Chapter 1

Defining UX and the Process

In This Chapter

▶ Orienting you to what UX is about and why it's important

▶ Understanding how to use UX

▶ Defining the various components that comprise the world of UX design

Any darn fool can make something complex; it takes a genius to make something simple.

— Albert Einstein

Maybe you think UX is a high-tech term that applies only to folks who work with computers. And prior to picking up this book, you had no reason to understand anything about UX. Or maybe you develop code for a website and want to learn how to more effectively work with folks in UX. Regardless, it is safe to bet that UX has impacted your life in numerous ways, quite possibly every day or even every hour. If you've ever browsed a website, purchased a product online, checked the weather via an app on a smartphone, used an electronic kiosk at an airport to print a ticket, or interacted with an interface on your television to watch a movie, you have touched on the world of UX. There is a UX that surrounds many types of products, from home appliances such as the interface on microwave ovens to the dashboard of your car. Empowering so many of today's everyday products and digital experiences is the art and science of UX: making our interactions and transactions seamless, effective, and oftentimes invisible for people who use them.

UX is known by several other names, such as UXD (user experience design), user-centered design, human-computer interaction (HCI), and experience design. Although there are subtle differences in these expressions, regardless of what you call it, UX plays a critical role in making our physical and digital lives frictionless and enjoyable. When good UX practices are not deployed, the result is interactions that are frustrating, confusing, ineffective, or just plain useless or ugly. If you have ever used a website and walked away from the experience so frustrated that you wanted to throw your monitor out a window, you know what it means to encounter bad UX design.

Perhaps you are thinking of launching your own website, designing a blog, or maybe you just want to better understand the basic design considerations of the world of digital media. Maybe you have a website but it is not accomplishing your intended goals. Or you have to ramp up quickly on UX so that you can work with a UX professional. Regardless of your starting point, taking a look at UX will help you think differently about the digital phenomenon that is changing our world. This chapter helps you get started on the UX journey.

What Is UX, Really?

UX, simply put, stands for user experience. You may be asking, "Why not UE?" But in the world of user interaction, *X* takes precedence over the letter *E*. *User experience* is the design practice that focuses on creating experiences — typically digital experiences like websites, for example — that are easy to use and satisfying for users. It focuses on a design practice that puts the user at the center of all considerations, so that the eventual experience provides interactions that are intuitive, helpful, and even enjoyable.

Although user experience can apply to many different types of products and designs, the scope of this work is to focus primarily on digital interfaces. In this context, user experience design is changing all parts of our world, including:

- **Websites:** Content sites, social media, and e-commerce
- **Mobile apps:** Smartphone applications
- **Tablet experiences:** Apps for tablets
- **Kiosks:** Seen in airports, shopping malls, and so forth
- **Software:** Standard software applications such as spreadsheets and word processing
- **Product Interfaces:** GPS systems, interfaces in automobiles to control audio and climate, digital interfaces to common household appliances such as TVs, and microwaves

From a business standpoint, UX best practices help to define how your brand or business will be experienced by customers through digital media.

Good UX can ensure that customers use and actually enjoy the experiences you design. If you've ever used a website, software application, or product interface that confused you, you've probably experienced a design process that did not leverage UX best practices. In addition, UX can be a key component in establishing customer loyalty and goodwill.

The Promise of Good UX Design

Good UX design has three fundamental measurements, and they are widely known throughout the UX digital design industry. Any UX design should embody all the following components:

✔ **Useful:** The solution provides content, features, or functions that meet common user needs; in short, the experience must be useful in all aspects. As an example, an e-commerce website could include the capability to see if a specific product is in stock or not — a simply useful feature.

✔ **Usable:** The solution provides functionality that is easy to use and intuitive, for which basic functions do not require much active concentration to accomplish. Given the e-commerce example just used, this could mean that the process to purchase a product is simple and quick.

