

Making the Most of Web Design Patterns

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- 1** In Chapter 1 (Customer-Centered Web Design: More Than a Good Idea), we explained why designing for the customer experience is crucial to a Web site's success. We also introduced the notion of Web design patterns, a powerful conceptual framework for building compelling, effective, and easy-to-use Web sites. In this chapter we explain patterns in depth.

We do not expect you to read through all the patterns in this book from start to finish. Instead, we show you ways to explore the patterns so that you can quickly find the right ones for your needs.

2.1 What Are Patterns?

Patterns communicate insights into design problems, capturing the essence of the problems and their solutions in a compact form. They describe the problem in depth, the rationale for the solution, how to apply the solution, and some of the trade-offs in applying the solution.

Patterns were originally developed by the architect Christopher Alexander and his colleagues, in a 1977 groundbreaking book called *A Pattern Language: Towns, Buildings, Construction*. Patterns, Alexander said, can empower people by providing a living and shared language “for building and planning towns, neighborhoods, houses, gardens, and rooms.” Alexander intended for everyday people to use patterns to guide the process of creation, whether designing a house for themselves or working with others to design offices and public spaces. By creating a common language, would-be designers could discuss and take part in the design of the spaces in which they worked, lived, and played. Alexander's patterns were also a reaction against contemporary architectural design, which he felt did not take enough of human needs, nature, growth, spirituality, and community into consideration.

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Alexander's emphasis was on an entire language for design. He felt that individual, isolated patterns were of marginal value. By connecting related patterns, and by showing how they intertwine and affect one another, he believed he could create an entire pattern language that was greater than the sum of the individual parts.

Likewise, Web design patterns make up a *language* that you can use in your daily work. In fact, though you may not know it, you may already be using some form of pattern language to articulate and communicate your designs. The patterns might reflect your own experiences using the Web. You might have picked them up from another site. They might even come from an insight you learned from a successful design that you developed in the past.

Our Web design pattern language focuses on your customers and their needs. This book is a reaction to the multitude of design patterns implicitly in use that do not take a customer-centered design approach.

Many of our patterns reflect how your customers understand and interact with Web sites. When people go online, they don't start with a blank slate. They take with them all of their experiences, their know-how, and their understanding of how the world works. By now, most visitors to the Web recognize common signposts such as blue links and buttons, and well-known processes such as sign-in and shopping cart checkouts, as powerful ways of making any single site easy to use.

Some patterns reflect abstract qualities that make great Web sites—qualities such as value, trust, and reliability. You will integrate traits like these into the design of the entire Web site, and reaffirm and reinforce them at every point of contact with your customers. These patterns describe the essence of these abstract qualities and how they can be incorporated into the whole Web site.

A Sample Pattern

Let's start with a pattern that may already be familiar to you: ACTION BUTTONS (K4).¹ Action buttons solve a common problem that customers encounter on Web sites: knowing what can and cannot be clicked on. By adding shading to an otherwise flat button, you make it easier for people to find your links. This visual illusion works because it takes advantage of what people already know about physical buttons (see Figure 2.1).

2.2

K4

¹ Patterns in this book are referenced in SMALL CAPITAL LETTERS. The part in parentheses in this case, "K4," means to go to Pattern Group K (Making Navigation Easy) and then to the fourth pattern in that section.

Figure 2.1

People know how to use three-dimensional buttons.



2.1

Figure 2.2

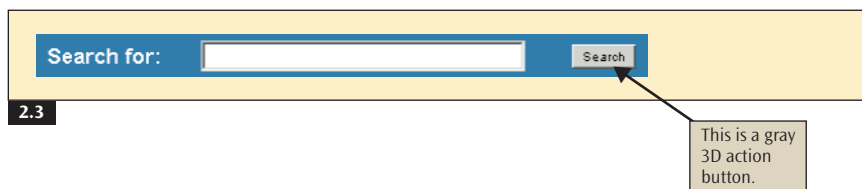
Buttons in modern graphical user interfaces appear three-dimensional, to make them look as if you can press them. You can take advantage of this knowledge by making the most important buttons on your Web site look three-dimensional too.



2.2

Figure 2.3

The gray Search button on the right is an example of an HTML action button. HTML action buttons can be specified in HTML and are created by the Web browser.



