our recruiting process for research. Chisnell recommends skipping traditional "screeners," where potential participants are filtered based on fixed criteria, such as age or income level, and performing a mini-interview or open-ended survey instead.

For example, when Sara interviewed young women about gender issues, she used social media to ask prospective participants to take a short survey. But rather than asking for fixed data, she asked a couple open questions like, "Which political issues are most important to you right now?"—without defining what users' answers could be.

This prevented her from filtering out people who weren't quite what she pictured, but from whom she could learn a lot. And it gave her a rich set of answers in respondents' own words, helping her to uncover themes and connections she'd never have seen if she'd dismissed participants based on their backgrounds, rather than listening to their voices. Finally, it gave her access to real people's stories from day one—which added more depth to her understanding of the audience.

EXPLORE TOUCHY SUBJECTS

We've found interviews to be potent tools for understanding a broader range of user needs and concerns, but some topics are still difficult for people to talk about. When words alone won't work, researcher Kyle Soucy recommends an unconventional technique: collaging.

According to Soucy, collaging can either supplement or replace traditional interviews. To do it, Soucy recommends gathering a random set of 150-200 stock photos and magazine cutouts depicting things like nature scenes, people, and everyday objects. From there, you'll need just a few crafting supplies: paper, scissors, glue or tape, and pens.

To create the collage, give the participant a specific prompt, such as, "Describe what your commute is like," or "Tell a story about what it's like to manage your condition." Then have them compile their collage by selecting from the collection of images. For each image, ask them to write a caption that explains why

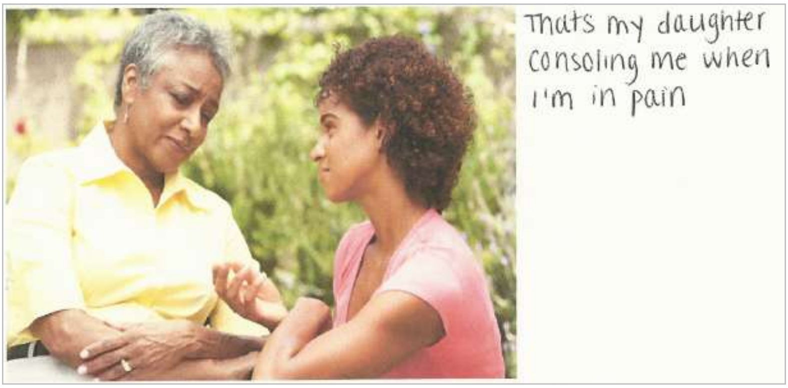

FIG 6: An example from a collaging session led by Kyle Soucy. Participants select images around a given prompt, then explain why they chose each one. Photograph courtesy Kyle Soucy.

they chose it. Once they're finished, have the participant walk you through their collage, and ask deeper questions as they describe each part of it.

The benefit of this technique, Soucy says, is that it opens up space for unknowns: the things you'd never think to ask, and your participant might never think to explain, but are crucial to delivering a more compassionate user experience. In a 2012 *Smashing Magazine* article, she writes:

> *Sometimes the most valuable answer is not in response to a direct question, but one that's elicited. An image can be a powerful stimulus that evokes a strong response, triggers a memory, and draws out feelings that exist below a person's own level of awareness. (http://bkaprt.com/dfrl/06-01/)*

For example, Soucy once visited a woman's home while researching a medical device. In addition to having the condition the device was designed to help, the woman was depressed and seemed to be hoarding. When she shared her collage with Soucy, she began crying—because the collage had allowed her, finally, to describe not only her condition, but also her life, and what was going on in her day. None of these topics would have come up in a traditional interview, but they all played a role in Soucy's recommendations.

So how can you incorporate collage results into your work? For Soucy, the answer is in "painting a picture" for her clients. She shows her clients the collages themselves, paired with audio clips of users describing them—a powerful way to get stakeholders to see the emotion and, at times, distress, behind everyday scenarios. She also brings small details about emotional responses and triggers into her personas, a technique we'll talk about more in Chapter 7.

"We can stop anytime."

Yep, we borrowed that phrase from counseling, but it definitely works in research. As Soucy saw in her collaging sessions, it's not unusual for participants to get emotional. Our job is to accept that while we may be the ones asking questions, our users are still in charge. We need to give them space to decide how much they want to give, and make sure they don't feel pushed too far.

After all, opening up to a stranger isn't easy. When we go beyond shallow conversation about product preferences and dig into the things that make our users human, we always run the risk of causing them harm: making them feel uncomfortable, vulnerable, stressed, anxious, or triggered.

As ethical researchers, we must also be "present" in the interview—sensitive to interviewees who seem exhausted, tense, or terse. We must be willing to stop and say, as Dana Chisnell does, "This person is done. I have taxed them emotionally," even when that means leaving some of our questions unanswered.

THE VALUE OF OPEN

What these methods share is that they help us think beyond our own comfort zone and expand our perspective. We don't do open-ended research to get The Answers. We do it to see just how incomplete our questions were in the first place.

We'll never gather every single perspective; we can't interview the universe every time we build a website. But even with a handful of diverse people, we can learn a tremendous amount about where our product might break, and how we can avoid that. And, perhaps most of all, we are reminded that humans are more varied than we could have imagined before we talked to them.

The qualitative insights gleaned from interviews can power every bit of your product process—especially the way you work with your team, the topic of our next chapter.

7 HUMANIZE YOUR PROCESS

YOU'VE SEEN THE FALLOUT when digital products aren't designed for real people. You understand the importance of compassion. And you've learned how to talk with users to uncover their deepest feelings and needs. But even with the best intentions, it's still easy for thoughtful design teams to get lost along the way.

What you and your team need is a design process that incorporates compassionate practices at every stage—a process where real people and their needs are reinforced and recentered from early explorations through design iterations through launch.

CREATE REALISTIC ARTIFACTS

In Chapter 3, we talked about the importance of designing for worst-case scenarios, and how bringing stress cases into audience artifacts like personas and user-journey maps can help. Now let's talk about creating those materials.

Imperfect personas

The more users have opened up to you in the research phase, the more likely you are to have a wealth of real, human emotion in your data to draw from: marriage difficulties or bad breakups, accidents, a friend who committed suicide, or a past of being bullied. The point isn't to use your interviewees' stories directly, but to allow them to get you thinking about the spectrum of touchy subjects and difficult experiences people have. This will help you include realistic details about your personas' emotional states, triggers, and needs—and lend them far more depth than relying solely on typical stats like age, income, location, and education.

These diverse inputs will also help you select better persona images. Look for, or shoot your own, images of people who don't fit the mold of a cheerful stock photo. Vary their expressions and clothing styles. If you can imagine these personas saying the kinds of things you heard in your user interviews, you're on the right track.

More realistic personas make it much easier to imagine moments of crisis, and to test scenarios that might trigger a user's stressors. Remember that "crisis" doesn't have to mean a natural disaster or severe medical emergency. It can be a situation where an order has gone horribly wrong, or where a user needs information while rushing to the airport.