✔ **Desirable:** Good UX designs enable experiences that are desirable, or even delightful. So not only does the solution provide useful features that are easy to use, but it also does so in a way that engages the user — often through great visual design, content, and copy. To continue with the e-commerce example, the capability to purchase a product online should be so compelling and enjoyable that users are likely to come back again sometime soon or even share the experience with others within their friends and family.

WARNING!

If the user experience is not all these things — useful, usable, and desirable — it is very possible the shopper will find other ways to purchase your product or will purchase a similar product from another source. For example, if a user gets frustrated because your website makes her do all sorts of things she does not or cannot understand, she will quite likely jump to a competitor's website to purchase a similar product. And if you are really unfortunate, she might post her experience in social media, such as on Yelp.com, Twitter, or Facebook, adding further insult to injury and informing others to not use your experience!

UX Components

UX design is a particularly multidisciplinary practice that integrates a number of components. The following sections highlight these components to help you better understand what makes up UX. In later chapters, you find out more about each of these areas.

Information architecture

Information architecture is one of the most fundamental components to good UX design and refers to breaking down a solution, website, or screen into the most basic contents, including these:

- ✔ **Navigation:** How a user navigates on a site
- ✔ **Content organization:** How information is organized, into which modules or "containers" it is placed, and where the modules go
- ✔ **Visual priority of page elements:** Where things fall or reside on the screen
- ✔ **Interaction design:** What the interaction model is (defined later)

Information architecture is most often brought to life during the design process through a *wireframe:* a black-and-white sketch of a web page or an application screen, much like an architectural blueprint that provides a basic illustration of a house under construction. Wireframes and information architecture also typically include technology and functional requirements, which help to define how the experience will change (or not) when a user interacts with it.

Content strategy

Content strategy determines how, why, where, and when content will go into an experience. Content refers to any type of information that is recorded (video, images, copy, text, information). The content for the experience is another of the basic components to defining the user's overall experience. Content strategy is similar to the overall editorial strategy for the experience, outlining the objectives and defining characteristics of all the content, whether that is written content or functionality. All content within an experience should have a purpose and must be meaningful in helping a user achieve a task. Digital content must be written for "scanability," understanding that most users digest written content on a screen quickly, and oftentimes without reading the full page.

Interaction design

Interaction design defines the rules for how a user interacts with an experience: what happens when users navigate, choose buttons, and follow links, for instance. Interaction design helps to define the journey a user goes through to accomplish a task. Say a user wants to interact with online support on a website. What does the user do before, during, and after that

experience? What types of interaction should the website include so that all the user's needs are met? The area of interaction design is growing as the types of interactions with digital products increases. For example, most smartphones allow for touchscreen interactions, providing new models of interaction design that include touch, swipe, and pinch.

Usability

Usability refers to how well the experience performs against users' interactions with it. For example, if Sheila wants to check on her prescription using a digital kiosk in her local pharmacy, can she quickly find the status of whether the pharmacist has filled it? Is the kiosk useful to her, or is it just an oversized gizmo unnecessarily taking up store real estate? Is the experience clear and intuitive to users, or does it require active concentration to complete basic functions or needs? Poor usability is an experience killer in today's world of digital media. And an experience killer can mean a death in the relationship between you and your user.

You should know your users — those who interact with your product, service, brand, company, or all of the above via a digital interface — as well as you know your best friends (or even better). This means you need to get into their minds and understand how they think, act, look, and behave. This book explores how you begin to understand your uses, generally through user interviews, usability testing, and other techniques that are explored later in the book. You also have to stay on top of your users' needs. Just as with friendships, user needs and behaviors change. The better you know your users, the more likely the experience you build will resonate with them, which translates into success for your business.

Visual design

The visual aspects to any user's experience are the most visible components of the solution. *Visual design* not only helps to ensure a solution is aesthetically pleasing, but it also helps ensure that the solution follows brand consistency. In addition, though, visual design helps a user digest all the content on any screen, so it's a key contributor to the usability of an experience.