2.3

Graphical user interfaces have become another form of transferable knowledge. People who use computers learn that they can press on buttons with a mouse (see Figure 2.2). This becomes a learned behavior that can be transferred to how people perceive and interact with Web sites.

K4

There are two kinds of ACTION BUTTONS (K4): HTML action buttons and graphical action buttons. HTML buttons are specified in HTML, so you have little control over how they're displayed. Figure 2.3 shows an example of an HTML button.

Revert to black

eBay.com and Amazon.com provide two examples of Web sites that use graphical action buttons on their homepages (see Figures 2.4 and 2.5). These buttons are often implemented as a single image that may contain multiple buttons.

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Figure 2.4

eBay uses a graphical action button for the REGISTER NOW button.



Figure 2.5

Amazon.com uses graphical action buttons for its Find Gifts and Web Search features.

Making buttons look three-dimensional is not the end of the story, however. What size should these buttons be? Bigger buttons are easier to see and easier to click on, but they take up more space. In addition, if there's an image link, should there also be a redundant text link that goes to the same place? Finally, how does using images as links affect download speed?

These are all examples of **forces** that you will consider when you use the patterns. The forces are the key issues that come into play when you're trying to solve a particular design problem. Within each pattern we include these forces and provide guidance for how to resolve the issues. For example, to improve the download speed of your ACTION BUTTONS (K4), you might use FAST-LOADING IMAGES (L2). You might even consider using AJAX (Asynchronous JavaScript And XML) to display button graphics as they are loaded, as discussed in FAST-LOADING CONTENT (L6).

The preceding explanation of ACTION BUTTONS (K4) has all the essential ingredients of a pattern. It explains the basic problem and describes the general solution. It also points out the forces exerting themselves on a design, and the many decisions and trade-offs that must be made if you use the pattern. Most importantly, it refers to other related patterns that affect how the pattern in question will be used.

As in Christopher Alexander's pattern language, each pattern is connected to certain higher-level patterns and to certain lower-level patterns.

K4
L2
L6
K4

The pattern helps complete the higher-level patterns that are “above” it, and it is completed itself by the lower-level patterns that are “below” it. ACTION BUTTONS (K4), for example, help complete a PROCESS FUNNEL (H1), where moving from step to step requires a clear call to action. Similarly, ACTION BUTTONS (K4) may be completed with FAST-LOADING IMAGES (L2).

The benefit of using patterns is that they embody design experience that all of us as a community have developed and learned. A given pattern may not necessarily be the best solution in every case, but it tends to work in practice.

In the next section we describe the specific format of the patterns presented in this book. If you have ever seen patterns in other domains (such as software design or architecture), you will notice many similarities.

2.3 How to Read a Pattern

The patterns in this book have a more formal format than what you have read up to this point. Each pattern has six parts: name, background, problem, forces, solution, and other patterns to consider. See Figure 2.6 for an example.

The pattern name is the name we have given the solution. It consists of a phrase that you can use in a sentence, such as “What is the name of that PAGE TEMPLATE (D1)?” Each pattern name is written in SMALL CAPITAL LETTERS so that you can quickly identify it on a page. Each pattern also has a pattern number, such as A9. The letter identifies the group to which the pattern belongs. Throughout the book we also flag patterns in the margins with small callouts (such as A9). These callouts are also color-coded to match the corresponding pattern group. In addition, each pattern group is color-coded on the edge of the page so that you can find the group you want by looking at the edge of the book. Following the pattern name is a sensitizing image—a sample implementation of the solution. It shows how the solution might appear on a finished site.

Next comes the background, which provides context for the pattern, describing any other patterns that lead to this pattern and how they are related, as well as the scope of this pattern.

The next part is the problem, a concise statement, in **boldface**, of the specific problem that this pattern addresses.

The forces follow the problem, describing it in more detail, examining how people, their tasks, the technology, and society affect the design problem and its solution.

J1 SEARCH ACTION MODULE



Figure J1.1
IMDb's Web site
provides an effective
search feature—one
that is both simple
and powerful.

BACKGROUND

As a standard element of MULTIPLE WAYS TO NAVIGATE (B1) and a counterpart to BROWSEABLE CONTENT (B2), this pattern explains the search half of the search and browse combination.

J1 SEARCH ACTION MODULE

store known primarily for selling books. The second issue is size. Smaller sites that have fewer than a couple hundred pages in various categories will not be able to yield enough results to warrant a subsection search selector.