As you write your personas and scenarios, don't drain the life from them: be raw, bringing in snippets of users' anecdotes, language, and emotion wherever you can. Whoever picks these personas up down the line should feel as compelled to help them as you do.

User-journey maps

In Chapter 3, we mentioned a technique Sara used with a home-improvement chain: user-journey mapping. Also referred to as customer-experience mapping, this technique is well established in many design practices, such as Adaptive Path, the San Francisco-based design consultancy (recently acquired by Capital One).

In 2013, Adaptive Path turned its expertise into a detailed guide, available free at mappingexperiences.com. The guide focuses on how to research the customer experience, facilitate a mapping workshop, and apply your insights. The process includes documenting:

- **The lens:** which persona(s) you're mapping, and what their scenario is
- **Touchpoints:** moments where your user interacts with your organization
- **Channels:** where those interactions happen—online, over the phone, or elsewhere
- **Actions:** what people are doing to meet their needs
- **Thoughts:** how people frame their experience and define their expectations
- **Feelings:** the emotions people have along their journey—including both highs and lows

Constructing a journey map usually starts, as so many UX processes do, with sticky notes. Working as a team, you map out a user's journey over time, with the steps extending horizontally. Below each step, use a different-colored sticky note to document touchpoints and channels, as well as what a user is doing, thinking, and feeling. The result will be a big (and messy) grid with bands of color, stretching across the wall (**FIG 7.1**).

Journey mapping brims with benefits. It helps a team to better think from a user's point of view when evaluating content, identify gaps or disconnects across touchpoints or channels, and provide a framework for making iterative improvements to a major system over time. But we've found this technique can also be a powerful window into identifying previously unrealized, or unexamined, stress cases—if you think carefully about whose journey you're mapping.

Make sure you use personas and scenarios that are realistic, not idealized. For example, an airline might map out experiences for someone whose flight has been canceled, or who is traveling with a disabled relative, or who needs to book last-minute tickets to attend a funeral. A bank might map out a

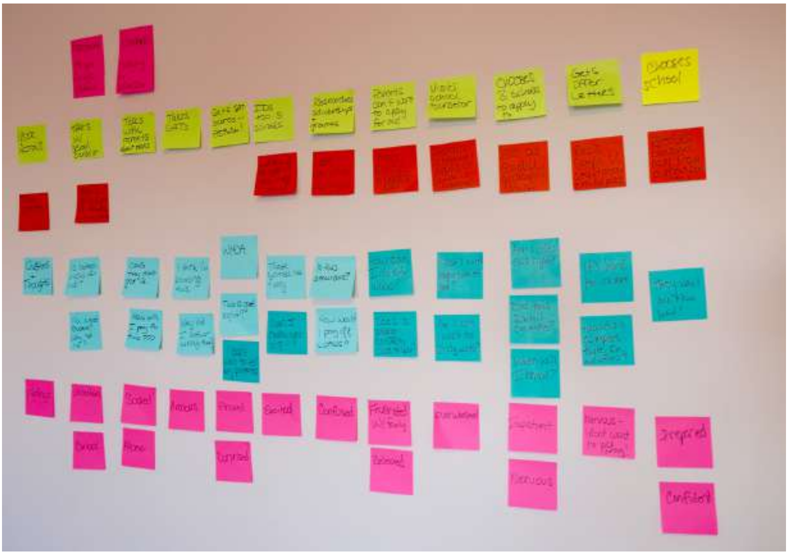

FIG. 7.1: A typical journey mapping activity, where participants use sticky notes to show a user progress through multiple stages and needs over time.

longtime customer who applies for a mortgage and is declined. A university might map out a user who's a first-generation college student from a low-income family. The list goes on.

In our experience, it's also important to do this work with as many people from your organization as possible—not only other web folk like developers or writers, but also groups like marketing, customer service, sales, and business or product units. This collaboration across departments brings diverse viewpoints to your journey, which will help you better understand all the different touchpoints a user might have and prevent any one group from making unrealistic assumptions. The hands-on nature of the activity—physically plotting out a user's path—forces everyone to truly get into the user's mindset, preventing participants from reverting back to organization-centric thinking, and increasing the odds you'll get support for fixing the problems you find.

In addition to determining an ideal experience, also take time to document where the real-life experience doesn't stack up. This might include:

- **Pain points:** places where you know from research or analytics that users are currently getting hung up and have to ask questions, or are likely to abandon the site or app.
- **Broken flows:** places where the transition between touchpoints, or through a specific interaction on a site (like a form), isn't working correctly.
- **Content gaps:** places where a user needs a specific piece of content, but you don't have it—or it's not in the right place at the right time.

Just as you can map many things in your journey—channels, questions, feelings, actions, content needs and gaps, catalysts, and more—you can also visualize your journey in many different ways. Sometimes, you might need nothing more than sticky notes on a conference room wall (and a few photos to refer back to later). Other times, you'll want to spend a couple of days collaborating, and create a more polished document after the fact. It all depends on the complexity of the experience you're mapping, the fidelity you need in the final artifact, and, of course, how much time you can dedicate to the process.

If journey maps are new to your team, a great way to introduce them is to spend an hour or two during a kickoff or brainstorm session working in small groups, with each group roughing out the path of a different user. If they're already part of your UX process, you might just need to start working from a wider range of personas and scenarios. Either way, building journey maps that highlight stress cases will help you see:

- How to prioritize content to meet the needs of urgent use cases, without weakening the experience for others. That's what the home-improvement store did: walking through stress cases made it easier for the team to prioritize plain language and determine what should be included in visually prominent, at-a-glance sections.

- Places where copy or imagery could feel alienating or out of sync with what a user might be thinking and feeling at that moment. For example, imagine if Glow, the period-tracking app, had mapped out a user journey for a single woman who simply has trouble remembering to buy tampons. The designers would have seen how, at each touchpoint, the app's copy assumed something about this woman's needs and feelings that wasn't true—and they could have adjusted their messaging to fit a much broader range of potential users.
- Whether any gaps exist in content for stress-case users. For example, if the Children's Hospital of Philadelphia had created a journey map for a user in crisis, it might have prevented the content gap Eric experienced: no information about rushing to the hospital in an emergency existed online.

STRENGTHEN YOUR PROCESS

With more realistic representations of your audience in hand, it's time to build checks and balances into your process that remind the team of these humans, and ward against accidentally awful outcomes. Here are some techniques to get you started.

The WWAHD test

In many cases, the easiest way to stress-test any design decision is to ask, "WWAHD?"—"What would a human do?" When you're designing a form, try reading every question out loud to an imagined stranger, listening to how it sounds and imagining the questions they might have in response.

Kate Kiefer Lee of MailChimp recommends this for all copy, regardless of where and how it's used, because it can help you catch errors, improve your flow, and soften your sentences. She says:

> *As you read aloud, pretend you're talking to a real person and ask yourself "Would I say this to someone in real life?"*

> *Sometimes our writing makes us sound stodgier or colder than we'd like.*
>
> *Next time you publish something, take the time to read it out loud. It's also helpful to hear someone else read your work out loud. You can ask a friend or coworker to read it to you, or even use a text-to-speech tool. (http://bkaprt.com/dfrl/07-01/)*

That last point is an excellent tip as well, because you'll gain a better sense of how your content might sound to a user who doesn't have the benefit of hearing you speak. If a synthesized voice makes the words fall flat or says something that makes you wince, you'll know you have more work to do to make your content come to life on the screen.