Of course anyone who pays a professional to build an interface wants it to look good. But sometimes, this becomes the main priority — color and imagery take the front seat to all other design decisions. Although visual design is the final icing on top of an effective UX, it's imperative that the other aspects of UX are also represented in any final solution. A beautiful website that contains difficult or unintuitive navigation will impress no one and may ultimately compromise a business's goals.

UX Is a Big Deal

Simply put, good user experience is good business. Many companies — as big as GE and as small as your local web design shop — are now focusing on the discipline of UX. It's just as important for Tom's Tavern in Eliva, Wisconsin, to embody good usability so customers can easily order food for takeout as it is for a Fortune 100 company to have a robust user experience to sell products online. Apple, for example, is known for simplicity in the UX of its products and software. Just how important is UX to the business bottom line? As shown in Figure 1-1, companies that provide an outstanding customer experience outperform in the S&P.

Customer Experience Leaders Outperform the Market
6-Year Stock Performance of Customer Experience Leaders vs. Laggards vs. S&P 500 (2007-2012)
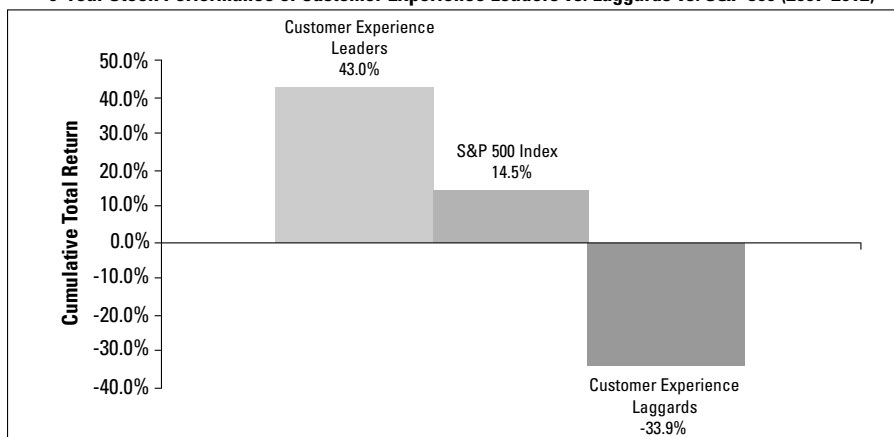

Figure 1-1: Customer experience leaders outperform the market.

Here are some areas in which good UX can have a significant business impact:

✓ **Customer satisfaction and loyalty:** The better the experience with a product or service, the more likely customers are to continue to use it, and to recommend it. The quality of the experience is becoming an increasing factor in overall customer loyalty. If you use online banking and recently switched banks, it's easy to compare which bank has better online banking services, more useful tools and features, and is easier to use. Most consumers feel more loyal to the bank that offers a better user experience.

✓ **Revenue:** Clarity and consistency in UX will help ensure shoppers can get through the online purchase process quickly and efficiently. For big box retailers like Walmart, Target, and Amazon, clarity in the UX of the shopping and checkout process can mean the difference in millions of dollars in sales on any given shopping day.

✔ **Traffic:** The better the UX on a website, the more likely users will spend more time on the site and are more likely to return at a later date. Increased traffic and dwell time have a direct correlation to rankings in search engines like Google, and the higher the rankings, the more additional traffic that will visit the site. In short, better experiences help deliver more customers.

✔ **Brand expression:** and finally, the better the UX, the better the impression of the brand overall. A famous designer, Clement Mok, once was quoted as saying, "the Experience is the Brand." In his words, the user experience is an active expression of the brand: a bad experience leads to poor brand perception. A good user experience leads to positive brand impressions and higher longer-term brand value.

How UX and Usability Work Together

UX and usability are often confused. Certainly, there is a close relationship between the two, but these two concepts are fundamentally different. In short, UX is a broader design practice that ensures the usability of a solution, but UX is focused on broader objectives, such as usefulness and overall engagement. Usability is an output of the UX, and within UX seeks to test the performance of the solution. The following sections help to clarify how UX differs from usability.