We advocate starting simply, using a straightforward search mechanism that lets people type in whatever terms they want. However, when your site becomes large and produces dozens of results to common searches, it's time to add a search selector to let people narrow their searches.

Put the Search Tool in a Consistent Place • People expect to find the search tool in the same place on every page. They might use the search function from any page on your Web site, so place the search action module ABOVE THE FOLD (I2) in the top left, middle, or right, and keep it there on every page.

SOLUTION

Build a search action module into every page, using simple phrasing that indicates the search space for typing in words or phrases and providing an action button for starting the search. If you have a large site and want to give customers the ability to search a subsection, add a list of subsections and the word for to indicate the string to look for.



Figure J1.3
Customers will readily
use the search action
module if it is simple and
appears on every page.

SEARCH ACTION MODULE J1

PROBLEM

Customers sometimes want to jump quickly from one location to another, but search pages are often too complex for such functionality.

When entering your site, customers sometimes know exactly what they're looking for. A quick and simple search function on the homepage is critical to win these visitors' confidence. Other visitors may browse through a site and then perform a search. If they don't spot a search tool immediately, or they have to go through a complex search page, they are less likely to spend the time. Building a simple search action module into every page is the best way to serve the needs of all customers.

Create a Simple Search Tool • A simple tool for searching, when possible, is much easier to understand than a complicated search page. Although advanced search tools might allow customers to look for words near another word, to search for specific words and not others, and to enter other complex search expressions, most customers would rather have a simpler tool that works well and returns ORGANIZED SEARCH RESULTS (J3). Use simple phrasing to identify the search field and provide an ACTION BUTTON (K4) for starting the search.

Some large Web sites use a search selector to help narrow the focus of a search. Figure J1.2 shows the search selector at Barnes & Noble.com. The first is to make sure that the search selector has the right default, in case it goes unnoticed. For example, the default for Barnes & Noble.com is to search on "Books." Anyone who types in something without changing the default will expect to find books on the site of a

Figure J1.2
Barnes & Noble.com
provides a search
selector that lets
people search on
specific categories,
such as "Books" and
"Music."



OTHER PATTERNS TO CONSIDER

- Keep your search tool in a consistent place on every page, ABOVE THE FOLD (I2) at the top left, middle, or right.
- If you're WRITING FOR SEARCH ENGINES (D6) when you develop your site's search facility, customers will use your site's content more readily because the search action module will exist on every page.
- Make the button that starts the search, which is often labeled "Search" or "Go," an ACTION BUTTON (K4).
- When necessary, customers can fill out more detailed STRAIGHTFORWARD SEARCH FORMS (J2). Results will always be returned on an ORGANIZED SEARCH RESULTS (J3) page.

Figure 2.6

Every pattern has the same elements in identical order so that you can quickly find the information you need.

Next is the solution. Also set in **boldface**, the solution is a succinct statement of how to solve the problem. Accompanying the solution is a sketch to help you visualize the solution.

Finally, we discuss other patterns to consider, recommending additional patterns that help complete this one. You should examine and choose these according to your needs.

2.4 How Much Do Patterns Change Over Time?

We are sometimes asked how lasting the patterns in this book are. The World Wide Web has undergone many changes since we published the first edition of *The Design of Sites* in 2002, including the rise of XML and style sheets, the introduction of AJAX Web applications, and the widespread success of blogs and wikis. Are the patterns we describe something ephemeral that will need to be changed next year, or will they stand the test of time?

One way of answering this question is to look at how much specific Web pages have changed since the first edition of this book. Of the roughly four hundred screen shots in this second edition, about 70 are updates of previously included Web pages, and only about 35 are new shots replacing Web pages that either no longer exist or no longer demonstrate the desired design pattern. For example, both Nolo Press and BabyCenter were previously used as exemplars of TAB ROWS (K3), but these sites now use traditional NAVIGATION BARS (K2) instead.

Where screen shots have been updated, we feel that the design of these Web pages has become more professional in terms of cleaner layout, better use of icons and color, and more compelling content. However, *although the visual design of these Web pages has been polished, the underlying principles, structure, and design patterns remain essentially the same*. To underscore this point, Figures 2.7 through 2.9 compare some screen shots that we used in the first edition to what those Web pages look like today.