The premortem

In design, we create biases toward our imagined outcomes: increased registrations or sales, higher visit frequency, more engaged users. Because we have a specific goal in mind, we become invested in it. This makes us more likely to forget about, or at least minimize, the possibility of other outcomes.

One way to outsmart those biases early on is to hold a project *premortem*. As the name suggests, a premortem evaluates the project *before* it happens—when it "can be improved rather than autopsied," says Gary Klein, who first wrote about them in 2007 in *Harvard Business Review:*

> *The leader starts the exercise by informing everyone that the project has failed spectacularly. Over the next few minutes those in the room independently write down every reason they can think of for the failure.*
>
> *(http://bkaprt.com/dfrl/07-02/)*

According to Klein, this process works because it creates "prospective hindsight"—a term researchers from Wharton, Cornell, and the University of Colorado used in a 1989 study, where they found that imagining "an event has already occurred increases a team's ability to correctly identify reasons for future outcomes by 30%."

For example, say you're designing a signup process for an exercise- and activity-tracking app. During the premortem, you might ask: "Imagine that six months from now, our signup abandonment rates are up. Why is that?" Imagining answers that could explain the hypothetical—it's too confusing, we're asking for information that's too personal, we accidentally created a dead end—will help guide your team away from those outcomes, and toward better solutions.

The question protocol

Another technique for your toolkit is Caroline Jarrett's question protocol, which we introduced in Chapter 4. To recap, the question protocol ensures every piece of information you ask of a user is intentional and appropriate by asking:

- *Who within your organization uses the answer*
- *What they use them for*
- *Whether an answer is required or optional*
- *If an answer is required, what happens if a user enters any old thing just to get through the form*

You can't just create a protocol, though—you need to bring it to life within your organization. For example, Jarrett has worked the approach into the standard practices of the UK's Government Digital Service. GDS then used its answers to create granular, tactical guidelines for designers and writers to use while embedded in a project—such as this advice for titles:

> *We recommend against asking for people's title.*
>
> *It's extra work for users and you're forcing them to potentially reveal their gender and marital status, which they may not want to do. There are appropriate ways of addressing people in correspondence without using titles.*
>
> *If you have to implement a title field, make it an optional free-text field, not a drop-down list. Predicting the range of titles your users will have is impossible, and you'll always end up upsetting someone. (http://bkaprt.com/dfrl/07-03/)*

By making recommendations explicit—and explaining *why* GDS recommends against asking for titles—this guide puts teams on the right path from the start.

If user profiles are a primary part of your product's experience, you might also want to adapt and extend the question protocol to account not just for how a *department* uses the data collected, but for how your product itself uses it. For example, a restaurant recommendation service can justify asking for users' locations; the service needs it to prioritize results based on proximity. But we've seen countless sites that have no reason to collect location information: business magazines, recipe curators, even municipal airports. If these organizations completed a question protocol, it might be difficult for them to justify their actions.

You don't even have to call it a "protocol"—in some organizations, that label sounds too formal, and trying to add it to an established design process will be challenging. Instead, you might roll these questions and tactics into your functional specs, or make them discussion points in meetings. However you do it, though, look for ways to make it a consistent, ingrained part of your process, not an ad hoc "nice to have."

The Designated Dissenter

Working in teams is a powerful force multiplier, enabling a group to accomplish things each individual could never have managed alone. But any team is prone to "groupthink": the tendency to converge on a consensus, often without meaning to. This can lead teams to leave their assumptions unchallenged until it's far too late. Giving one person the explicit job of questioning assumptions is a way to avoid this.

We call this the "Designated Dissenter"—assigning one person on every team the job of assessing every decision underlying the project, and asking how changes in context or assumptions might subvert those decisions. This becomes their primary role for the lifetime of the project. It is their *duty* to disagree, to point out unconsidered assumptions and possible failure states.

For example, back in Chapter 1 we talked about the assumptions that went into Facebook's first Year in Review product. If the project had had a Designated Dissenter, they would have gone through a process much like we did there. They would ask, "What is the ideal user for this project?" The answer would be, "Someone who had an awesome year and wants to share memories with their friends." That answer could lead to the initial questions, "What about people who had a terrible year? Or who have no interest in sharing? Or both?"

Beyond such high-level questions, the Designated Dissenter casts a critical eye on every aspect of the design. They look at copy and design elements and ask themselves, "In which contexts might this come off as ridiculous, insensitive, insulting, or just plain hurtful? What if the assumptions in this error message are wrong?" At every step, they find the assumptions and subvert them. (The tools we discussed in the previous sections can be very useful in this process.)

For the next project, however, *someone else* must become the Designated Dissenter. There are two reasons for this:

- By having every member of the team take on the role, every member of the team has a chance to learn and develop that skill.
- If one person is the Designated Dissenter for every project, the rest of the team will likely start to tune them out as a killjoy.

Every project gets a new Dissenter, until everyone's had a turn at it. When a new member joins the team, make them the Designated Dissenter on their second or third project, so they can get used to the team dynamics first and see how things operate before taking on a more difficult role.

The goal of all these techniques is to create what bias researchers Jack B. Soll, Katherine L. Milkman, and John W. Payne call an "outside view," which has tremendous benefits:

> *An outside view also prevents the "planning fallacy"—spinning a narrative of total success and managing for that, even though your odds of failure are actually pretty high. (http://bkaprt.com/dfrl/07-04/)*

Our narratives are usually about total success—indeed, that's the whole point of a design process. But that very aim makes us more likely to fall victim to planning fallacies in which we *only* envision the ideal case, and thus disregard other possibilities.

STRESS-TEST YOUR WORK

Usability testing is, of course, important, and testing usability in stress cases even more so. The problem is that in many cases, it's impossible to find testers who are actually in the midst of a crisis or other stressful event—and, even if you could, it's ethically questionable whether you should be taxing them with a usability test at that moment. So how do we test for such cases?

We've identified two techniques others have employed that may be helpful here: creating more realistic contexts for your tests, and employing scenarios where users role-play dramatic situations.

More realistic tests

In Chapter 3, we shared an experiment where more difficult mental exercises left participants with reduced cognitive resources, which affected their willpower—so they were more likely to choose cake over fruit.

Knowing this, we can make our usability tests more reflective of real-life cognitive drain by starting each test with an activity that expends cognitive resources—for example, asking participants to read an article, do some simple logic puzzles, play a few rounds of a casual video game like *Bejeweled,* or complete a routine task like replying to emails.

After the tester engages in these activities, you can move on to the usability test itself. Between the mental toll of the initial task and the shift of context, the testers will have fewer cognitive resources available—more like they would in a "real-life" use of the product.

In a sense, you're moving a little bit of field testing into the lab. This can help identify potential problems earlier in the process—and, if you're able to continue into actual field testing, make it that much more effective and useful.

