Imagine driving out of the airport in a part of the world you've never before visited. You come upon a fork in the road with two stark choices: North and South. Your destination is downtown, and in the few seconds before you must go one way or the other, you seem to recall that downtown is East. Frustrated, you choose North and fail to find any turnoff for downtown or see any facility where you can ask directions. Even if you finally make it downtown with sanity intact, you'll consider the area cursed and won't be eager to return and explore without a guide.

This story dramatizes, with only slight exaggeration, the predicament many users encounter in their first or subsequent visits to many Web sites. Navigation labels, the words or phrases on a site's major internal links, function like signposts that should tell us where to turn at a fork in the road. All too often, however, they provide a bad match with visitors' mental maps. Sometimes they make no sense at all to newcomers. The disorientation repeats with another popular tool for finding one's way around sites, the Search box.

In this chapter:
- What researchers have learned about how people find their way around a site
- How to arrive at appropriate navigation categories, step by step
- How to lay out navigation options on your Web page
- Why you should include tips for searching along with a Search box
- When to structure searches with specific options

The Importance of Navigation Labels
Research by usability guru Jakob Nielsen reveals that when visitors arrive at a Web site, about half head straight for the Search box to find what they are looking for; one-fifth depend on the navigation links, and the rest switch
between searching and following links. These numbers may understate the importance of navigation labels. Because the categories represented by these labels are often just as visible on the home page as the site’s name plate, they help orient visitors whether they prefer starting off at the Search box or choosing navigation links.

**Usability Resources**—By watching people try to accomplish certain tasks at Web sites, usability researchers discover which factors make sites easier to use and which frustrate users. Learn more about such findings at these information-packed sites: Usable Web (http://www.usableweb.com/); Usert.com (http://www.useit.com/); and User Interface Engineering (http://www.uie.com/).

Consider visitors interested in mutual funds who land at a site called Fifi Financial. If navigation tabs like New Investors, Your Account, and About Us catch their attention, they'll either begin typing in the Search box or select a link. But if the tabs read About Pet Plots, Web Memorials, Pet Insurance, and Financing Your Purchase, they'll realize at a glance that they're at the wrong place and will back out without using either the Search box or the links.

Coming up with the ideal set of top-level navigation choices is not easy, whether you're starting from scratch or revising a site that's been up for a while. One common pitfall to stay away from is replicating your internal company structure in the main choices on your site. See Figure 2.1 for an example of a top-level navigation system constructed from company divisions rather than the needs of potential clients.

**Figure 2.1:** I arrived at Visix International (http://www.visix.com/) after selecting #16 on Fortune magazine’s list of fastest growing companies. Why should I have to select either U.S. users or International Users before learning what the company does?

Figure 2.2 shows another site with a startlingly fractured set of main choices that don't make sense from the site visitor’s point of view. Nielsen reports that one e-commerce project showed a ninefold increase in usability when a site switched from categories derived from the way the manufacturer thought about its products to a scheme reflecting users' mental model of the product lines.
Effective navigation choices indicate to your target audience where they should click to find the items or information they're looking for. Annual tests of e-commerce sites by a firm called Creative Good show findability of items by online shoppers getting worse rather than improving. Paying close attention to this factor alone can help your site soar above the competition.

**Six Steps to Top-Level Navigation Categories**

Arriving at good top-level link labels involves a combination of approaches. Using only one method, you run too great a risk of leaving out or obscuring options that matter to your visitors. Some steps in the following list may seem to duplicate other steps, but I urge you to stick with the instructions to make certain that you end up with categories that funnel visitors to the parts of your site that pay off both for you and for them:

**Step 1**— Make a list of kinds of visitors to your site, breaking the list into as many categories as you can think of. For example, for a smallish bank with several local branches, the list might include current depositors and borrowers, local people shopping for a new bank, newcomers to the area, consumer and commercial customers, kids, students, wage earners, seniors, and the media.

**Step 2**— For each group you identified in step 1, brainstorm a list of activities people might want to perform at your site—actions they'll want to accomplish. Include actions visitors might want to take but you don't plan to accommodate for now. This list will contain verbs, such as the following, for a car dealer's site:

- Find out about available cars
- Learn the features of current models
- Find out about available financing
• Book a repair appointment
• Determine warranty periods and policies
• Find directions, service hours, and phone number

**Step 3—** Now create a list of items and features you already have at the site or plan to provide there. For a graphics software company, this list might include these things, among others:
• Information about the programs
• Information about program updates
• Technical support FAQs (frequently asked questions)
• Technical support hours, phone numbers, and e-mail addresses
• Additional company information
• Online order forms

**Step 4—** Where possible, consult your e-mail, phone, and in-person customer-service records to note what people have been looking for at your site that wasn't there or what needs they've had that they couldn't satisfy at the site. Sometimes this step makes obvious something that didn't come up on the other lists.

