

chapter **1**

User Experience and Why It Matters

We have a double-edged relationship with the products and services we use. They empower us and frustrate us; they simplify and complicate our lives; they separate us and bring us closer together. But even though we interact with countless products and services every day, we easily forget that they are made by people, and that someone, somewhere should get the credit when they work well for us—or get the blame when they don't.

Everyday Miseries

Everyone, every once in a while, has one of those days.

You know the kind of day I'm talking about: You wake up to sunlight streaming in your window and wonder why your alarm clock hasn't gone off yet. You look over to see that your clock thinks it's 3:43 a.m. You stumble out of bed to find another clock, which tells you that you can still make it to work on time—if you leave in 10 minutes.

You turn on the coffeemaker and hustle to get dressed, but when you go to retrieve your dose of life-sustaining caffeine, there's no coffee in the pot. No time to figure out why—you've got to get to work!

You get about a block from your house when you realize that the car needs gas. At the gas station, you try to use the one pump that takes credit cards, but this time it won't accept yours. So you have to go inside and pay the cashier, but first you have to wait in line while the cashier very slowly helps everyone in front of you.

You have to take a detour because of a traffic accident, so the drive takes longer than you expected. It's official: Despite all your efforts, you are now late for work. Finally, you make it to your desk. You're agitated, harried, weary, and irritable—and your day hasn't even really started yet. And you still haven't had any coffee.

Introducing User Experience

It seems like a string of bad luck—just one of those days. But let's rewind that series of events, look closer, and see if, somehow, all that bad luck could have been avoided.

The accident: The accident on the road happened because the driver took his eyes off the road for a moment to turn the radio down. He had to look down because it was impossible to identify which was the volume control by touch alone.

The register: The line at the register in the gas station moved so slowly because the cash register was complex and confusing, and unless the clerk paid extra-close attention while ringing something

up, he would make a mistake and have to start all over again. If the register had been simpler and the layout and colors of the buttons different, that line never would have formed.

The pump: You wouldn't have had to stand in that line at all if the pump had accepted your card. It would have done so if you had turned the card around the other way to swipe it, but nothing on the pump indicated which way the card should be turned, and you were in such a hurry that you didn't think to try every orientation.

The coffeemaker: The coffeemaker didn't make coffee because you didn't push down the power button all the way. The machine doesn't do anything to let you know that it has been turned on: no light, no sound, no resistance you can feel when the button makes contact. You thought you had turned it on, but you were wrong. The problem could have been avoided altogether if you had set the coffeemaker to start brewing automatically first thing in the morning, but you never learned how to use that function—if you knew it existed at all. The display on the front is still blinking 12:00.

The clock: And now we come to the factor that started the whole chain of events: the alarm clock. The alarm didn't go off because the time was wrong. The time was wrong because your cat stepped on the clock in the middle of the night and reset it for you. (If this sounds implausible to you, don't laugh—it has happened to me. I have had to go to surprising lengths to find a clock that is impervious to cat meddling.) A slightly different configuration of buttons would have prevented the cat from resetting the clock, and consequently you would have been out of bed with plenty of time—no need to rush at all.

In short, every one of the previous cases of “bad luck” could have been avoided had someone made different choices in designing a product or service. These examples all demonstrate a lack of attention to the **user experience**: the experience the product creates for the people who use it in the real world. When a product is being developed, people pay a great deal of attention to what it does. User experience is the other, often overlooked, side of the equation—how it works—that can often make the difference between a successful product and a failure.

User experience is not about the inner workings of a product or service. User experience is about how it works on the outside, where a person comes into contact with it. When someone asks you what it’s like to use a product or service, they’re asking about the user experience. Is it hard to do simple things? Is it easy to figure out? How does it feel to interact with the product?

That interaction often involves pushing a lot of buttons, as in the case of technology products such as alarm clocks, coffeemakers, or cash registers. Sometimes, it’s just a matter of a simple physical mechanism, such as the gas cap on your car. However, every product that is used by someone creates a user experience: books, ketchup bottles, reclining armchairs, cardigan sweaters.

