CHAPTER EIGHT

WEB SITE DESIGN, PRODUCTION, AND AESTHETICS
DESIGNING A WEB SITE

Once a public relations or advertising agency, television or radio station, or any other company or person decides to establish an online presence, their real work of creating a Web site begins. Creating a Web site is not as simple as writing a couple of pages of HTML text and adding some jazzy-looking graphics. Site design requires a thorough understanding of the Web and its users and an expertise in marketing, design, and Internet technology.

Detailed planning is the key to a successful Web site. Content, graphics, video, audio, linking pages, and overall site architecture should be mapped out in as much detail as possible before the site goes online. Also, mapping gives designers an image of how each page fits in with the site's overall architecture.

Sites are generally structured as levels. Most sites open at the door, or home-menu page, which introduces the site and links visitors to the various first-level sections or areas within the site. First-level opening pages are linked to second-level material, those in turn are linked to third-level documents, and so on, with the material on each level usually becoming more specific. For example, the CNN Interactive Web site opens with a colorful menu page containing the company logo and three columns of clickable indexes. The first column is a menu of clickable links to areas within the site including "World News," "Weather," and "Arts & Style." The middle of the page is dominated by a summary of the latest news, and in the left-hand column are hypertext links to other top stories. On April 18, 2000, the shooting death of two women in their senior citizen residence was the featured summary on the main page, which in turn linked to the full story on another page. The complete story describes the tragedy in more detail and contains hyperlinks to maps that show the proximity of the shooting's location to the nearest major city, Detroit. Additionally, users can link to a message board to discuss the shootings with others.

Web site design should be approached from the perspectives of both the Web site provider and its users. An online site may be perfectly designed from a company's point of view, but if it does not attract users or encourage repeat visits, the site is not worth the time and resources of upkeep. On the other hand, numerous and repeat visits mean little if users are just skimming around the site but not using it as the company intended. In the long run, the quality of the visit is just as important as the number of visitors.

Web site design begins with understanding why users access the Web and then combining the users' needs with the provider's purpose in establishing the site. Putting it all together involves first deciding on the site's purpose and goals, content, presentation, image, feedback mechanisms, page links, and other architectural considerations and then determining how the site will attract its target audience. The Web is not a "field of dreams," where if a site is built, people will come; it requires careful, deliberate planning.
BOX 8.1 DESIGNING A WEB SITE

I. Going online
   A. Outline the primary and secondary purposes for going online
   B. Set goals and objectives
      1. Specify outcomes and measurements
   C. Research and identify target audience
   D. Determine the type of site needed
   E. Select Webmasters and hire supporting staff
      1. Complexity of site
      2. Amount of updating and maintenance

II. Content
   A. Determine content function
   B. Select products and services to feature
   C. Write new content or modify existing content
   D. Include value-added content and interactivity
   E. Encourage repeat visits
   F. Add feedback mechanisms
   G. Schedule updating and changing

III. Organizing a site
   A. Create a site map
   B. Establish category structure
   C. Develop linking pages

IV. Rating and evaluating a site
   A. Develop evaluation criteria
   B. Create a rating scheme

Going Online

ESTABLISHING A PURPOSE AND SETTING GOALS  The rush to the Web is in some ways similar to the California Gold Rush, when thousands of people hoped to strike it rich on their patches of claimed land. In the modern world, many people are galloping to cyberspace and elbowing their way to a patch of claimed Web space where they hope to find handfuls of gold. Removing the dollar signs from before their eyes helps Web site providers form a clearer vision of the Web's potential and a sounder purpose for establishing a site.

It is folly to post an online site without first defining clear objectives and goals. Determining the type of site needed is foremost in the planning process. While one provider might need a simple billboard/informational site, another may require an interactive storefront. The overall site architecture depends on the provider's
purpose for establishing the site. Careful analysis of the provider's products or services, target audience, budget, and technological expertise should drive the site, not the other way around. Purposes for establishing a Web site include generating revenue, providing basic corporate information, building brand image, offering cheap and convenient product information, improving customer service, enhancing consumer interest, building a community of online consumers, educating site visitors, acquiring new customers, and maintaining relationships with regular customers.