**Step 5—** Now pool all the information from Steps 1 through 4 and devise five to seven top-level categories that enable visitors to accomplish their goals and find the materials you want them to locate on your site. Often site teams come up with these central categories through scribbles, circles, and arrows on white boards. Others arrange and rearrange self-stick notes to do this, either on poster board or on the wall. A corkboard and pushpins get the job done, too. My favorite organizational tools are index cards. I write each item on a separate card and sort related cards into piles. Each pile then represents a category, for which I create a name.

**Step 6—** Test and revise. It's essential to learn whether the labels you've come up with make as much sense to your audience as they do to you. You don't need to design and code those labels into a Web site to test them, however. You can get valuable answers from giving five or six people in each target market a paper-and-pencil quiz. Give them a small number of tasks to imagine performing, or a number of items to find, and ask them to check off which link they would choose to accomplish each task. The last option in each set of responses should read something like, "I'm stumped." If testers select the correct options, the associated categories will probably work well at the site. But if testers make lots of mistakes or report confusion, you should create a new set of labels and test again.
Keep in mind that the top-level navigation represents just the beginning of a workable Web structure, since users often have to drill down several levels to find what they are looking for. Getting lost halfway to one's destination is as serious as being baffled at the outset. If you have a large or medium-sized site with a great variety of elements, you'll want to repeat this exercise to end up with a complete, well-organized configuration of categories. Many site builders convert their arrangement of self-stick notes or their white-board sketch into a multilevel diagram resembling an organizational chart. (See Figure 2.3.)

**Category Problems and Solutions**

Let's look at some common shortcomings for navigation labels and how to remedy the flaws. Unless you are 100% certain that anyone who might realistically do business with you understands your specialized or trendy terminology, beware of jargon. Buzzwords, or fashionable phrases that convey little except “We're cool,” hold special irritation for journalists. A group of writers for Forbes, Fortune, and eCompany Now singled out these offenders, among others, at **Buzzkiller** (http://www.buzzkiller.net/buzzsaw.html):

- Mission-critical
- Scalable
- Next-generation
- Web-enabled
- B2B, B2C

![Figure 2.3: This is a schematic diagram of the Web site for a proposed TV show called “Soho Success.”](image-url)
However, even terms that have been around for a generation can get in the way of communication if they represent language understood by those selling the product or service but not those buying. For example, marketers sometimes call brochures “collateral,” which to many business owners evokes associations of collateral damage, not vehicles for getting a company’s message across. Likewise, financial planners are comfortable talking about irrevocable trusts and limited partnerships, but clients don’t usually know what such terms mean.

Jargon often creeps into Web sites in the form of navigation labels comprised of names or concepts invented by the company. For instance, Drugstore.com (http://www.drugstore.com/) has an option under Service Center that reads eMedAlert. (See Figure 2.4.) That, it turns out, is a free e-mail alert service for product warnings, updates, and recalls. But how would you know that unless you’d already visited the page that explains it? More people would click the link if it said, Free Product Safety Alerts.

Avoid the temptation to come up with cute titles for navigation options or with phrases so pithy that they’re confusing. Numerous sites have seen sales pick up when they changed some creative moniker, such as shopping sled or wheelbarrow, to the standard label, shopping cart.

Similarly, when I visited the site for the Weather Channel (http://www.weather.com/), I had to scratch my head at a link labeled, Wireless

Figure 2.4: The ineffective link for eMedAlert in the left column would more effectively read Free Products Safety Alerts.
Weather. I know what Boston Weather or World Weather would lead me to, but would Wireless Weather tell me about atmospheric static affecting wireless reception? Nope. It tells how to receive weather reports on a wireless device. Accordingly, Wireless Weather Reports would be much clearer and more effective.

According to usability expert Jared Spool, longer links orient users significantly better than those consisting of just one or two words. Granted, longer labels can pose design challenges, but what's the point of an aesthetically perfect home page with options that perplex visitors? The six-step process outlined earlier in this chapter can help you arrive at more effective options.