Before you start adding stressors to your tests, though, make sure your users are informed. This means:

- Be clear and transparent about what they'll be asked to do, and make sure participants give informed consent to participate.
- Remember, and communicate to participants, that you're not evaluating them personally, and that they can call off the test at any time if it gets too difficult or draining.

After all, the goal is to test the product, not the person.

Stress roleplays

Bollywood films are known for spectacular plot lines and fantastical situations— and, according to researcher Apala Lahiri Chavan, they're also excellent inspiration for stress-focused usability testing.

In many Asian cultures, it's culturally impolite to critique a design, and embarrassing to admit you can't find something. To get valuable input despite these factors, Chavan replaced standard tasks in her tests with fantasy scenarios, such as asking participants to imagine they'd just found out their niece is about to marry a hit man who is already married. They need to book a plane ticket to stop the wedding immediately. These roleplays allowed participants to get out of their cultural norms and into the moment: they complained about button labels, confusing flows, and extra steps in the process. (For more on Chavan's method and results, see Eric Schaffer's 2004 book, *Institutionalization of Usability: A Step-by-Step Guide,* pages 129–130.)

This method isn't just useful for reaching Asian markets. It can also help you see what happens when people from *any* background try to use your site or product in a moment of stress. After all, you can't very well ask people who are in the midst of a real-life crisis to sit down with your prototype. But you can ask people to roleplay a crisis situation: needing to interact with your product or service during a medical emergency, or after having their wallet stolen, or when they've just been in an accident.

This process probably won't address every possible crisis scenario, but it will help you identify places where your content is poorly prioritized, your user flows are unhelpful, or your messaging is too peppy—and if you're already doing usability testing, adding in a crisis scenario or two won't take much extra time.

COMPASSION TAKES COLLABORATION

One thing you may have noticed about each of these techniques is that they're fundamentally cross-discipline: design teams talking and critiquing one another's work through the lens of compassion; content strategists and writers working with designers and developers to build better forms and interactions. Wherever we turn, we find that the best solutions come from situations where working together isn't just encouraged, but is actively built into a team's structure. Your organization might not be ready for that quite yet—but you can help them get there. Our next chapter will get you started.

8 MAKE THE CASE

It's one thing to believe in doing right by users, but quite another to get people with fancy titles to draw connections between compassionate design and successful business. No matter how much you want to build the practices and principles we've covered into your work, you may still need to get the support of bosses, clients, or executives to make it real.

There are no easy answers to this, but as consultants, we've both spent a fair amount of time talking with business types about topics like web standards, accessibility, and user-friendly content. The best way we've found to gain buy-in is to:

- Define how this work will help the organization
- Develop and support an argument
- Determine the best way to approach your stakeholders

In this chapter, that's what we'll cover: ways to make a case for compassionate design, articulate it well, and bring it to the people you need on your side.

FIND STAKEHOLDERS' PAIN POINTS

Every project and product has internal stakeholders—sometimes a couple, sometimes what feels like a million. One of the first ways to make space in your organization for a more human design process is to get those stakeholders on board.

When identifying your stakeholders, make sure to include:

- People who control budgets and set priorities (often at a senior level)
- People who run projects and processes, such as project or product managers
- People from other departments who need to buy into a proposed change
- People whose day-to-day work is most affected by changes, such as content creators and web production staff

These are the people who can approve, support, and implement the compassionate changes you recommend—or who can veto, thwart, or ignore those same changes if you don't work to get them on your side.

So how do you get these people not only to believe in a kinder approach to design in theory, but to support it in practice? You need to understand *their* point of view. After all, if you can see the world through their eyes, you'll be a lot more prepared to convince them to see it through yours.

That's where stakeholder interviews come in. If they're new to you, the concept is straightforward. Stakeholder interviews are the internal equivalent of user interviews: open-ended, one-on-one sessions with the people inside your organization (or your client's company) who can make or break your project. They're typically used to clarify the goals of the project from different perspectives, gather requirements, gain rapport with the team, and identify potential threats to the work.

When you ask those questions well—and when you use some of the follow-up techniques we outlined for user interviews in Chapter 6—people will tell you about a lot more than just their project vision. They'll tell you about their own team's goals, unmet needs, and frustrations.

While that might sound a bit negative, these interviews are a huge positive for your project. First, it's best to hear any grievances early, long before you make decisions on design direction or discuss a user flow. Second, listening to people's pain points does wonders for helping them feel that you're on their side, and that the project will reflect their needs. Third, and most important for our purposes, these conversations can help you connect the dots between design decisions that will be kinder and more inclusive for your users, and your stakeholders' own goals and needs.

That's what one content strategist we spoke with found when she was working with an institution to overhaul its online forms. Her design team knew from the beginning that the forms needed work: over the years, they had been updated and added to many times, resulting in a complex, clunky experience. Perhaps worse, the team feared that the forms were also alienating users from diverse backgrounds.

But not everyone saw the problem at first. Historically, the organization had chalked up users' challenges to the fact that the form was the first step in a complex process, not that the form itself was a barrier.

Rather than start out by trying to convince stakeholders that users might feel alienated, the team first went to each group to gain support for usability testing. They did this by asking questions:

- "What data do you wish users were providing that you're not getting now?"
- "Where do you tend to get messy or unreliable data?"
- "How do you use this piece of information to drive other processes?"

The stakeholders replied with a list of questions they wished users would provide detailed answers to, as well as areas where they wound up doing time-consuming follow-up to resolve confusion and contradictions.

This insight gave the design team an inroad: they could then relate users' experiences to stakeholders' problems. They could say, "If we make it easier to fill out this form, we can increase the number of users who give us the kind of rich information you want."

DETERMINE YOUR ANGLE

Next, you need to articulate the business benefit to your work. While "it's the right thing to do" might be enough for some stakeholders, others will ask you to speak in terms of business opportunities and financial return. For those people, you'll be best served by preparing a more formal business case.

Accessibility consultant Karl Groves has argued that there are really only three business cases for anything (http://bkaprt.com/dfrl/08-01/):

- It will make money.
- It will save money.
- It will decrease risk.

According to Groves, it's often difficult, or even impossible, to tie an accessibility project to a specific and tangible return—because taken by itself, the impact of accessibility is hard to quantify.

The same is true for designing with compassion: each small change to how you communicate with your users will not, most of the time, have a dramatic effect on your financial picture.

That doesn't mean business cases aren't worth making, though. Sometimes, you'll be surprised at the potential financial impact you uncover. Other times, you'll find that telling the story of kindness in budgets and bottom lines simply makes the conversation go more smoothly.

Let's walk through a few potential business cases, and consider how we could use them to help us win support for the work we believe in.

IT WILL MAKE MONEY

We'll stand out from competitors

A faster website, a smoother purchase flow, and a superior customer support system are all ways to differentiate a business from its competitors. So, too, is a more human and compassionate design. Tell your stakeholders to look at Slack—the messaging application that, in early 2015, shot to a $2.8 billion valuation after only a little over a year on the market (http://bkaprt.com/dfrl/08-02/).