C1 Figure 2.7 shows how eBay's HOMEPAGE PORTAL (C1) has changed over the past five years. Although there have been a few changes, most notably an increase in the number of elements ABOVE THE FOLD (I2), all of the same essential design patterns are reflected in both designs, including NAVIGATION BAR (K2), SIGN-IN/NEW ACCOUNT (H2), SEARCH ACTION MODULE (J1), and OBVIOUS LINKS (K10). Perhaps the most prominent change in eBay's newer design is to include more FEATURED PRODUCTS (G1) in the main content area in the center, as well as a **Live Help** feature.

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Figure 2.7

Although the information density on eBay's homepage has increased over the years—as these two screen shots, from 2001 (a) and 2006 (b), illustrate—it's clear that eBay has retained all of its core elements and navigation structure.



Figure 2.8

All of the essential design patterns that were featured in Amazon.com's home-page portal in 2001 (a) are still there five years later (b).



2.8a

(www.amazon.com, December 3, 2001)



2.8b

(www.amazon.com, June 15, 2006)

amazon.com. WELCOME ADDRESS ITEMS WRAP SHIP PAY **PLACE ORDER**

Please review and submit your order

Click the "Place your order" button to complete your purchase. **Place your order**

Shipping to: [Change](#)
 Douglas K. van Duyne
 24915 Soquel-San Jose Road
 Los Gatos CA 95033
 USA

Shipping Options: [Learn more about shipping prices and policies](#)

☒ Standard Shipping (3-7 business days)
☐ Second Day Air (2 business days)
☐ Next Day Air (1 business day)

☒ Ship when entire order is ready
☐ Ship as items become available ([at additional cost](#))
[Update](#) to see new shipping changes.

Items: [Change quantities or delete](#)

My Inventions : The Autobiography of Nikola Tesla Ben Johnston (Editor)
\$9.95 - Quantity : 1 Usually ships in 24 hours
Gift Options: [Change](#)
 Gift wrap: no
 Gift note: (none)

Hidden Fortress - Criterion Collection Toshirô Mifune - DVD
\$23.99 - Quantity : 1 Usually ships in 24 hours
Gift Options: [Change](#)
 Gift wrap: no
 Gift note: (none)

Order Summary
 Items: \$33.94
 Shipping & Handling: \$3.97
 Total Before Tax: \$37.91
 Tax: \$0.00
Order Total: \$37.91

Have a gift certificate or promotional code?
 Enter code here: [Apply](#)
[Learn more about gift certificates](#)

Payment Method: [Change](#)
 MasterCard: ***-12495
 Exp: 07/2002

Billing Address: [Change](#)
 Douglas K. van Duyne
 24915 Soquel-San Jose Road
 Los Gatos CA 95033
 USA

Click the "Place your order" button to complete your purchase. **Place your order**

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Go to the [Amazon.com Home Page](#) (without completing your order)

powered with

2.9a

(www.amazon.com, December 4, 2001)

Figure 2.9

All of the essential design patterns that were featured in Amazon.com's quick-flow checkout in 2001 (a) are still there five years later (b).

Figure 2.9

(Continued)

amazon.com SIGN IN SHIPPING & PAYMENT GIFT-WRAP PLACE ORDER

Please review and submit your order
By placing your order, you agree to Amazon.com's privacy notice and conditions of use.

If placing a Marketplace order you are also agreeing to the [Marketplace Participation Agreement](#)

Important Messages

☐ Check this box to default to these delivery and payment options in the future.

Thanks for choosing FREE Super Saver Shipping! We've removed shipping fees from the eligible items in your order. ([Why aren't all my items eligible?](#)) Please note that items will take an additional 3-5 days to ship. Need them faster? Choose one of our other shipping speeds.

Review the information below, then click "Place your order." **Place your order**

Shipping to: [Change](#)

Jason Hong
920 Bellefonte St
First Floor
Pittsburgh, PA 15232
United States

Sending items to more than one address? [Ship to multiple addresses](#)

Shipping Options: ([Learn more](#))

Choose a shipping speed:

☒ FREE Super Saver Shipping (5-9 business days) 🚚

☐ Standard Shipping (3-5 business days)

☐ Two-Day Shipping (2 business days--**get it Tuesday, June 20!**)

☐ One-Day Shipping (1 business day--**get it Monday, June 19!**)

The following items will arrive in 1 shipment:

Need to [Change quantities or delete](#)?