Categories that appeal to one audience and not another can also cause problems. Most sites for leading camera stores provide options similar to those shown in Figure 2.5. For sophisticated buyers who know what they want, navigating according to manufacturer and model number is perfect. However, people who have no idea whether they want a 35mm or digital camera, much less the make and model number, will go elsewhere when encountering only such choices. To welcome less knowledgeable shoppers, these sites merely have to add a top-level link, “Which camera?” leading to a page recommending certain cameras for family, vacation, or business use. Don't be afraid of adding information geared to a less advanced audience so long as experienced visitors can zoom in right away on their quarry.

Figure 2.5: Like most camera-store Web sites, Mike's Camera (http://www.mikescamera.com/) presents cameras only by manufacturer and model number, which is unhelpful for someone who has no idea what to buy.

Another prevalent blunder involves missing information. I once decided to find out whether I could eliminate monthly service charges on my checking account by shifting money I had on deposit elsewhere to a money-market savings account connected to my checking account. Naturally, I’d want to do this only if subtracting the service charge and comparing interest rates kept me
roughly in the same financial situation I was already in. A visit to the bank’s Web site raised and then dashed my hopes of getting my question answered there.

Although the home page for the bank did not include a clear option for rates, clicking any of the link options on the home page brought up a new set of links, including one for Rates. When I clicked this very promising link, however, there was no mention of savings rates, only mortgage rates. In fact, savings rates were not mentioned anywhere at the site. A bank representative said savings rates weren’t posted at the site because they varied from state to state and week to week. Still, how much interest someone gets on deposits is a common enough concern that copy on the Rates page should have said something, such as “Call for current savings rates.” Leaving this out was a flaw in the site’s navigation, which would have been prevented by brainstorming a full list of bank services.

Navigation Formats

Conventionally, sites display the main navigation options either just below the name plate, vertically along the left margin, or both. Graphically, tabs, buttons, words encased in a horizontal colored bar, or simple underlined hyperlinks usually display the choices. Since these formats work not because they’re intrinsically intuitive but because they’ve become widespread, you normally can’t go wrong by imitating the format used by the Web’s most popular sites.

Drop-down menus are another way to provide navigation choices, but be sure to test these with older browsers before finalizing your site. Newer browsers enable a visitor to select from a drop-down menu by highlighting a choice and then pressing the Enter key or clicking a mouse button. (See Figure 2.6.)

Figure 2.6: The ClickZ Network’s drop-down menu (http://www.clickz.com/), which allows you to click an author and go to a page listing that author’s articles, works when you click a mouse button or press the Enter key. Using an older browser, though, you can’t get to the articles.

A older browser may require a Go button for a drop-down menu to do its thing. (See Figure 2.7.)
Many sites furnish the main navigation options in a cluster of links at the bottom of every page in addition to under the name plate or along the left side. Don't worry about the apparent duplication of having more than one set of links! I've never heard of a user complaining because of too many routes leading to their destination, although the opposite problem rears its head frequently. Having two or even three—top, left side, and bottom—overlapping batches of navigation choices simply increases the odds of visitors finding their way without having to scroll or click around too much.

In line with usability expert Jared Spool's discovery that links with more words tend to work better than compressed two-word phrases, some sites do well with hyperlinks containing more than five words or even an entire sentence. (See Figure 2.8.)

Likewise, at an information design seminar, Yale professor Edward Tufte showed the opening screen of Excite.com (http://www.excite.com/) that served as a gateway for no less than 162 links. (See Figure 2.9.) Such densely packed but logically organized information there does not overwhelm the viewer.
The more link choices you offer, however, the more vital it is that they be chunked in scannable groups of links under subheads. (See Figures 2.10.) More than seven items together in one list makes most people's eyes glaze over. When you do offer many options, try to cluster them either thematically or chronologically. Alphabetical lists rarely work well.

When you can't easily summarize an offering or a section of information with a couple of words, consider getting your point across with a headline, a block of text, and a link people can click to learn more. (See Figure 2.11.) This technique is often used for news items and ads, but there's no reason you can't use it for major options on a home page. Remember, no one gives prizes for managing to reduce your directional signals to just one word or two. The reward of increased leads and sales from your site will often require clearer, longer labels than that.
What about graphic icons instead of text link labels? Ordinarily, words communicate much more clearly to first-time visitors than images do. Icons also present a barrier to visually impaired computer users, unless the images bear HTML Alt tags—text associated with the images that is accessible to a nongraphical browser.