Slack is winning out over competitors like HipChat and Yammer, in part, by being more empathetic in its design and operation. Slack makes it simple to get support or report an issue, and it relentlessly scours that feedback, looking for trends in feature requests or challenges users are having. It's easy for users to customize settings, notifications, and even the skin color of their emoji. At every turn, Slack focuses on including all kinds of users.

In an interview with the *New York Times,* founder Stewart Butterfield explains why:

> *One way that empathy manifests itself is courtesy… It's not just about having a veneer of politeness, but actually trying to anticipate someone else's needs and meeting them in advance. (http://bkaprt.com/dfrl/08-03/)*

Sound familiar? It should, because this idea of courtesy is uncannily similar to the concept of compassion we discussed in Chapter 5: going beyond simply *feeling* for others, and making it your purpose to *make things easier* for them. That message—and the story of Slack's success—is one that will both resonate with those seeking a competitive advantage, and create space for work that plans for stress cases and communicates compassionately.

We can reach new audiences

This argument works best if you're trying to make space for more inclusive design, such as getting rid of potentially off-putting form fields in your onboarding process, or revising tricky product messaging. Here you'll want to focus on how you can increase your product's reach by designing it to hold up against more varied identities and use cases.

Say you're working on a photo-sharing product. The current onboarding process asks users to provide their full name "so friends can easily find you." Since the app doesn't need users' real names, you'd like to move that field to an optional screen at the end of the flow.

To get buy-in for this change, you could look at the percentage of users who download the app but never get past the real-name screen during signup. How many people feel alienated and never even try your product? By focusing on this missed opportunity, you could open the door to making a more compassionate design change, or even testing one out to see how it affects numbers.

IT WILL SAVE MONEY

We can cut customer-service costs

If a process is leading to lots of user frustration, then chances are it's costing money in the form of increased support emails or call-center hours. That was the case at the Government Digital Service, the folks behind GOV.UK, which we talked about in Chapter 7.

According to its own research, as of 2011, the UK government was receiving 150 million avoidable calls a year—meaning an online service existed, but people were phoning in anyway (http://bkaprt.com/dfrl/08-04/). The constituents making those calls were often already upset and frustrated from trying to navigate the outdated, inefficient, and confusing network of government services. Across the board, non-digital transactions were costing the UK government around £4 billion per year.

As GDS releases more and more digital tools that are designed compassionately based on user needs, they've estimated that an annual savings of £1.7 to £1.8 billion is possible. Its approach is to focus on high-volume transactions—areas where GDS could see the most impact the fastest, which would help it gain both governmental and public trust.

If you're in an organization where customer service or support costs are high, you might use GDS as an example of how user-centric, empathetic design can have a real—and even impressive—impact on the bottom line.

We can increase retention, rather than invest in finding new users

Depending on which study you read—and plenty exist—it's anywhere from five to twenty-five times more expensive to find a new customer than to retain an existing one (http://bkaprt.com/dfrl/08-05/). If your product relies on repeat visitors, you can make a case that more compassionate design will keep people engaged in your product longer (and maybe even persuade them to recommend it).

For example, Dan Hon, the content director at Code for America and a former interactive creative director at Wieden+Kennedy, told us about his experience using activity trackers after being diagnosed with Type II diabetes. He started monitoring his blood glucose levels, tracking his weight, and documenting his food intake. What he realized is that many trackers don't work for people with chronic conditions like his, because goals are tied to individual days and tend to focus on unbroken streaks or continuous repetition—rather than making a user feel successful for sustaining changes *over time*. He says:

> *[These companies] don't realize or put value on the fact that you don't want to be discouraging to someone with a chronic condition or who wants long-term change. You missed one day so you break that thirty-day streak. You start from zero again...*
>
> *We are not reflecting the cognitive technique of "tomorrow I can try again."*

In circumstances like these, you can argue that when a user has already decided they want to use your product, identifying stress cases—like Hon's example of a chronic illness—can lead to design solutions that prevent people from feeling discouraged or disconnected when their real lives don't add up to the narrow success stories the product-makers first envisioned.

To make this case, get data on customer attrition rates, and then pair it with information about *why* people stop using your product by mining trends from product reviews, social media posts, and customer service inquiries.

IT WILL DECREASE RISK

We can avoid negative experiences, which cause backlash

Any time we create a negative experience for a user, we risk losing them forever. Think of people who vow never to fly with an airline because it once lost their luggage. Even if they got their luggage back later the same day, they never forgot that initial negative experience.

We face similar risks with our designs. It's bad enough to create a difficult user experience; do that often enough, and users will go elsewhere out of frustration. Deeper emotional reactions—grief, pain, anger—will drive them away even faster.

Any negative experience has the potential to spread, creating bad press. Particularly egregious examples tend to go viral—like Eric's Year in Review story, which ended up on CNN, the *Washington Post, Le Monde,* and countless media outlets around the world where Facebook undoubtedly would rather not have seen the story.

We can prevent losing core users' trust

If your organization wants to launch a feature that you worry isn't well tested, you might build your business case around *trust*. Once you've established trust with a core user base, a new feature that alienates them—like Flickr's autotags from

Chapter 1—can create a massive outcry, turning your best brand supporters against you and creating extensive customer-service and reputation-management headaches.

By slowing down and vetting product and design decisions more carefully, you can uncover gaps and weaknesses that would breach your core users' trust, and avoid costly problems down the line.

DEVELOP AN ARGUMENT

Once you understand your stakeholders' pain points and have an angle in mind, it's time to construct your argument. In *The Content Strategy Toolkit,* Meghan Casey provides a framework for doing just that—and it works just as well for design projects as it does for content strategy.

Using a simple version of philosopher Stephen Toulmin's argumentation model, Casey writes that an argument has six key features:

- *Claim: the statement you are asking someone to accept*
- *Grounds: the data and facts to support your claim*
- *Warrant: how the data is relevant to your claim*
- *Backing: information that supports your claim*
- *Qualifier: the likelihood that the data supports the warrant*
- *Rebuttal: the response to anticipated challenges to your claim*

Let's say you're a designer for Glow, the period-tracking app, and you want to make the case that the company could increase its user base if it offered a more inclusive message. Your argument might look like this:

- **Claim:** we can increase user growth by 10% per month if we stop forcing users to select one of the three categories at onboarding.
- **Grounds:** currently, 25% of the people who download our app never sign up for Glow. That means only 75% of downloads become users.

- **Warrant:** we need to convert more downloads to users to reach our growth goals, and we can only do that if we include women who don't fit one of those three categories.
- **Backing:** after all, according to Pew research, one in five Americans over age twenty-five has never married, and that doesn't even count teens and college students. Plus, a YouGov survey reported that one in three Americans under thirty don't consider themselves heterosexual. That means our options won't fit a lot of people's lives.
- **Qualifier:** changing our process won't convert all of that 25%, but if we can convert one-third of those users, that will mean more than 83% of downloads become active users. That's an 11% increase in monthly growth rate.
- **Rebuttal:** I know you're concerned that a more complicated onboarding process might detract from our easygoing brand, but I've thought of ways we can tweak our wording and loosen categories without adding more screens.