The basics of usability

Usability is an area of research and testing that primarily ensures that any digital solution works, and is easy to use and intuitive. It also tests to make sure that a user can accomplish the goals embodied by the digital solution. For example, a local car dealership may want a website so that a user can locate the shop, identify which cars are currently in stock, schedule service for an existing car purchase, or call the shop to discuss a new car. The usability of a solution can be tested and explored in many ways, and several of those methods are explained in Chapter 12. Consider usability testing to be a primary method of answering the question, "How easy is a solution to use?" Following are some examples of common problems that usability testing can identify in a solution:

✔ **Navigation:** How does a solution work, where does a user click to accomplish key tasks, and is the website or application structured to make sense to a user?

✔ **Content:** Is the content clear, and is it the right level of content at the right time?

✔ **Dead ends:** Are there navigational pathways that don't lead to the completion of a user's task; dead links; nonworking buttons; or links that take users to features they did not expect?

✔ **Cognitive overload:** Are you asking the user to digest too much information or complete too many functions or fields, or have you designed a user flow that is too complicated?

TIP

The most important measurements for usability are clarity, consistency, and ease of use. Thus, if you build an experience that is clear, concise, and easy to use, then chances are your solution will be effective and you will please your users.

Comparing UX to usability

UX, on the other hand, has a broader set of focus areas beyond just usability. If usability aims to answer the question, "How easy is a solution to use?" the world of UX design also aims to answer the questions, "How useful was the solution?" and "How enjoyable was the solution to use?"

Making a solution easy to use is one of the key objectives behind user experience design, but UX also focuses on making sure a solution contains content, features, and functions that are most useful to a user (not simply features that work well). UX also focuses on how satisfying and engaging a solution is, which is determined by factors other than how simple it is to use. Factors like visual appeal, the tone of written content, and how the website or system responds are all key components to determining how engaging and desirable the final solution will be.

Necessary UX Inputs

One of the goals of UX is to make complex interactions and transactions easy and enjoyable to accomplish. That said, it may not surprise you that many considerations go into designing the experience to ensure that it feels seamless. The building blocks of the UX design process focus on a number of things: business goals, target users, enabling technologies, and content, among others. All these topics become strategic inputs to the UX design process.

Strategic inputs include the following: business objectives, competitive landscape and technical architecture, design, and content input. You should consider all these areas when building a user experience, as each impacts the overall experience. The relationship between each input and user experience is examined in the following sections.

Business objectives

The most fundamental input in the UX design process is a solid understanding of the underlying business objectives. What are you trying to accomplish? Do you want to sell products? Provide customer information to reduce phone calls? Engage and entertain users? A clear definition of the business goals and objectives is the first and most critical step.

For example, Deborah, a bakery owner in Portland, Maine, wants to build a website for desktop, mobile, and tablet devices to promote her business. Her business goals in doing so include promotion of her business by generating buzz about her shop; selling more products by providing customers the capability to order online; and, competitively differentiating herself from other bakeries in her area by building a best-in-class website. To create a successful experience, Deborah must first consider what constitutes success and then identify ways to demonstrate its value.

After you define these objectives, you also have to determine how you will measure success. It's critical to define the key success metrics, or key performance indicators (KPIs), at the start of the project because they will impact all other decisions you make throughout the process. These metrics also ensure that the final experience aligns with your original goals.

In addition, though, you must consider other operational business objectives, which may be equally important. How will the experience be maintained? Who will update the content? How will the experience be modified and enhanced over time?

Competitive landscape

Before you begin the design process, it's important to consider the competitive landscape: Who else possesses a similar product or service that is on the market? Has he built a user experience to promote, sell, or support his product or service? What can you learn from assessing the UX of that service? What do you like? What features or content may be missing?