While the purpose guides a site's basic design and functions, specific goals and objectives measure its success. Goals should be set in quantifiable terms, such as the number of monthly visitors, the number of items sold, the dollar amount of monthly sales, the number of new subscribers, the amount of e-mail feedback, or the number of product inquiries. Also, a fair method of measuring goals should be put in place during the planning stage. For example, some Web sites may measure the number of visitors by counting the number of hits on the opening page, while others may record only those who travel beyond the first-level pages. While some may measure sales by the number of items purchased directly from the site, others may also include items purchased by telephone if the purchaser made a Web inquiry prior to the sale. The absence of clear guidelines specifying exactly how the goals and objectives should be measured could easily mislead executives into thinking their site is successful when in fact it is performing well below expectations, or vice versa. Setting specific desired outcomes and a reliable system of evaluation keeps providers on top of the site's performance and alerts them to any problems so that changes can be made promptly.

UNDERSTANDING MOTIVATIONS AND TARGETING AN AUDIENCE

The Web is a new interactive medium that is undergoing many changes, and reasons for using it are shifting as it develops and evolves. People are turning to the Web to satisfy their needs for entertainment, social interaction, information and news, and self-enhancement. Individuals also look to the Web to conduct research, shop, and often just to pass the time or escape from responsibilities (Kaye, 1998; Wilson, 1997).

Sometimes, people access the Web instrumentally, when they have a clear purpose in mind, while at other times they connect ritualistically, just for something to do. Motivations can change from one Web session to another. Also, some users may be more inclined to move constantly from one site to another, while others would rather explore a small number of sites in more depth.

Web site designers need to be aware of these changing motivations and should attempt to create sites that accommodate the varying needs of their target audience. Identifying the target audience and researching what they want is a first step in Web site design. Next, the Web site designer should address the provider's needs and goals in conjunction with the identified customers' needs and motivations. A Web site cannot possibly be all things to all people, but it should focus on meeting the
DETERMINING THE TYPE OF SITE NEEDED AND HIRING PERSONNEL Once the goals and objectives have been set and the target audience identified, Webmasters and supporting staff need to be hired. Webmasters and executives should work together to design the type of site that will best fulfill the provider's objectives. Time and budget considerations often influence the general design and complexity. If a firm is in a great hurry to get a site online or is facing severe monetary restrictions, it may be best to begin with a billboard-type site and gradually add interactive elements and sales components. However, a company may instead choose a large, multilayered, in-depth site that contains many interactive elements, a security or password system, and a transaction element. Another, such as a news site, may opt for a less complex presence, but one that requires frequent or daily updates. Complexity and depth, together with the projected amount of maintenance and updating, determine the size of the support staff needed to keep the project online. Other personnel issues include the Webmaster's role and which staff will perform roles such as content editor, art designer, technician, purchaser of new software, online security manager, and liaison to read and respond to e-mail.

Before even one word is written in HTML script, the goals, objectives, and budget need to be set, a target audience identified, personnel hired, and the general type of site determined and mapped out.

ONLINE CONTENT A Web site's success depends on how well the content matches the needs of the target audience and the provider's goals and objectives. Just because the Web is not limited by space and airtime does not mean that all possible content should be put online, nor that the editorial can ramble or be disjointed. A strong editorial plan prioritizes content so the most important information is featured up front, followed by links to less important pages. Also, items of little consequence should not be put on the same page as important or frequently accessed information. There is nothing more annoying than waiting and waiting for a page to download, only to discover that the delay was caused by a totally superfluous photo of the company mascot.

Content needs to be planned around the general theme or purpose of the site. If generating revenue through sales is the main purpose, then the site should be designed around the featured products and services. The general tone of the site, including content, graphics, and audio or video, must be consistent with the overall objectives.