For any kind of product or service, it’s the little things that count. Having a button click when you push it down doesn’t seem like much, but when that click makes the difference between getting coffee and not getting coffee, it matters a great deal. Even if you never realized that the design of that button was causing you trouble, how would you feel about a coffeemaker that you were able to use successfully only part of the time? How would you feel

about the manufacturer? Would you buy another product from that company in the future? Probably not. Thus, for the want of a button that clicks, a customer is lost.

From Product Design to User Experience Design

When most people think about product design (if they think about product design at all), they often think of it in terms of aesthetic appeal: a well-designed product is one that looks good to the eye and feels good to the touch. (The senses of smell and taste don't come into play for most products. Sound is often overlooked but can be an important part of the aesthetic appeal of a product.) Whether it's the curve of a sports car's body or the texture of a power drill's grip, the aesthetic dimension of product design is a sure attention-getter.

Another common way people think about product design is in functional terms: A well-designed product is one that does what it promises to do. And a badly designed product is one that somehow doesn't: scissors that don't cut even though the blades are sharp, a pen that doesn't write even though it's full of ink, a printer that constantly jams.

All of these can certainly be failures of design. These products might look great and work well functionally, but designing products with the user experience as an explicit outcome means looking beyond the functional or aesthetic.

Some people responsible for creating products may not think in terms of design at all. For them, the process of creating a product is about development: steadily building up and refining the features

and functions of the product until they add up to something viable in the marketplace.

In this view, the design of the product is dictated by its functionality—or, as designers sometimes put it, “form follows function.” This approach makes complete sense for the inner workings of a product, the parts concealed from a user. But when it comes to the parts of a product that are user-facing—the buttons, displays, labels, and so forth—the “correct” form isn’t dictated by functionality at all. Instead, it’s dictated by the psychology and behavior of the users themselves.

User experience design often deals with questions of context. Aesthetic design makes sure the button on the coffeemaker is an appealing shape and texture. Functional design makes sure it triggers the appropriate action on the device. User experience design makes sure the aesthetic and functional aspects of the button work in the context of the rest of the product, asking questions like, “Is the button too small for such an important function?” User experience design also makes sure the button works in the context of what the user is trying to accomplish, asking questions like, “Is the button in the right place relative to the other controls the user would be using at the same time?”

Designing (for) Experience: Use Matters

What’s the difference between designing a product and designing a user experience? After all, every product intended for humans has a user, and every time a product is used, it delivers an experience. Consider a simple product such as a chair or a table. To use the chair you sit on it; to use the table you place other objects on it. In

both cases, the product can fail to deliver a satisfactory experience: if the chair won't support the weight of a person, for example, or the table is unsteady.

But the manufacturers of chairs and tables tend not to employ user experience designers. In these simple cases, the requirements to deliver a successful user experience are built into the definition of the product itself: In some sense, a chair you can't sit on isn't a chair at all.

With more complex products, though, the requirements to deliver a successful user experience are independent of the definition of the product. A telephone is defined by its ability to place and/or receive calls; but there are practically infinite variations on the telephone that can deliver on this basic definition—with widely varying degrees of successful user experience.

And the more complex a product is, the more difficult it becomes to identify exactly how to deliver a successful experience to the user. Each additional feature, function, or step in the process of using a product creates another opportunity for the experience to fall short. A modern mobile phone has many, many more functions than a desk phone of, say, the 1950s. As a result, the process of creating a successful product has to be quite different. That's where product design has to be supported by user experience design.

User Experience and the Web

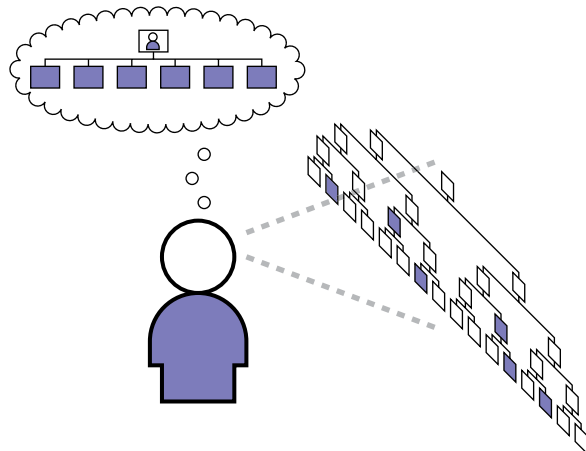
User experience is vital to all kinds of products and services. This book is primarily about the user experience of one particular kind of product: Web sites. (I'm using the term *site* here to refer to both content-oriented Web products and interactive Web applications.)