Boom. You've got a believable, thought-out case for compassion that makes your organization money. You may never need to share your argument in this form, but writing it out like this forces you to think it all the way through—and prepares you for questions or pushback you'll get along the way.

PRESENT YOUR CASE

Once you have an argument you think will resonate, it's time to decide how you'll bring it to your audience, and what you'll propose to get started.

There's no one right way to do this; it all depends on your organization's culture and structure, and how you fit into it. Here are a few techniques we've seen work, and how to use them.

Take your argument on the road

Before requesting an official project or budget, consider creating a roadshow: taking a proposal to multiple teams, departments, or executives to ask for support individually. This lets you tailor your pitch to the goals of each person or group, and can work wonders in consensus-driven cultures, where one dissenting team can quash a project.

Create a spectacle

If your organization tends to stick to business-as-usual, consider turning your case into a spectacle: something that's impossible to ignore. For example, the content strategist we mentioned earlier knew from user research that the forms she was redesigning were excluding and alienating users, particularly those who were low-income. But her team needed their stakeholders to see it, too, before they'd get support for the changes they wanted to see happen.

So they prepared a research presentation that wasn't just a slide deck or a series of quotes, but actual video and audio clips—clips showing users struggling, or getting dejected. One revealed a user unable to complete a field because it required information about a family member who was deceased. Another showed a user spending thirty minutes struggling with a single page.

When they presented the clips at a stakeholder meeting, the room went silent. No one played with their phones. No one looked bored. "It never occurred to them that this experience could be *unkind*," the content strategist told us. "It was like a switch had been flipped." The team's stakeholders were so struck by the users' stories that they referred to them throughout the meeting. Their commitment to the project was cemented that day.

Use the improv approach

Another way to make space for compassionate processes is to tack them onto work that's already underway, or ideas that already have support. We call this the improv approach because it uses the common improv theater technique of saying "yes, and": *yes*, we can improve transaction completion rates, *and* we'll do that by removing these extra form fields that may alienate users. *Yes*, let's move to modular content so we can better support mobile, *and* while we're at it, we'll reprioritize those modules to better support stress cases.

This approach works because it supports others' ideas, rather than putting them in competition with, or in opposition to, your goals. This helps others draw connections between their goals and yours, and can make it easier to keep projects moving.

SPREAD COMPASSION

Approvals and budgets are powerful tools, but they're not the only ones. We've found that it's also incredibly helpful—and often necessary—to become an evangelist for this work. When you share ideas and approaches with anyone who'll listen, you'll sow the seeds for a grassroots shift in thinking that can, over time, turn into real cultural change.

There are lots of ways to be an evangelist within your organization. You can bring in outside experts to talk about a specific issue—sometimes, just having a third party with credibility say what you've been saying will make people pay attention—and because they're an outsider, they'll have an easier time representing the user's point of view, too. In fact, Facebook has brought in speakers critical of its work, like Mike Monteiro and Eric, precisely for this reason.

You might hold a lunch-and-learn, where you share examples of experiences that break for users who don't fit the mold—and the ensuing bad press—to show your organization the real risk of ignoring these issues. Or you could host an open session where people can bring in work in progress and focus on identifying points of stress or potential alienation. Heck, you could even leave copies of this book around the office.

MAKE A HABIT OF IT

Most of us don't have the power to change our company's values or realign budgets overnight. We *do* have the opportunity to become advocates for the users who are easiest to ignore:

those whose lives and identities don't fit the unrealistic ideals our organizations tend to focus on. The more we help others see the world from those users' eyes, the more difficult it will be for them to push those users to the edges of our work.

Most of the time, the business cases we'll need to make won't require massive slide decks full of buzzwords. They'll just take practice understanding our colleagues' concerns, speaking their language, and making a believable case. So take the tools and techniques we've identified and try them out—and then keep trying them until you feel confident talking about compassion with everyone in your organization.

CONCLUSION

> *"The only unit of time that matters is heartbeats."*
> —PAUL FORD, "10 Timeframes" (http://bkaprt.com/dfrl/09-01/)

THE HEARTBEATS OUR WORK affects belong to people—people who have painful experiences and imperfections and subjects they'd rather not have dredged up every time they use the web.

But that's life. Stress, trauma, alienation, crisis, pain: each of these states is part of the human experience. Not fringe. Not weird. Just as typical, and expected, as anything else. The more we embrace this, the better we'll become at supporting real people as they interact with our sites and products.

We hope this book has given you the tools to get started—because you're now as prepared as anyone to advocate for more empathetic and inclusive design in your organization.

Compassion helps everyone

Designing with compassion helps every one of us, even when we're not facing trauma or crisis. When we build content and designs that stand up against stress, we stop filling our pages with clever-but-meaningless fluff; we stop foisting features on users who haven't asked for them; we stop attempting to tell users how they ought to feel.

Sure, we might lose a bit of plucky copy and upbeat imagery along the way. But what we gain is so much richer: a compass that will guide us in a humane, sensible direction as we continue to sort out the role digital products play in our lives. We gain the space in our processes and designs for the things that truly matter: being clear, specific, and helpful.

Be courageous

As we've said, this takes courage—because no matter how great our intentions, we'll still make mistakes. As ThinkUp, the service we met at the start of this book, says in its mission statement:

We're going to screw up. We're going to learn from it. It's only unforgivable if we don't share what we learned.

It's easy to be kind when a person is standing in front of us, and when we know precisely what they're going through. It's much harder to foster compassion for unknowns—for all the ways our work could hurt someone, or increase their stress and anxiety, that we'll never hear about.

We owe it to our users to try anyway, and to own up to it when we get it wrong.

That process starts with listening. Listening to those millions and trillions of heartbeats—the heartbeats of people we'll never know, but whose lives we affect every day.

RESOURCES

Putting people first

We owe it to the people who use our products and websites to truly design with them in mind. These books, articles, and videos will help you view design through a lens of empathy and kindness, and make decisions that allow your users to do their best.

- "10 Timeframes," Paul Ford. Ford's call to think about our users' clocks, rather than our own, is as touching as it is helpful (http://bkaprt.com/dfrl/10-01/).
- Adaptive Path's Guide to Experience Mapping. A free, downloadable guide to get you started mapping user journeys (http://bkaprt.com/dfrl/10-02/).
- *Badass: Making Users Awesome,* Kathy Sierra. Rather than spending all our time trying to create successful products, we should be thinking about how to make successful users. Sierra's book shows us how (http://bkaprt.com/dfrl/10-03/).
- "How Bad UX Killed Jenny," Jonathan Shariat. We often think more technology is the answer, but sometimes it can become overwhelming—and deadly (http://bkaprt.com/dfrl/10-04/).
- "How Designers Destroyed the World," Mike Monteiro. In this video, Monteiro takes designers to task for the work they put into the world, and the impact it has on their users (http://bkaprt.com/dfrl/10-05/).
- "Information Architecture Summit 2013 Closing Plenary," Karen McGrane. This talk discusses mobile, content management, organizational change, and—perhaps most important of all—compassion (http://bkaprt.com/dfrl/10-06/).
- *Practical Empathy,* Indi Young. By cultivating empathetic, people-centered listening skills, you can better understand what people think and feel, and apply that knowledge to your work (http://bkaprt.com/dfrl/10-07/).
- "Your Website Has Two Faces," Lyle Mullican. A robust website is one that is empathetic to users and allows them to

enter data in a variety of forms, yet can translate that input to meet the system's needs (http://bkaprt.com/dfrl/10-08/).