Those new to creating Web sites often erroneously think that all they need to do is simply post existing content. Thus, Web pages are often nothing more than
boring product specs or seemingly endless lines of colored text. Using existing materials created for other media, such as print or broadcast, saves time and resources, but most must be modified and adapted for use on the Web. Often print layouts need to be adapted for on-screen viewing, which may involve deleting or adding white space, adding hyperlinks and other navigational tools, changing fonts and font sizes, condensing or editing text, and rewriting long sentences and paragraphs into shorter blocks conducive to quick reading. Additionally, editing and cutting long video and audio components significantly reduce downloading time (Thompson, Thompson, & McLaughlin, 1996). While it may make good sense for a Web site creator to use existing material, much of the material should first be modified and adapted before being posted to the Web.

Value-added content often serves to hold visitors’ attention and increase time spent on the site. Inclusion of value-added content and interactivity depends largely on the overall objectives of the site and the resources available for extra bells and whistles. Many people insist that value-added content and interactivity are essential to the success of any site and that simply placing existing text-only documents on the Web is very shortsighted and misses the point of having an interactive medium in the first place. Interactivity and value-added content create interest, delight visitors, initiate two-way communication, and spur users to take actions that increase their involvement with the site and, hence, with the company and its products and services. By exploring the Web's potential and challenging existing sales and marketing models, designers can produce fascinating sites that keep visitors coming back for more adventures in cyberspace.

Frequent updates and additions keep a site interesting and fresh. It is poor practice to keep material posted for months before making changes. Depending on its timeliness, some copy should be updated on a monthly, weekly, or even daily basis. Even copy that is not time-sensitive should be spruced up and altered after it has been online awhile. The Web is unlike most other media, where the publishing or broadcast date lets users know if the information is current. Generally, Web users have no way of knowing how long information has been online unless the posting date has been added to the page. Although there are no clear guidelines on how often Web material should be changed, many sites tell visitors when the material was last updated and when they can expect further updates.

Planning online editorial involves matching the content’s general look and tone with overall objectives and goals, selecting which products and services to feature, deciding which types of content to provide, determining whether to write new material or adapt existing documents for the Web, determining how much value-added content and interactivity should be included in the site, and developing a schedule for updating and changing the editorial. Additionally, building feedback mechanisms and creating a cyberenvironment that encourages repeat visits strengthen a company’s online presence.
Organizing a Web Site

The overall organization of a Web site depends largely on the provider, the purpose of the site, and the type of site being developed. A site should be organized for the sake of the visitors, not the provider. It is the designer’s responsibility to create a site through which visitors can navigate easily to find whatever information they are seeking; visitors who cannot find their way around tend to get frustrated and leave the site altogether. Visitors do not want to waste time clicking on one dead-end page after another, especially if they are connecting through a slow modem. Organizing an easy-to-navigate site is a very important part of establishing an online presence and is crucial to the site’s success.

**Mapping** Web sites can be as simple as a main menu page with a few linking pages, or they can encompass hundreds of pages housed within many linking pages.
Web sites are configured in many different ways with different systems of navigation. Some sites are organized like books, where the menu page acts as a table of contents and visitors read the pages in some sort of orderly, linear fashion. Most other sites are mapped in some sort of a hierarchical manner, with a center homepage that links to each of the site's various sections, each of which comprises a set of linking pages. Still other sites are configured as a wagon wheel, with the main page as the hub that is linked to all other pages, which in turn are linked to one another. Many sites are designed using a combination of these structures, and others use their own unique systems of organization and links.

Movement through a site is either horizontal or vertical. The homepage is usually considered the top of the site and movement from it to other sections or pages is a vertical move to the next layer. Linking between sections or pages on the same level is a horizontal move. Movement between pages should be as logical and easy to follow as possible. Many homepages include maps to guide users through the site.

The United Nations Web site follows a standard menu-to-link design. The general organization is based on an umbrella structure, in which sections link from the opening page, but not all sections and pages are linked together. In other words, visitors at any of the "About the UN" sections must return to the main menu page before they can link to another section like "UN Peace Missions."

On the other hand, Saab's and The New York Times's Web sites are designed as wagon wheels, where the door pages to various sections feature complete menus that link to the next desired section without requiring the user to go back to the main menu page. Visitors checking out the newest Saab cars who then decide to read about the history of Saab need only click on the "Community" section from within the "New Models" page and then on the "History" link; they do not have to return to the main homepage.