On the Web, user experience becomes even more important than it is for other kinds of products. But the lessons we've learned from creating user experiences on the Web can be applied far beyond its boundaries.

Web sites are complicated pieces of technology, and something funny happens when people have trouble using complicated pieces of technology: They blame themselves. They feel like they must have done something wrong. They feel like they weren't paying enough attention. They feel stupid. Sure, it's irrational. After all, it's not their fault the site doesn't work the way they expect it to. But they feel stupid anyway. And if you intend to drive people away from your site (or any product), it's hard to imagine a more effective approach than making them feel stupid when they use it.

Regardless of the type of site, in virtually every case, a Web site is a self-service product. There is no instruction manual to read beforehand, no training seminar to attend, no customer service representative to help guide the user through the site. There is only the user, facing the site alone with only her wits and personal experience to guide her.

Faced with a wide array of choices, the user is left to her own devices to determine which features of a site will meet her needs.



It's bad enough that she's been stuck in the position of having to figure out the site on her own. The fact that most sites don't even acknowledge her helpless condition only makes matters worse. Despite the vital strategic importance of user experience to the success of a Web site, the simple matter of understanding what people want and need has been a low priority for most of the history of the medium.

If user experience is such a vital part of any Web site, why is it so often neglected in the development process? Many Web sites are built with the idea that being first to market is the key to success. In the earliest days of the Web, sites like Yahoo! built early leads that later competitors struggled to overcome. Established companies raced to set up Web sites, determined not to be perceived as falling behind the times. But in most cases, companies considered merely having deployed the site a great accomplishment; whether the site actually worked for people was, at best, an afterthought.

To gain market share against these first-movers, competitors often add more and more content and functionality in hopes of drawing in new customers (and maybe stealing a few customers from the competition). This race to cram more features into products is hardly unique to the Web; from wristwatches to mobile phones, featuritis is endemic to many product categories.

Having more features, however, turns out to be only a temporary source of competitive advantage. With the added complexity that comes with an ever-expanding feature set, sites become increasingly unwieldy, hard to use, and unappealing to the very first-timers they are supposed to draw in. And still, many organizations pay little attention to what users like, find valuable, or are really able to use.

More and more businesses have now come to recognize that providing a quality user experience is an essential, sustainable competitive advantage—not just for Web sites, but for all kinds of products and services. It is user experience that forms the customer’s impression of a company’s offerings; it is user experience that differentiates a company from its competitors; and it is user experience that determines whether your customer will ever come back.

Good User Experience Is Good Business

Maybe you don’t sell anything on your site. All you provide is information about your company. It might seem that you have a monopoly on that information—if people want it, they have to get it from you. You don’t have competition in the same way that an online bookstore does. Nevertheless, you can’t afford to neglect the user experience of your site.

If your site consists mainly of what Web pros call *content*—that is, information—then one of the main goals of your site is to communicate that information as effectively as possible. It’s not enough just to put it out there. It has to be presented in a way that helps people absorb it and understand it. Otherwise, the user might not ever find out that you offer the service or product they’re looking for. And even if they do manage to find that information, they’re likely to draw the conclusion that if your site is difficult to work with, your company probably is as well.