**Navigation Aids**

Helping visitors find their way around your offerings and treasures is so vital that you should consider a few additional techniques that help orient and direct people at your site. For a site containing more than 10 or 15 pages, particularly with a lot of different types of content, a site map shows at a glance the categories and subcategories. Usually a site map displays just the structure of the site with a phrase summarizing each page, but Figure 2.12 shows a more creative format for a site map, helping newcomers understand what they can find where at the site.
If you have a deeply structured site, with visitors able to delve further and further into one category at a time, you might want to provide “bread crumbs,” which show the path just taken through ever narrower categories (see the top line of text in Figure 2.13). Named after the trail markers used by Hansel and Gretel in the well-known fairy tale, a bread-crumb system reminds visitors exactly how they’ve drilled down and where they’ll go if they hit their browser’s Back button.

It’s customary to code hyperlinks to change color after they are clicked, so that visitors can see which links they have already visited and which they have not. I received complaints from users when the first version of my Web site didn’t include a color change for visited links.

Even if you’ve indicated an area of your site in your main navigation system, both in top and side or bottom sets of links, you may be wise to insert yet another textual link exactly where the reader would naturally begin thinking along those lines. For example, eReleases (http://www.ereleases.com/), a company that writes and delivers news releases to the media, has an excellent FAQ (Frequently Asked Questions) page that needs to be mentioned more prominently on the page where visitors are ready to place an order and may have questions. (See Figures 2.14 and 2.15.)

More Tips for Wording Navigation Links

Whether displayed horizontally or vertically, a set of navigation links should conform to some niceties we expect of a table of contents, which it functionally resembles. For instance, the words and phrases should be grammatically parallel. Consider the following set of links for a graphic design firm:

- What We Do
- Who We Are
- Our Portfolio
- Contact Us
This list would be more effective if converted to the following:

- **What We Do**
- **How We Do It**
- **Who We Are**
- **How to Reach Us**

Before finalizing your list of links, think about the order in which you put them. When the order on the Web page matches some sequence in the visitor’s mind or the process someone is likely to follow at your site, the links are easier to use. At most shopping sites, for example, having Place Your Order as the first link doesn’t make sense, since visitors first need to look around to see what, if anything, they want to buy. On the other hand, at a business-to-business site where most visitors arrive knowing what they want to buy, a Place Your Order link might indeed be the first logical option.
Helping Searchers

As mentioned earlier in this chapter, many Web users explore sites primarily through entering terms representing what they're looking for in a Search box. Naturally, this applies only to sites having more than a couple of dozen pages. Many site builders devote next to no energy to ensuring that such a Search box actually helps visitors find the pages that meet their needs. As a result, the search box usually frustrates rather than helps. When I asked six prominent Internet industry commentators how well they thought the average search box worked, five of the six said it worked extremely poorly most of the time. The sixth said that Webmasters usually didn't try to make it work well; but when they did, results could be quite accurate. This consensus made me feel good, because it showed that my own frustration with on-site search could be laid at the feet of those who created the site and not my incompetence as a user.

First, consider the bare-bones setup you'll find at many mid-sized or larger sites: a blank box with a gray Search button beside it. This takes up little space but gives no guidance whatsoever to the searcher. If you're looking for articles by but not about Tom Peters, what exactly are you supposed to type into the little box? According to the experts, there is no standard answer to this question. I, as a long-time Web user, have no idea how to phrase this search; newer users are undoubtedly equally in the dark.

Theoretically, it's simple to eliminate this obstacle: Directly under the blank box insert a link that reads, Search Tips or How to Search. (See Figure 2.16.) This shouldn't muck up anyone's design. Such a link should lead to a set of instructions in ordinary language, with examples: If you're looking for _____, type in ______. The next part may not be so easy. To write user-friendly instructions for your visitors, you need to understand how the search engine you are using works. If you're using the Search box that comes with your Web authoring software, you may have to figure that out on your own. For instance, FrontPage 2000 makes it easy to create a Search box and says, “If you add a search form to an existing page using the following procedure, be sure to type instructions for site visitors on how to use the search form, and then create the search form immediately following the explanatory text.” Nowhere does the program provide such instructions.

You're equally on your own for user-friendly search instructions if you install a third-party Search box at your site. I visited Web sites for eight third-party on-site Search boxes, all of which create an index of words and phrases for your site that your visitors search through a box the third party gives you to install. None of the eight sites said anything about user instructions for using these Search boxes, either in their marketing copy, in their demos, or in their FAQs. Two
strategies might help you overcome this obstacle. You might simply install a
Search box on your site; create the index; try a lot of searches for material you
know is or isn’t on your site, and then write clear instructions yourself. Or you
can find a site comparable to yours in size that has good search instructions, get
the particular Search box they use and adapt their instructions for your visitors.
(See Figure 2.17.)