Assessing your competition means that you assess what others in the same industry are doing, especially around any types of user interaction they create. For example, when Deborah, mentioned earlier, decides to build a web presence, she reviews all the competitors in Portland to see what they offer. Who has a website and who does not? With those who do, what features do they offer their users on their websites? Deborah also looks at websites for similar businesses in other cities to determine if there are any other ideas she can glean about building a best-in-class user experience.

Given the iterative nature of digital design, where websites and applications are continually updated and enhanced, it's particularly useful to take a deep look at any similar experiences (products or services) that exist on the market. You can learn a lot from quickly assessing these services, and avoid many of the UX pitfalls that are common in design today.

Technology architecture

This input includes which technology is necessary to support the solution you are building. Which technology is necessary to create, produce, publish, and maintain your user experience? Also, where will the user experience exist (for instance, a website on mobile, tablet, and desktop)? What technology will support you solution?

Taking time to assess the underlying technology architecture will ensure that the design choices you make throughout the process will be supported by the underlying technology. Some of the more simple technology questions that need to be addressed are: Which web browsers will be supported? Will the solution be used via mobile devices, and if so, which operating systems will be supported (Apple, Android, and so forth)?

If you are designing an e-commerce or more complex solution, you need to explore additional areas, including:

- ✔ Is there a system to publish and manage content, such as a content management system?

- ✔ If you are selling products, how will the product catalog be updated and maintained? How will you process payments?

- ✔ Will the website or app require a user to register or authenticate herself?

These topics can get very technical, very quickly, so it is critical for all team members on a UX project to have a common understanding of the technologies that will enable the experience. They play a critical role in the eventual experience.

Design inputs

Design inputs include the components necessary for thorough and robust design experiences. Two considerations form these inputs: profiles or personas, and customer journeys or scenarios.

Profiles and personas help frame which user behaviors are necessary to consider in your ultimate experience, while scenarios and journeys provide the different paths a user may take to accomplish a task within the experience.

Profiles or personas

Another fundamental building block of UX is an understanding of your target audience: Who are they, how will they use your solution, and what do you know about them? If you want to design successful user-centered solutions, profiles and personas provide a helpful understanding of how your user is critical.

Frequently, though, one of the bigger challenges with respect to understanding your target user is not the lack of information about users, but the challenge of *prioritizing all the information* you know about users. For example, for most solutions, not all users are equally important. It's important that you document which type of user may be your top priority. For a baby goods company, the priority persona might be expectant mothers, rather than soon-to-be uncles and aunts (gifters), who may be important, but not as critical as expectant mothers.

User information is typically distilled into simple and digestible formats, called user profiles or personas. Personas help to bring to life the target user for your solution, highlight mission-critical information about that user, and strip away the unnecessary details. You use these personas throughout the entire project lifecycle.

Scenarios and journeys

To help bring a prospective solution to life, a persona is typically paired with a scenario or a user journey. Scenarios tell a simple story of the process a target user goes through, and how your new solution is used along the way. For an e-commerce example, your scenario might explain the process that an expectant mother goes through to purchase products for the nursery.

The user journey, similarly, tells a story, but it's typically a higher-level story, with broader reach and impact. For example, a scenario may illustrate how the mother-to-be researches a crib for the nursery, while the user journey shows the broader process of getting the nursery ready overall.

Brand guidelines

You will want to understand any brand requirements your organization may have, because these may impact the eventual user experience. In some cases, such as a small business building an entirely new website, no brand guide-lines may exist. For larger companies, these guidelines typically come in the form of brand guidelines, which outline color palettes, logo usage, and fonts, among other details. For smaller projects and smaller businesses, it's helpful to identify and assess any existing collateral that will help inform the visual look and feel you will be creating. This information can be in the form of printed brochures, corporate identity, or even product specifications.