Even if your site is a Web-based application that people can use to accomplish certain tasks (like buying airplane tickets or managing bank accounts), effective communication is a key factor in the

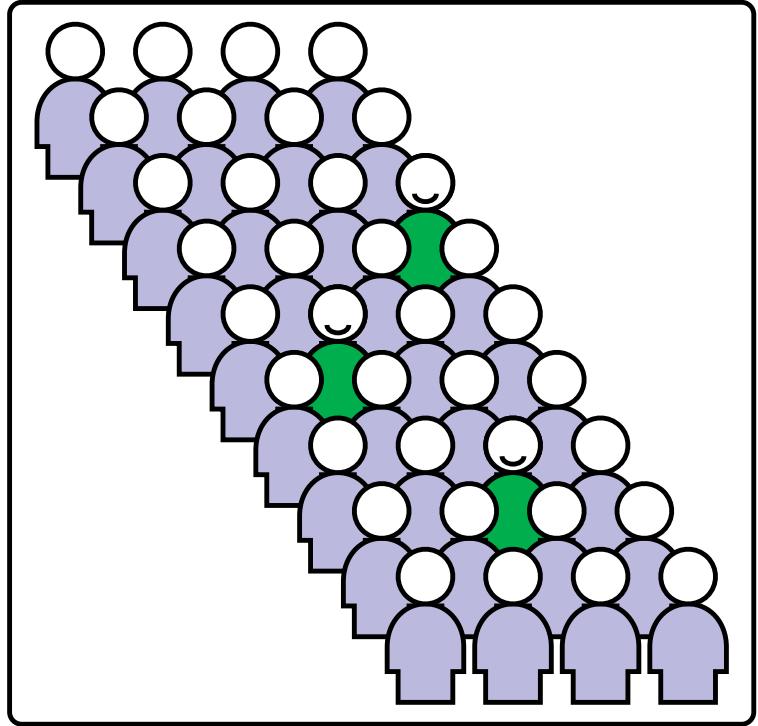
success of your product. The world's most powerful functionality falters and fails if users can't figure out how to make it work.

Simply put, if your users have a bad experience, they won't come back. If they have an OK experience with your site but a better experience with your competitor's site, they'll go back to that competitor, not you. Features and functions always matter, but user experience has a far greater effect on customer loyalty. All your sophisticated technology and brand messaging won't bring those customers back a second time. A good user experience will—and you don't get much of a second chance to get it right.

Customer loyalty isn't the only way that focusing on the user experience of your site can pay off. Businesses with an eye on the bottom line want to know about the **return on investment**, or ROI. ROI is usually measured in terms of money: For every dollar you spend, how many dollars of value are you getting back? That's the ROI. But return on investment does not have to be expressed in strictly monetary terms. All you need is a measurement that shows that your money going out translates into value for your company.

One common measure of return on investment is **conversion rate**. Any time you want to encourage your customers to take the next step in building a relationship with you—whether that involves something as complex as customizing the site to their preferences or as simple as signing up to receive an e-mail newsletter—there's a conversion rate you can measure. By keeping track of what percentage of users you convert to the next level, you can measure how effectively your site is meeting your business goals.

Conversion rate is a common way of measuring the effectiveness of a user experience.



3 subscription sign-ups

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36 visitors

=

8.33% conversion rate

Conversion rate becomes even more important in the case of commerce sites. Far more people browse a commerce site than buy from it. A quality user experience is a key factor in converting these casual browsers into active buyers. Even a tiny increase in your conversion rate can translate into a dramatic leap in revenue. It's not

uncommon for a change in conversion rate as small as one-tenth of one percent to result in a revenue increase of ten percent or more.

On any site where users have the opportunity to give you some money, you have a measurable conversion rate, whether you're selling books, cat food, or subscriptions to the content of the site itself. Conversion rate can give you a better sense of the return on your user experience investment than simple sales figures. Sales can suffer if you're not successful in getting the word out about your site. Conversion rate tracks how successful you are in getting those who visit to spend some money.