GROUPING SUBJECTS TOGETHER Web sites can be arranged in a wide variety of ways depending on their content and purpose. Information can be categorized by who, what, when, where, and how. For example, book titles may be organized by target audience, such as children or the elderly; information can be categorized into broad subject areas containing subtopics; current news stories are often listed in chronological order; international information may be arranged by geographic location; and "how-to" directions usually follow some sort of step-by-step progression.

Some Web sites are made up of a variety of organizational schemes. For example, a first-level subject index of news stories may lead to a second-level news
area that is chronologically ordered; a Web site of universities in the United States may be geographically organized by state, but within the "State" menu institutions may be listed alphabetically or ordered by size of the student body. Whichever organizational schemes are chosen, they must be easy to follow and make sense to visitors.

ESTABLISHING LINKING PAGES Linking pages on each level should be consistent with the general section or area. For instance, if the menu page of an online bookstore links to nonfiction books, all books within that section must be nonfiction. However, an additional link may be established that takes visitors directly to fiction books without making them go back to the main page. The network of links

FIGURE 8.2 Saab Web Site Map
depends on whether a site’s overall design is linear in nature or arranged like a wagon wheel. The design should ensure that visitors do not have to dig deep into a site. Desired information should not be more than three to four clicks away from the menu or door page. In other words, Web sites should not be designed with more than three or four levels. TVGEN, the online TV Guide Entertainment Network, is a large, complex site, but users can easily get right to where they want to go via a pull-down site index on the main menu page. Visitors need only click on one of the many options such as “TV Listings,” “Soaps,” and “Games” to travel directly to the information they are seeking.

Generally, links should connect users to material that exists within the site. All too often, homepages contain links to outside resources, a device similar to sending customers to someone else’s store (“Building Profits,” 1996; Hawn, 1996; Henley, Gennarelli, Hon, & Kelleher, 1996). Providers should strive to keep visitors within their site by adding extra pages as necessary. For example, a travel agency promot-
FIGURE 8.4 TV Guide Pull-Down Index

...ing a Hawaiian vacation should post information and photographs of Hawaii within its own site, rather than linking its clients to a Hawaii page posted by someone else. In all likelihood the outside Hawaii page links to other vacation spots and agencies, and the chances that clients will eventually make their way back to the original agency are pretty slim. It is worth investing the resources to create additional pages to keep visitors within the site. On the other hand, there are instances when it makes sense for providers to link visitors to outside resources. Professors and teachers...
often post course materials and other information on the Web but then direct students to other research materials beyond the course site.

**GRAPHIC ISSUES**

Regardless of a Web site's technical sophistication—spinning logos, animation, audio, or even video clips—the first thing that visitors to a site will see is the graphic work. Attractive and quick-loading graphics will keep people coming to the site and staying long enough to get the provider's desired message. Web designers must understand how graphic files work and be aware of some of the pitfalls that can cause surfers to click on their browser's stop button before a Web site even finishes loading.

**Types of Graphic Files**

Graphic files on the Web are generally of two types: gif files or jpg files. These suffixes are file extensions that indicate how a graphic file is encoded in digital form.

**GIF FILES**  The gif, or "GIF" (graphic interchange format), files are the most common type of image on the Internet, including the Web and bulletin board services. There are two versions of the GIF format, 87a and 89a, representing the years that the format version was developed. Most images on the Web were created in the 89a format, which allows display of a transparent image and the use of animation within a single GIF file. GIFs are commonly used for the banner ads that are pervasive on the Web.

GIFs are especially suited to images that contain large areas of one color, line art, or simple logo art. Because GIF files are easy to compress, they allow for short loading times for Web pages. Graphics files in other formats can be converted to GIF files using a number of software programs, for example, Alchemy Mindworks Graphic Workshop for Windows.