Estimated ship date for these 3 items: June 21, 2006

The Essential Drucker : The Best of Sixty Years of Peter Drucker's Essential Writings on Management - Peter F. Drucker
\$11.67 - Quantity: 1 - Usually ships in 24 hours - **Eligible for Amazon Prime**
shipping rates: [join now](#)
Condition: new
Sold by: Amazon.com
[Gift options](#) None [Change](#)

The Battle for the Soul of Capitalism - John C. Bogle
\$15.75 - Quantity: 1 - Usually ships in 24 hours - **Eligible for Amazon Prime**
shipping rates: [join now](#)
Condition: new
Sold by: Amazon.com
[Gift options](#) None [Change](#)

Statistics Hacks : Tips & Tools for Measuring the World and Beating the Odds (Hacks) - Bruce Frey
\$18.89 - Quantity: 1 - Usually ships in 24 hours - **Eligible for Amazon Prime**
shipping rates: [join now](#)
Condition: new
Sold by: Amazon.com
[Gift options](#) None [Change](#)

Order Summary

Items:	\$46.31
Shipping & Handling:	\$5.97
Super Saver Discount:	-\$5.97
Total Before Tax:	\$46.31
Estimated Tax:	\$0.00
Total:	\$46.31
Est. AQ 11/2% Instant Reward:	-\$0.73

Order Total: \$45.58

You got free shipping!

Have any gift cards, gift certificates or promotional claim codes?
Enter them here (one at a time):
 [Apply](#)

Payment Method:
[Change](#)
Amazon.com Visa: ***-21365
Exp: 06/2009

Billing Address: [Change](#)
Jason Hong
920 Bellefonte St
First Floor
Pittsburgh, Pa 15232
United States

Review the information above, then click "Place your order." **Place your order**

If placing a Marketplace order you are also agreeing to the [Marketplace Participation Agreement](#)

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For an item sold by Amazon.com: When you click the "Place your order" button, we'll send you an e-mail message acknowledging receipt of your order. Your contract to purchase an item will not be complete until we send you an e-mail notifying you that the item has been shipped.

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2.9b

(www.amazon.com, June 28, 2006)

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Similarly, Figures 2.8 and 2.9 show the evolution of Amazon.com's Web site. As Figure 2.8 illustrates, the underlying structure of Amazon.com's newer HOMEPAGE PORTAL (C1) is still quite similar to its older homepage. Although the number of TAB ROWS (K3) has been decreased and the color scheme is now more colorful, both pages feature the same inverted-L NAVIGATION BAR (K2), FEATURED PRODUCTS (G1) in the center, and ACCOUNT MANAGEMENT (H4) and SHOPPING CART (F3) in the top right. Figure 2.9 shows that the ORDER SUMMARY (F7) portion of the QUICK-FLOW CHECKOUT (F1) has also remained essentially the same.



Figure 2.10 shows how the homepages of some prominent Web sites have changed during the past six years. With the exception of Google, which has always stressed simplicity, it is interesting to note that the only major change has been an increase in the information density of these Web pages. In fact, Web design has already converged on what we call the “common Web look and feel.”

Today, the large majority of commercial Web sites have a two- or three-column GRID LAYOUT (I1) with the most important content and navigation ABOVE THE FOLD (I2), a NAVIGATION BAR (K2) and/or a TAB ROW (K3) along the top, a SEARCH ACTION MODULE (J1) at either the top right or the middle left, a clickable logo to go back to the HOMEPAGE PORTAL (C1), both a PRIVACY POLICY (E4) and an ABOUT US (E5) link at the bottom, SHOPPING CARTS (F3) and QUICK-FLOW CHECKOUTS (F1) for managing purchases, CONTENT MODULES (D2) in the center and along the right side for easily updating content, and so on. Even with AJAX technologies and the Mobile Web, the sheer momentum of billions of existing Web pages makes it unlikely that there will be any tectonic shifts in the way Web pages are designed in the near future.



Returning to the question posed at the start of this section, we argue that all of this means that the design patterns in this book represent the essential foundation of Web design. Though the surface appearance of Web sites might change to accommodate the latest fashion trends, their core underlying structure, as exemplified by our design patterns, is here to stay.