Free Site Search Engines—These eight sites offer free on-site search boxes for
which they create and host the index. They provide you with a search box to install
on your site and usually enable you to customize various aspects of searching, such
as how results are displayed. Some charge to host your search box if you have more
than 500 pages at your site or if you would like their ads removed from the search
display.

SiteLevel.com, http://www.sitelvel.com/

Figure 2.16: By adding
a simple link such as
Search Tips below a
plain-vanilla search box,
WorkZ.com would be
able to clue in
flummoxed searchers.

Figure 2.17: Larry Chase’s
Web Digest for Marketers
(http://www.wdfm.com/)
offers search tips that Chase
obviously wrote himself. He
says he got the Search box
script from Matt’s Script
Archive (http://www.world
widemart.com/scripts/).
Along with installing a Search box and providing general guidance for those who need help using it, offer suggestions on the page displaying the results. Figure 2.18 shows what typically happens when the user's first request doesn't succeed. Not very helpful! Users may also need help when a search request returns too many results. Third-party site search engines allow you to customize the copy on the search display page, so again the challenge is figuring out what to say. Something like the following might work there:

Too many results? Try using a phrase (such as “wedding flowers”) rather than just a word (“flowers”), or linking two words with “and” (“wedding and flowers”).

Too few? Try synonyms and related words (“bouquet” instead of “flowers”).

Irrelevant results? Try excluding what you don’t want with “not” (“justice of the peace and not bail and not traffic violations”).

A final common and easily remediable fault with Search boxes is hiding them rather than making them available from every page of the site. Don’t hide yours on some obscure back page! Either insert the Search box in the same spot on every page or offer Search as one of your main navigation options.

Drop-Down Menus and Keywords
Some searches should be more highly structured for the visitor using a different interface than a Search box. For example, let’s suppose that you provide a directory of properties available for rent on Cape Cod. Much better than a Search box would be a set of drop-down menus from which users could choose the month they wanted to rent, how many bedrooms they needed, any particular town or towns they had a preference for, and an acceptable price range. See Figure 2.19 for an example of this approach used by eCapeCod.com (http://www.ecapecod.com/).
The structured search approach may work especially well for e-commerce sites where it’s unlikely that visitors will be able to accurately type in the name or kind of item they’re searching for. You can also offer a set of options when a regular search doesn’t succeed. Offering options in a drop-down menu steers them to the right department, so to speak, where they can peruse a limited selection of items, such as in Figure 2.20. It also works well for situations where pages don’t necessarily contain the exact words matching the category under which they conceptually fall. For instance, I have written marketing articles that never use the word “marketing” as well as articles on online marketing that use the words “Internet” or “Web” rather than “online.” The drop-down menu approach ensures that documents come up by category rather than according to words contained in them.

Judicious use of a drop-down menu requires two steps: first, anticipating the categories your visitors will use to search, and second, programming the drop-down menu so that it directs users to the proper pages. The latter involves techniques involving scripts and databases that are beyond the scope of this book but that most Web developers and designers can implement.

For structured searches to work properly, each document or item for sale must be coded with keyword metatags corresponding to the categories in the drop-down menu. Metatags are special insertions in HTML coding that visitors never see on the page but that determine which pages come up in a search. Figure 2.21 shows a database entry interface that ensures the proper placement of keywords behind the scenes. For sites with a constantly changing inventory of items or an ever-growing collection of documents, it’s best to develop a discipline of adding the keywords as a part of adding any new item or page to the site. Web authoring programs generally provide a way to add keywords to a page invisibly.
Consider adding common misspellings to the keywords. You can't reasonably expect everyone to know that a well-known book on Web usability is not by Jacob Nielson but by Jakob Nielsen. On the other hand, you don't want to misspell this name on your Web site. Interestingly, the first (wrong) spelling of Nielson's name calls up his books at barnesandnoble.com (http://www.barnesandnoble.com/) but not at amazon.com (http://www.amazon.com/).

Having both a Search box and drop-down menus enables you to fine-tune your on-site search to increase the success rate of visitors' searches. Most of the third-party site search engines enable you to keep tabs on what people are typing into the Search box, so that you can incorporate new phrases and common misspellings into the keywords. If the search reports say that people were looking for sales force software at your site, and you'd been calling it sales automation software, you'd know how to steer those using the former term toward the proper offerings. You can also add content to your site to satisfy visitors searching for material you don't yet have.

Remember, you want your site to manifest the principle, “Seek and ye shall find!”