Experience models

And finally, one last artifact that is critical for larger, more complex UX engagements is the experience model. The experience model aims to document the entire life cycle of an experience, stepping back from any one moment during the process, or any one website, application, or tool. The experience model is a critical tool for the overall understanding of users, and how all the products, services, marketing, and communications can fit into how users experience your world.

For example, experience models could help define the overarching process mothers go through in having children: whether from adoption, surrogacy, or becoming pregnant, to preparing for new babies within their lives, and possibly repeating the process. It is the highest-level model of all our artifacts, going more broadly than scenarios and journeys. The same experience model can be used by business for years, without the need to update or modify them, while scenarios and journeys typically need updating as technology, tools, and behaviors evolve.

Content inputs

Content input is critical to successful user experiences because it informs what types of information are made available to your users. The next two sections highlight content models, matrixes, and taxonomies, and the role each plays in the user experience design process.

Content models and content matrix

The content model and matrix help you to organize the content that is in your experience and prioritize it effectively. A solid model also establishes any rules around the content (such as ensuring that the rotating carousel on the home page serves up five images with headlines, and is updated weekly). It can also enable personalization (for example, for people in Nebraska, serve up X content; for people in Tokyo, serve up Y content). Chapter 8 details exactly how to build the content model and matrix. A successful content model means that your users will get the right content in the right place at the right time.

Taxonomy

Taxonomy is not the art of stuffing animals. That's taxidermy. *Taxonomy* is the science of figuring out how to organize and label information so that your users can find what they need, where they need to find it, and when they need it. The manner by which information is organized in a library (by author, title, subject, and so forth) is an example of a taxonomy. Also, a grocery store is organized around a taxonomy (Meat > Beef > Steaks > Sirloin). If you have purchased any product online, you probably have interacted with a taxonomy without even

realizing it. Taxonomy is critical to organizing information so that users can find it; as you see later, it is critical for enabling search capabilities, whenever search functionality is present within an application or website. Without a proper and robust taxonomy, your users may not be able to find what they need.

Considerations before Beginning UX

Some of the best user experiences make the complex look very simple, but that simplicity often masks the large number of considerations that the UX designer takes into account during the development process. Just how complex will your project be? Take some time to consider all the variables that will help to determine a successful outcome for your solution. The following sections can guide you in this thought process.

Understanding your target users

What do you know about your users? How much information do you have about them? Can you easily picture your target users and describe them? Is there more than one type of target user, and, if so, how different are those users from one another? Given that UX is a user-centered process, it is critical you have a good understanding of whom you are designing for: who they are, how they behave, and their wants and needs.

If you don't know a lot about them, do you need to conduct user research? User research can be enormously effective for not only generating strategic insights into a solution, but also for inspiring the design process for how the solution will fit into a user's lifestyle.

If you think there are gaps in your understanding of your target user, a myriad of user research methods, tools, and approaches can help fill in some of the blanks. And many of them are easy, inexpensive, and quick to execute. Some of them are outlined in the following section.

Deciding on a new project or redesign

Many UX projects are redesigns of existing experiences, such as updates to existing websites, applications, or mobile apps. If this is the case, what data might be available from the existing experience that you can take into the start of your redesign analysis? Before you begin the redesign process, identify all sources of existing data that may be relevant, including current website analytics that outline which content is used most frequently, for example.

Identifying the technology

How complex will the solution be? If it is a content-heavy solution, consider how content will be created, maintained, and even retired. What system will enable this? By identifying your target user, you can identify the technologies that will need to be supported. For example, if you are targeting 20-year-old students for your new experience, it's likely you'll need to consider Android and Apple's iOS platform support to enable smartphone use as well as laptops for accessing websites. Without getting too deep into the technology, assess how technical you think your solution will be, and make sure the correct resources are aligned for supporting the project life cycle.

Maintaining the experience

Although your UX project has not even begun, it's never too early to stop and think about the longer-term maintenance of the final solution. How will the system be maintained once it has been built and launched to the public? How will new features be added? Spend some time to think about the longer-term needs before the design process begins. The plan for maintaining the solution can greatly impact the choices you will make during the UX design process.