How to Use the Patterns

Pattern groups are organized by letter and by name, as Table 2.1 shows. Each pattern group contains a collection of thematically related patterns. For example, if you wanted to improve the search feature on your Web site, you would refer to Pattern Group J (Making Site Search Fast and Relevant). Or if your testing showed that customers were having problems navigating your Web site, you would consult Pattern Group K (Making Navigation Easy).

2.5



Table 2.1 Pattern Groups

A	Site Genres
B	Creating a Navigation Framework
C	Creating a Powerful Homepage
D	Writing and Managing Content
E	Building Trust and Credibility
F	Basic E-Commerce
G	Advanced E-Commerce
H	Helping Customers Complete Tasks
I	Designing Effective Page Layouts
J	Making Site Search Fast and Relevant
K	Making Navigation Easy
L	Speeding Up Your Site
M	The Mobile Web

Generally speaking, the earlier the pattern group appears in this scheme, the earlier it should be used in the design process. For example, Pattern Groups A and B discuss Web site genres and creating a navigation framework for the entire Web site, respectively. Continuing, Pattern Group F looks at basic e-commerce issues, and Pattern Group H contains patterns that help customers complete tasks. These patterns are useful only after you have set the high-level goals and design of your Web site. Moving to the end, Pattern Group K deals with things like links and navigation bars, Pattern Group L looks at speeding up a Web site, and Pattern Group M contains patterns specific to the concerns of Mobile Web interfaces.

Each pattern identifies related patterns in its sections on background, forces, and other patterns to consider. This network of patterns lets you quickly collect the patterns you need to complete your design. You can use the rich pattern vocabulary to articulate an almost infinite number of designs.

2.6 An Example of Using Patterns

This example tells the story of a designer who discovers a costly Web site problem and uses the patterns presented in this book to deploy a customer-centered solution.