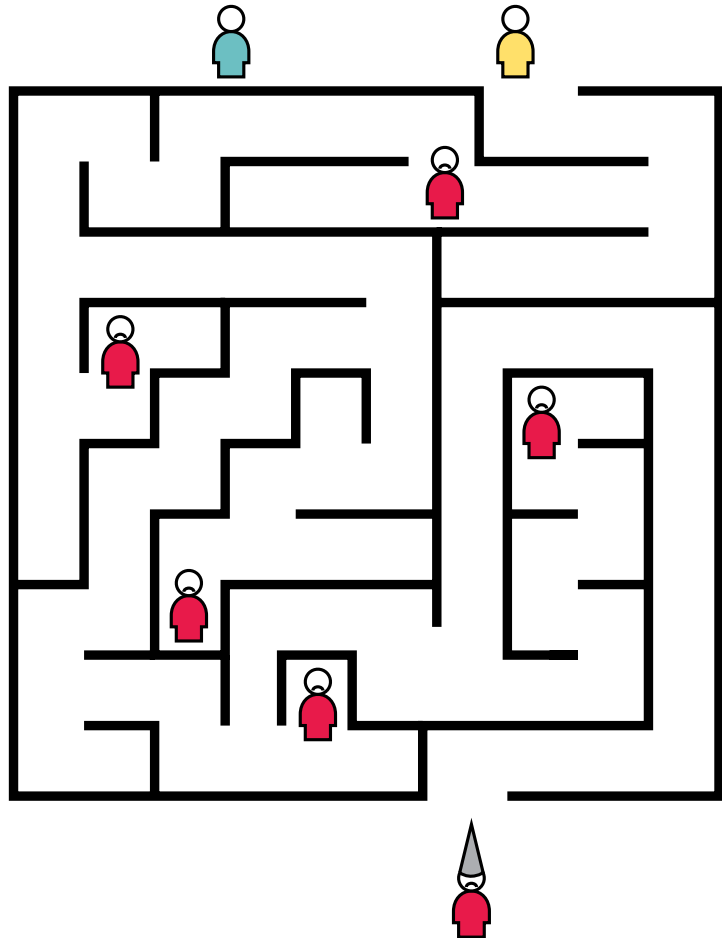
Even if your site doesn't lend itself readily to an ROI metric like conversion rate, that doesn't mean the effect of user experience on your business is any less significant. Whether they are used by your customers, your partners, or your employees, Web sites can have all kinds of indirect effects on the bottom line.

No one outside your company might ever see the site you run (as in the case of an internal tool or an intranet), but the user experience still makes a huge difference. Often, it can mean the difference between a project that creates value for the organization and a project that becomes a resource-consuming nightmare.

Any user experience effort aims to improve efficiency. This basically comes in two key forms: helping people work faster and helping them make fewer mistakes. Improving the efficiency of the tools you use improves the productivity of the business as a whole. The less time it takes to complete any given task, the more you can get done in a day. In keeping with the old notion that time is money, saving your employees time translates directly into saving your business money.

Efficiency doesn't only affect the bottom line, though. People like their jobs more when their tools are natural and easy to use, not frustrating and needlessly complex. If that person is you, these kinds of tools make the difference between coming home satisfied at the end of the day and coming home exhausted and hating your job. (Or at least, if you are coming home exhausted, it's for the right reasons—not because you've been struggling with your tools.)

Technology products that don't work the way people expect make them feel stupid—even if they ultimately accomplish what they set out to do.



If that person is your employee, providing these kinds of tools increases not only their productivity, but also their job satisfaction, making the employee less likely to seek a new job. This, in turn, means you save on recruiting and training costs, plus you benefit from the higher level of quality that a more dedicated, experienced employee brings to her work.

Minding Your Users

The practice of creating engaging, efficient user experiences is called **user-centered design**. The concept of user-centered design is very simple: Take the user into account every step of the way as you develop your product. The implications of this simple concept, however, are surprisingly complex.

Everything the user experiences should be the result of a conscious decision on your part. Realistically, you might have to make a compromise here and there because of the time or expense involved in creating a better solution. But a user-centered design process ensures that those compromises don't happen by accident. By thinking about the user experience, breaking it down into its component elements, and looking at it from several perspectives, you can ensure that you know all the ramifications of your decisions.

The biggest reason user experience should matter to you is that it matters to your users. If you don't provide them with a positive experience, they won't use your product. And without users, all you've got is a dusty Web server (or warehouse full of products) somewhere, idly waiting to fulfill a request that will never come. For the users who do come, you must set out to provide them with an experience that is cohesive, intuitive, and maybe even pleasurable—an experience in which everything works the way it should. No matter how the rest of their day has gone.