User research

The more we get to know the people who use (or might use) our digital products, the better we'll become at identifying the scenarios and real-life situations that might create stress cases. These resources provide a basic foundation in user research.

- "Collaging: Getting Answers to the Questions You Don't Know to Ask," Kyle Soucy. A detailed guide to running a collaging session as part of your user research program (http://bkaprt.com/dfrl/10-09/).
- *Interviewing Users,* Steve Portigal. Interviewing people well takes time and practice. This book walks you through everything you need to know: setting the stage, asking questions that probe without leading, and keeping interviewees on track (http://bkaprt.com/dfrl/10-10/).
- *Just Enough Research,* Erika Hall. You don't need to be a full-time researcher to gain helpful insights for your project. Learn how to plan, perform, and analyze results for all kinds of studies (http://bkaprt.com/dfrl/10-11/).
- *Mental Models,* Indi Young. This is the classic text for learning and documenting why your users do what they do (http://bkaprt.com/dfrl/10-12/).

Brains, bias, and decision-making

Our brains love to minimize work by relying on shortcuts—but that doesn't always lead to the best decisions for your users. These texts can help you understand the ways our brains fail us, and teach you techniques for reducing bias in your work.

- "Outsmart Your Own Biases," Jack B. Soll, Katherine L. Milkman, and John W. Payne. Most people rely on intuition to make business decisions—but that can result in automatic judgments and poor choices (http://bkaprt.com/dfrl/10-13/).

- *Thinking, Fast and Slow,* Daniel Kahneman. The noted psychologist uses decades of research to explain the two systems that govern our brains, and how those systems often lead us to illogical conclusions (http://bkaprt.com/dfrl/10-14/).

Inclusivity in design

We can't always predict who will need to use our products, and what their background, context, or ability level will be. But we can put inclusive principles at the heart of our work. These resources will help you think inclusively from the start.

- "The Audience You Didn't Know You Had," Angela Colter. Up to half your audience may have low literacy skills, and at times, even high-literacy readers may be temporarily low-literacy. Colter shares strategies low-literacy people employ, and how you can accommodate these users (http://bkaprt.com/dfrl/10-15/).
- "Consequences of an Insightful Algorithm," Carina C. Zona. In this keynote from PyCon Australia 2015, Zona discusses how programmers have an ethical responsibility to build empathy into the code they write (http://bkaprt.com/dfrl/10-16/).
- "Democracy Is a Design Problem," Dana Chisnell. In this video from Creative Mornings, Chisnell walks through examples of government services that work for diverse users—and those whose design misses its mark (http://bkaprt.com/dfrl/10-17/).
- Government Digital Service Design Principles. "The people who most need our services are often the people who find them hardest to use." The United Kingdom's government design principles serve as a powerful platform for inclusivity of all kinds (http://bkaprt.com/dfrl/10-18/).
- "Inadvertent Algorithmic Cruelty," Eric Meyer. A kernel of inspiration for this book: Eric's initial reaction to Facebook's Year in Review ad featuring his late daughter, Rebecca (http://bkaprt.com/dfrl/10-19/).
- "I Tried Tracking My Period and It Was Even Worse than I Could Have Imagined," Maggie Delano. Delano shows us

how products for women—in this case, period trackers—can alienate and exclude those who don't fit a narrow profile (http://bkaprt.com/dfrl/10-20/).

- "My Name Is Only Real Enough to Work at Facebook, Not to Use on the Site," Zoë Cat. A look at Facebook's real name policy by someone who saw it from the inside, and was negatively affected by it after she left (http://bkaprt.com/dfrl/10-21/).
- "Personal Histories," Sara Wachter-Boettcher. In this text, which was another inspiration for this book, Sara talks openly about the ways apparently neutral forms can have difficult and damaging effects on the people who must fill them out, and how a lack of context can make them even harder to complete (http://bkaprt.com/dfrl/10-22/).
- "A Talk About Nothing," Lena Reinhard. Reinhard explores underlying systems that shape our experience of the web—and how we can use our privilege to make those systems more inclusive (http://bkaprt.com/dfrl/10-23/).

Designing resilient interfaces

If we want our work to stand up to stress cases, then we need to design interfaces that are human, kind, and resilient to all kinds of fractures. These resources will get you thinking about what that means for your copy, form fields, and technical infrastructure.

- "Designing for Crisis," Eric Meyer. Recorded at An Event Apart Austin in October 2015, Eric explores the idea that making interfaces that people in crisis can understand makes better interfaces for everyone (http://bkaprt.com/dfrl/10-24/).
- "Don't Poke the Bear: Creating Content for Sensitive Situations," Kate Kiefer Lee. Kiefer Lee walks through common touchy subjects like financial disclosures and error messages and helps you create copy that's helpful, clear, and kind (http://bkaprt.com/dfrl/10-25/).
- "Everyone Has JavaScript, Right?," Stuart Langridge. A helpful visualization of the many reasons JavaScript might fail (http://bkaprt.com/dfrl/10-26/).

- *Forms That Work: Designing Web Forms for Usability,* Caroline Jarrett and Gerry Gaffney. A detailed guide to determining what to ask (and what to skip), and how to help your users be successful completing web forms (http://bkaprt.com/dfrl/10-27/).
- "Interface Writing," Nicole Fenton. Fenton walks through the words that make up our interfaces, and shows you how to take cues from conversations to create human, helpful interactions (http://bkaprt.com/dfrl/10-28/).
- "Obergefell v. Hodges: The Database Engineering Perspective," Ed MacPherson. A look at how database design can be a barrier to accommodating users' realities, and ways to do better (http://bkaprt.com/dfrl/10-29/).
- "The Question Protocol: How to Make Sure Every Form Field Is Necessary," Caroline Jarrett. A brief summation of the question protocol and how to apply it to your work (http://bkaprt.com/dfrl/04-03/).

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REFERENCES

Shortened URLs are numbered sequentially; the related long URLs are listed below for reference.