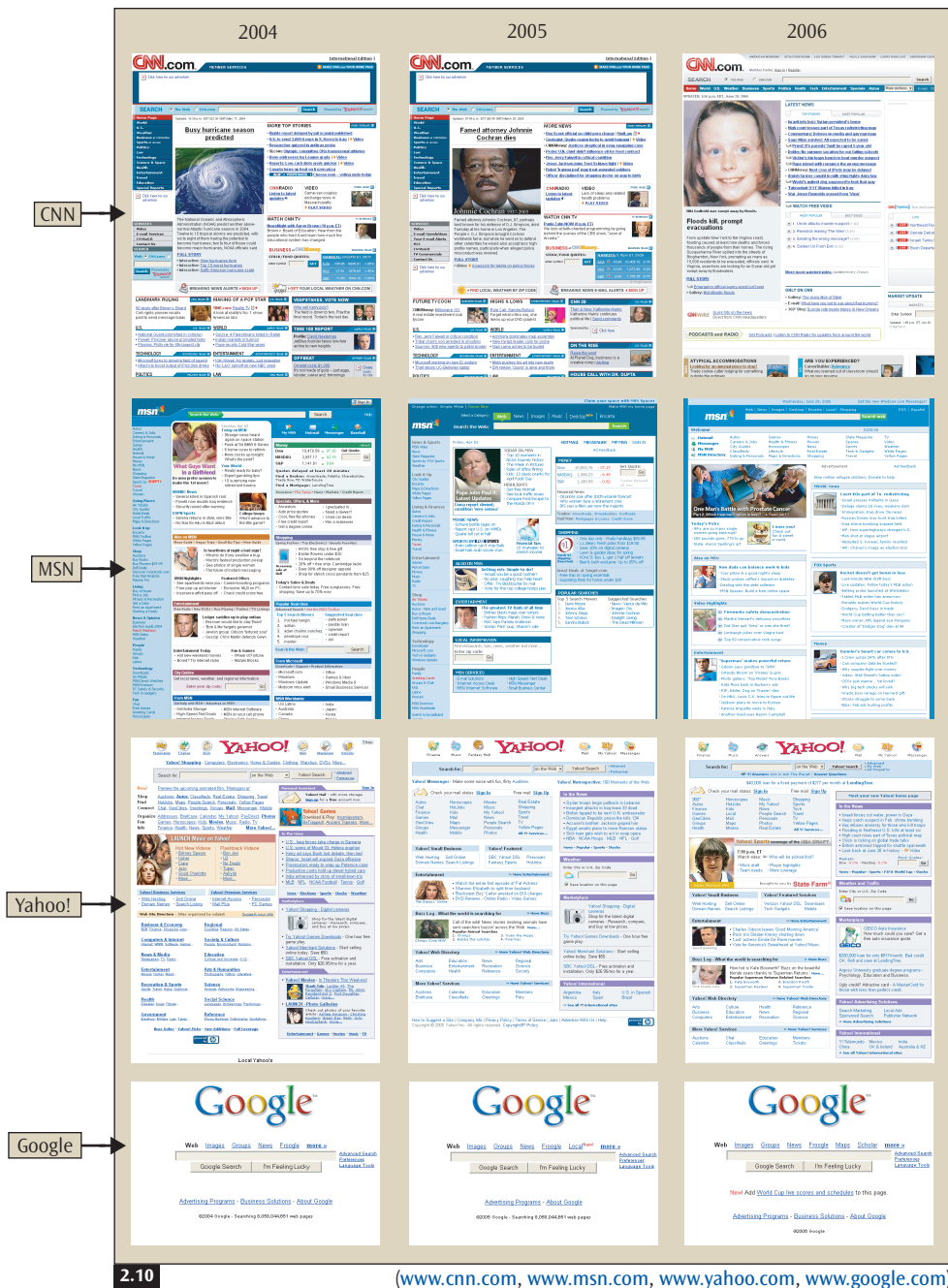


Figure 2.10

These screen shots illustrate the evolution of the homepages of CNN, MSN, Yahoo!, and Google from 2001 to 2006. Note that the core structure and the underlying design patterns used by these Web sites have not changed over the years. For the most part, the only major change to these Web sites has been an increase in information density.

Figure 2.10

(Continued)



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Sarah is part of the design team for an e-commerce Web site. Because the team is small, she has many responsibilities, including designing and evaluating the usability of the site.

While examining the Web site statistics, such as data from server logs, Sarah discovers that most customers are spending a fair amount of time on the site. However, many people appear to be abandoning their shopping carts and leaving the Web site right at checkout, before a sale is successfully closed. This problem is clearly something she needs to fix as quickly as possible.

Sarah brings up the problem at the design team's weekly meeting. It turns out that everyone knows the Web site checkout has numerous problems, but no one has a solution. In a heated discussion, team members voice their opinions, but the meeting ends with no resolution.

After the meeting, Sarah checks whether any design patterns might help. Because this is an e-commerce problem, she starts with Pattern Group F (Basic E-Commerce), quickly skimming through the patterns there.

The first pattern that catches her eye is QUICK-FLOW CHECKOUT (F1). The problem statement seems to match the problem that her Web site faces: "An e-commerce shopping experience will not be enjoyable—or worse, a purchase might not be completed—if the checkout process is cumbersome, confusing, or error prone." This pattern points out several problems with checkouts, including hidden charges, tedious text entries, confusing links, extra buttons, and complicated instructions. The members of Sarah's team took special care to address the issue of hidden charges when they first designed the site because that was something that bothered them on other e-commerce Web sites. She finds, however, that a few links on the site still have confusing names.

Sarah also sees that several other patterns are referenced, including PERSONAL E-COMMERCE (A1). This pattern is in a group that comes before QUICK-FLOW CHECKOUT (F1), indicating that it is a more abstract pattern. Skimming over the PERSONAL E-COMMERCE (A1) pattern, Sarah sees that it describes qualities of e-commerce sites in general, such as privacy, convenience, and returns. Although she finds that the PERSONAL E-COMMERCE (A1) pattern might be useful in the future, she decides that it is at too high a level for what she needs right now.

Another referenced pattern, SHOPPING CART (F3), looks more promising because it describes the features needed to make shopping carts useful. One important design question is how long unpurchased items stay in a shopping cart before they're automatically removed. Premature clearing

of shopping carts may lead to lost sales because customers who return to a Web site might be irritated to find that all the time they spent finding the items they wanted to buy was wasted. Sarah makes a mental note to ask the developers on the design team how long items are kept in the Web site's shopping carts. (It turns out to be just one hour.)