Ensuring consistency

What guidelines currently exist that may impact the look and feel of visual design? Are brand guidelines available? If so, get them on hand before the project begins. Furthermore, it's also helpful to get any other guidelines that may assist in developing written content. Many brand guidelines also include specifications for written content: guidelines that define the tone of voice and standards for written copy.

Determining your level of comfort

And finally, just how comfortable are you with this process? The world of UX is multidisciplinary, spanning business strategy, creative design, market insight, and technology (among other areas), but no one UX designer is equally strong in all these areas. Many UX designers come from one specific area, such as visual design or information architecture, and have only funda-mental knowledge and skills in the other areas. It is also common to see UX

designers who come from a technology or site development background. You won't need to do it all, but do identify where you might need more assistance and align the appropriate additional resources.

Understanding what makes a good UX designer

UX designers possess a mixed set of skills. Some skew more heavily toward user research; others skew more toward creative design. Some of the best UX designers have a good blend of experience in the creative design and a deep understanding of the business objectives and strategic goals, and are also great team project managers (able to pull all the pieces together). Figure 1-2 illustrates the ideal combination.

Figure 1-2: The ideal skill combination for a great UX designer.
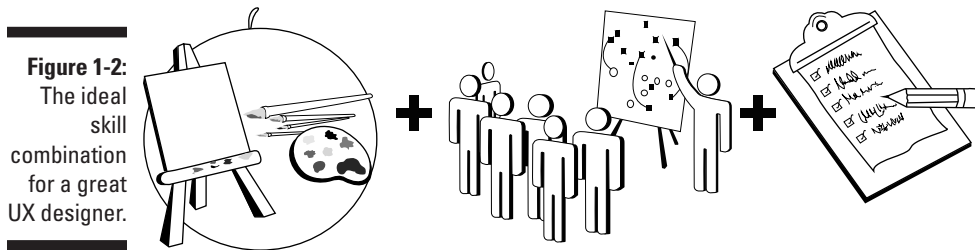
How a Typical Project Works

A wide variety of UX methods and approaches have been developed over the years, all reflecting the varied nature of today's digital experiences (websites, mobile apps, software design). And while some projects are enormously complex and will span years in design and development, others can be completed in just a few weeks.

Underneath all this diversity, though, is a set of common practices that are standard across the vast majority of UX projects. This approach can be scaled up or down to support projects of any complexity and duration. Each of the phases below can span hours or days for simpler projects, to months or years for more complex projects. Figure 1-3 illustrates this process.
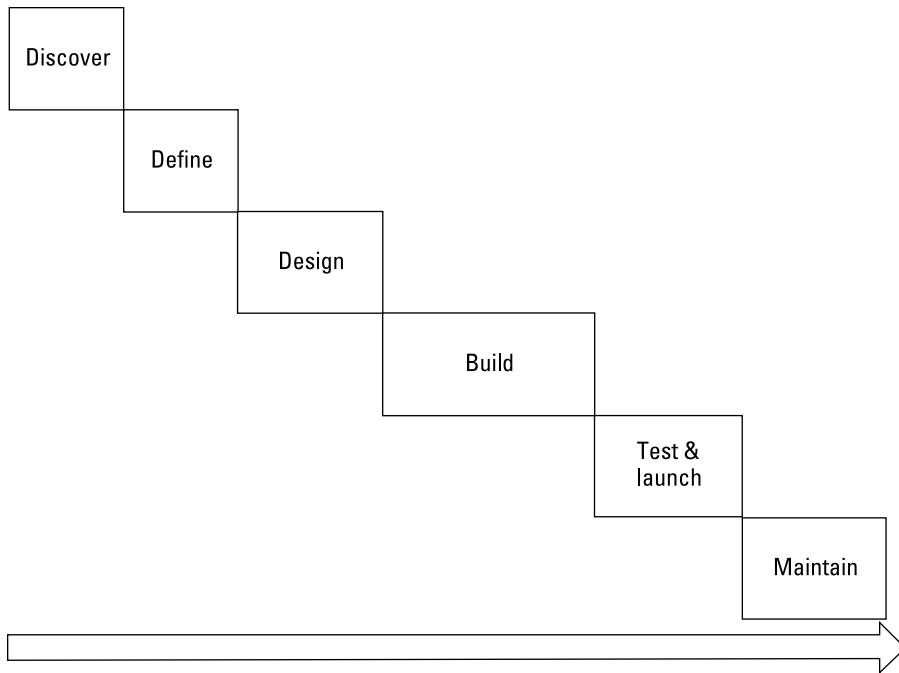
Define phase