Introduction

00-01 https://twitter.com/futuraprime/status/580810337391345664

00-02 http://contentsmagazine.com/articles/10-timeframes/

Chapter 1

01-01 http://newsroom.fb.com/company-info/

01-02 https://www.flickr.com/help/forum/en-us/72157652019487118/

01-03 http://www.theguardian.com/technology/2015/may/20/flickr-complaints-offensive-auto-tagging-photos

01-04 http://www.theverge.com/2015/7/1/8880363/google-apologizes-photos-app-tags-two-black-people-gorillas

01-05 https://www.flickr.com/help/forum/en-us/72157652019487118/page7/#reply72157650200555104

Chapter 2

02-01 https://www.behance.net/gallery/8548573/Gender-Selection-(select-box-or-radio-button

02-02 http://tools.ietf.org/html/rfc761

02-03 http://alistapart.com/article/your-website-has-two-faces

02-04 http://www.washingtonpost.com/news/morning-mix/wp/2015/02/10/online-authenticity-and-how-facebooks-real-name-policy-hurts-native-americans/

02-05 https://twitter.com/Creepingbear/status/521853766803673088

02-06 https://www.facebook.com/help/112146705538576#What-names-are-allowed-on-Facebook

02-07 http://www.bbc.com/news/blogs-trending-31699618

02-08 https://www.facebook.com/chris.cox/posts/10101301777354543

02-09 http://newsroom.fb.com/news/2015/12/community-support-fyi-improving-the-names-process-on-facebook/

02-10 http://www.theatlantic.com/technology/archive/2014/12/how-self-tracking-apps-exclude-women/383673/

02-11 http://techcrunch.com/2015/06/09/apple-stops-ignoring-womens-health-with-ios-9-healthkit-update-now-featuring-period-tracking/

02-12 https://medium.com/@maggied/i-tried-tracking-my-period-and-it-was-even-worse-than-i-could-have-imagined-bb46f869f45

Chapter 3

03-01 http://web.natur.cuni.cz/~houdek3/papers/Shiv%20et%20al%201999.pdf

03-02 https://rainn.org/

03-03 https://web.archive.org/web/20150316132655/https://rainn.org/get-information/types-of-sexual-assault

03-04 https://rainn.org/get-information/types-of-sexual-assault

03-05 http://kryogenix.org/code/browser/everyonehasjs.html

Chapter 4

04-01 http://www.wsj.com/articles/SB10000872396390444165804578008740578200224

04-02 http://www.cambridge-news.co.uk/Cambridge-paediatrician-8217-s-outrage-Pure-Gym/story-26188693-detail/story.html

04-03 http://www.uxmatters.com/mt/archives/2010/06/the-question-protocol-how-to-make-sure-every-form-field-is-necessary.php#sthash.GGxLSg84.dpuf

04-04 https://www.simple.com/blog/security-for-your-swipes

04-05 http://alistapart.com/article/dont-poke-the-bear-creating-content-for-sensitive-situations

04-06 http://therumpus.net/2012/08/the-illusion-of-safetythe-safety-of-illusion/

Chapter 5

05-01 https://www.patientslikeme.com

05-02 http://library.iasummit.org/podcasts/closing-plenary-2/

Chapter 6

06-01 http://www.smashingmagazine.com/2012/02/collaging-getting-answers-questions-you-dont-know-ask/

Chapter 7

07-01 http://katekieferlee.com/blog/2014/5/4/my-favorite-editing-tip

07-02 https://hbr.org/2007/09/performing-a-project-premortem

07-03 https://www.gov.uk/service-manual/user-centred-design/resources/patterns/names.html

07-04 https://hbr.org/2015/05/outsmart-your-own-biases

Chapter 8

08-01 http://www.karlgroves.com/2012/01/27/chasing-the-accessibility-business-case-conclusion/

08-02 http://blogs.wsj.com/digits/2015/03/26/slacks-valuation-more-than-doubles-to-2-8-billion-in-five-months/

08-03 http://www.nytimes.com/2015/07/12/business/stewart-butterfield-of-slack-experience-with-empathy-required.html

08-04 https://www.gov.uk/government/publications/government-digital-strategy/government-digital-strategy#what-we-have-already-done

08-05 https://hbr.org/2014/10/the-value-of-keeping-the-right-customers/

Conclusion

09-01 http://contentsmagazine.com/articles/10-timeframes/

Resources

10-01 http://contentsmagazine.com/articles/10-timeframes/

10-02 http://mappingexperiences.com/

10-03 http://shop.oreilly.com/product/0636920036593.do

10-04 https://medium.com/tragic-design/how-bad-ux-killed-jenny-ef915419879e

10-05 https://vimeo.com/68470326

10-06 http://library.iasummit.org/podcasts/closing-plenary-2/

10-07 http://rosenfeldmedia.com/books/practical-empathy/

10-08 http://alistapart.com/article/your-website-has-two-faces

10-09 http://www.smashingmagazine.com/2012/02/collaging-getting-answers-questions-you- dont-know-ask/

10-10 http://rosenfeldmedia.com/books/interviewing-users/

10-11 http://abookapart.com/products/just-enough-research

10-12 http://rosenfeldmedia.com/books/mental-models/

10-13 https://hbr.org/2015/05/outsmart-your-own-biases

10-14 http://us.macmillan.com/thinkingfastandslow/DanielKahneman

10-15 http://contentsmagazine.com/articles/the-audience-you-didn%E2%80%99t-know-you-had/

10-16 https://www.youtube.com/watch?v=NheE6udjfGI

10-17 https://www.youtube.com/watch?v=UFfCuCUfqyc

10-18 https://www.gov.uk/design-principles

10-19 http://meyerweb.com/eric/thoughts/2014/12/24/inadvertent-algorithmic-cruelty/

10-20 https://medium.com/@maggied/i-tried-tracking-my-period-and-it-was-even-worse-than-i-could-have-imagined-bb46f869f45

10-21 https://medium.com/@zip/my-name-is-only-real-enough-to-work-at-facebook-not-to-use-on-the-site-c37daf3f4b03

10-22 https://www.sarawb.com/2015/01/13/personal-histories/

10-23 https://www.youtube.com/watch?v=D3e3V66TH2Y

10-24 https://vimeo.com/148927676

10-25 http://alistapart.com/article/dont-poke-the-bear-creating-content-for-sensitive-situations

10-26 http://kryogenix.org/code/browser/everyonehasjs.html

10-27 http://www.formsthatwork.com/

10-28 http://nicolefenton.com/interface-writing/

10-29 http://qntm.org/support

INDEX

L

M

O

P

Q

R

S

T

U

Y

ABOUT A BOOK APART

We cover the emerging and essential topics in web design and development with style, clarity, and above all, brevity—because working designer-developers can't afford to waste time.

COLOPHON

The text is set in FF Yoga and its companion, FF Yoga Sans, both by Xavier Dupré. Headlines and cover are set in Titling Gothic by David Berlow.

ABOUT THE AUTHORS

Photograph by Jeffrey Zeldman

Eric A. Meyer started working on the web in late 1993. Since then, he's been a college webmaster, one of the original CSS Samurai, a standards evangelist at Netscape, the author of many books and online resources, an occasional code artist, the technical lead at Rebecca's Gift, and a cofounder of An Event Apart. He lives with his family in Cleveland.

Photograph by Carina Romano

Sara Wachter-Boettcher runs a content strategy consultancy based in Philadelphia, where she works with clients like Trek Bicycles, The Bill & Melinda Gates Foundation, the Associated Press, and Harvard. She is also the author of *Content Everywhere*, a book about creating flexible, mobile-ready content, and a past editor-in-chief of *A List Apart*.