F1

H1

QUICK-FLOW CHECKOUT (F1) also mentions a pattern called PROCESS FUNNEL (H1). Reviewing this pattern, Sarah sees that process funnels are a sequence of pages designed to help people complete extremely specific tasks. Special care is taken to make instructions concise, to minimize extraneous links that might lead customers out of the process funnel, and to shorten the number of steps required for completing the process funnel. Thinking about the current checkout process, Sarah realizes that some of her site's pages are heavy with text instructions. In addition, a few pages have links that could accidentally lead people out of the checkout process.

After studying the patterns, the forces, and the solutions, Sarah understands many of the shortcomings of her team's current checkout design. Using her site's existing design as a starting point, she can now quickly sketch design alternatives for a new checkout process, combining and modifying the solutions that the patterns describe.

After creating three possible solutions, using the patterns as a guide, Sarah asks for informal feedback from the members of her design team. They identify some problems with her proposed designs and point out which changes will be easy to implement and which will not. Sarah uses this feedback to sketch another set of design alternatives, again using the patterns and her team's suggestions.

Sarah knows that a key principle of customer-centered Web design is keeping customers in the loop throughout the design process. She decides to run a quick evaluation with some representative customers. For this round of evaluations, Sarah decides that informally talking to and observing five participants is enough to get a pretty good idea of what the big problems are with the current site. She recruits five people who live nearby, visiting them in their homes. Offering a gift certificate and a free T-shirt makes recruiting pretty easy.

First Sarah asks her recruits to try the old checkout process so that she can get a better feel for the problems they encounter. Then she shows them her sketches for the new checkout process and gets feedback on the early designs.

While observing the participants, she realizes that she has anticipated many of the problems correctly. A customer named Fred, for example,

2 Making the Most of Web Design Patterns

clicks on the wrong link while in the checkout sequence and accidentally exits the process funnel. Although he is momentarily confused, Fred figures out what happened and hits the **Back** button. However, all of the information that he had just typed has disappeared, and he has to enter it all over again. Sarah records this event as a critical error.

Sarah also discovers a few new things that the design team did not realize were problems. Two of the participants have serious problems finding the button that takes them to the third step of the checkout. The correct button is at the bottom of the page. However, these two have fairly old computers, and their monitors are small enough that this button is not visible on their Web browser unless they scroll down. (This is why Fred clicked on the wrong link and fell out of the checkout process funnel.)

Although all five participants successfully complete the checkout sequence, none of them think that it's very easy, and all of them suggest that the process reflects poorly on the Web site. Sarah also realizes that this result is probably affected by testing bias. Given all the problems with the Web site, she doubts that the participants would have finished the task if she had not been sitting beside them.

After the evaluation, Sarah takes out the sketches that she created from the patterns and prior discussion with her team. She shows them to the participants, one at a time, asking them where they think each link will take them if they click on it, and whether the content on the page makes sense.

All five participants like the design sketches and think that each one has more potential than the existing checkout process. However, one of the three design alternatives stands out as the one they like best. Sarah makes a note to explore this design alternative in greater detail.

At the next team meeting, Sarah presents the results of the evaluation. She describes many of the problems that her group of participants experienced and presents ideas on how to fix them. One team member mentions that the HIGH-VISIBILITY ACTION BUTTONS (K5) pattern addresses the problem of clicking on the wrong links in a process funnel.

K5

Everyone agrees that the existing checkout process is broken and needs to be replaced as quickly as possible. Sarah presents sketches for the design alternative that her recruited participants said was best. The discussion focuses on prioritizing the features. After a brief debate, the team quickly reaches a consensus on the most important features for the next version of the checkout. They start exploring whether any design patterns apply, and they get to work on refining the new design.

2.7 Take-away Ideas

The bulk of this book contains design patterns that you and your team can start using today. With these design patterns you can design a site from scratch, redesign a section of a site, or fix a particular problem on a page. Every design still requires your creativity, intuition, and testing to make the solutions effective. Our patterns simply help direct your creative energies to solving new problems, as opposed to reinventing the wheel. In the words of literary critic Lionel Trilling, “Immature artists imitate. Mature artists steal.”

The key is to consider your options in context. If the goal of your site is to challenge your visitors, then many of the design patterns may not apply. But for any business or government site, the goal is to maximize the customers’ experience. This means that you’ll want to provide valuable, useful, and usable navigation structures and make it easy to find information and complete tasks successfully. For these kinds of sites, our patterns provide design solutions that work.