The define phase frames the first phase in a typical UX project, also referred to as discovery. The work involved in this phase helps define the core building blocks of the solution, and helps ensure that the creative design process that follows is well grounded with insights and clear goals. The following are tasks that are commonly included in the define phase:

✔ **Define the business goals:** A clear definition of what business objectives the UX solution should accomplish, with clear metrics defined so that success can be evaluated.

✔ **Benchmark current experiences:** An assessment of any current experiences (if the project is a redesign), identifying what works well and what does not work well. In addition, a look at any competitive services: What insight can be taken from all existing experiences?

✔ **Develop user personas:** A clear and useful understanding of your target user, in the form of user profiles or personas. Personas can be created from existing data on target users, or can be created by conducting some user research to inform the UX process, if necessary.

- ✔ **Audit content:** A look at all content you'll have to work with during the design process. This can be existing website content (in the case of a redesign), or content that is used for other uses (such as printed materials).

- ✔ **Brand audit:** An assessment of any existing visual guidelines you have for the look and feel of the experience, as well as for the tone of written content.

- ✔ **Technology assessment:** A review of all technologies that will be involved in the final solution. This includes underlying technologies, as well as a "browser benchmark," which defines all versions of web browsers that should be supported, as well as key platforms (web, mobile, tablet, and so forth).

Often discovery and define are broken into two phases, with the discovery phase encompassing business goal definition, benchmarks and competitive analysis, audits, and user persona definition. Define includes sitemap creation (or the initial sitemap), content strategy framework, user flows, and technology assessment.

Design phase

This phase is where the creative process kicks into high gear. Wireframes and sitemaps are created to provide a high-level blueprint of the experience. Mood boards and visual design comps are created to illustrate the visual nature of the solution.

A key output of the design phase is a high-level design that shows key pages or screens: the home page and primary secondary pages or screens. All major creative design decisions are made during the design phase. Additional deliverables, all of which are explored later in the book, include wireframes, content matrix and guidelines, and detailed functional specifications.

Build phase

The build phase involves building out all lower-level pages and screens, according to the design decisions that were made during the design phase. This work involves the development of additional templates and visual designs for all lower-level pages, as well as the creation of additional page modules.

Typically, a large amount of work during the build phase is to create all the content that will fill all the pages and screens for the final solution. Some of this work can begin in the design phase, but in general the bulk occurs during the build phase. This content includes written content and visual assets (such as photographs and illustrations), as well as technical functions. While the majority of the larger creative decisions are made during the design phase, it's the heavy lifting of the build phase that determines how great the detailed experience will be.

Test and launch phase

Before an experience design is completed, it needs to be thoroughly tested for bugs, technical glitches, and any remaining usability problems. Depending on the complexity of the solution, the testing process can be extensive.

Maintain phase

Finally, given the iterative nature of digital design, once a website or application has launched to the public, ongoing effort must be made to maintain the quality of the experience. Is the content still relevant, or does it need to be updated or retired? Has the technology evolved, and if so, will it require enhancements to the user experience you created? The best user experiences are those that contain content and features that are still relevant and fresh, and it's the maintain phase that ensures how often the experience will be updated.