**JPEG FILES**  The jpg, or "JPEG" (joint photographic experts group), files are created for high-quality, complex images on the Web. JPEGs are created by selecting from a range of compression levels. Since graphic files are large, compression is used to make them smaller. Compression is a process that reduces the amount of data in a file by eliminating redundant information. The higher the quality of the desired image, the lower the compression. JPEGs are criticized for being "lossy," meaning that they are not easy to compress without significantly sacrificing image quality. JPEGs are best used for images, such as photographs, that require a natural look, which comes from a high resolution and a large number of colors.
The higher the resolution and greater the number of colors, the larger the file. Although reducing the size of the image from the original using JPEGs is simple, increasing the size of a JPEG image often results in digital artifacts that appear unnatural, like smooth lines becoming jagged lines. The JPEG file format is best for viewing on the computer screen, because the image that results from printing is often inferior to what is seen on the screen. GIFs, on the other hand, seem to fare better when printed because of their simplicity and ease of compression without artifacts.

**File Size**

File size increases with the size of the image, the resolution of the image, and the number of colors in the image. Reducing the number of colors from 256 to 16 allows the file to require only four bits per pixel (picture element or dot on a computer screen) instead of eight bits per pixel. This reduction in the number of colors will decrease the size of the file by half. However, this type of file reduction is only practical with GIFs, because the simplicity of line art graphics does little to reduce quality. Reducing colors in the JPEG format yields no advantage (Fisher, 1996).

Several programs are available that can reduce the file size of graphic images. Known as "Debabelizers," they work by reducing the "bit depth" through simplifying the image. Generally, the best method of reduction is to cut down on the number of colors.

Although it is always tempting to use very high resolution to yield impressive-looking graphic images, this approach may sometimes be counterproductive. As resolution increases, so does file size and, thus, downloading time. Using graphics with a resolution of more than 72 dpi (dots per inch) is totally wasteful. Computer screens cannot show any resolution higher than 72 dpi, and file size is increased for no reason.

Some modified forms of GIFs and JPEGs do not reduce the size of the image file but still help to discourage impatient Web surfers from moving on while they are downloading. These modified forms are interlaced GIFs and progressive JPEGs, and they yield a fast version of progressively higher-resolution images as the file is being received. The low-resolution image the viewer first receives gets progressively better as a reward for the user's patience.

**Downloading Graphics**

Downloading graphics is relatively easy. Conceptually, it is similar to cutting and pasting in word processing. The process is accomplished with the browser. When using a Macintosh computer, simply click on the desired graphic. Hold down the mouse button. The screen will then show a pull-down menu with the option "Save
## BOX 8.2 MODIFYING EXISTING MATERIALS FOR THE WEB

<table>
<thead>
<tr>
<th>Component</th>
<th>Possible Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout, formatting</td>
<td>Change aspect ratio&lt;br&gt;Adjust amount of white space&lt;br&gt;Redefine spatial relationships between text and graphics&lt;br&gt;Remove or adapt unnecessary elements (page numbers, running headers and footers, tables of contents)&lt;br&gt;Add hyperlinks&lt;br&gt;Add navigational components&lt;br&gt;Adjust typography for on-screen viewing&lt;br&gt;Add HTML tags for formatting&lt;br&gt;Create PDF files&lt;br&gt;Add buttons, other calls to actions, tie-ins to other sites</td>
</tr>
<tr>
<td>Text</td>
<td>Edit for faster reading, easier scanning&lt;br&gt;Condense and/or reduce content&lt;br&gt;Convert long linear text flows into shorter, hyperlinked chunks&lt;br&gt;Add headers&lt;br&gt;Add hyperlinks&lt;br&gt;Add navigational components</td>
</tr>
<tr>
<td>Graphics</td>
<td>Crop and scale as appropriate&lt;br&gt;Adjust bit depth, color palette&lt;br&gt;Convert to GIF or JPEG&lt;br&gt;Make backgrounds transparent (GIF)&lt;br&gt;Decide on interlace (GIF) or progressive (JPEG)</td>
</tr>
<tr>
<td>Video</td>
<td>Edit&lt;br&gt;Optimize for Web delivery and playback&lt;br&gt;Embed in HTML or PDF file</td>
</tr>
<tr>
<td>Animation</td>
<td>De-compose, tag as HTML component and/or&lt;br&gt;Write Java applet and/or&lt;br&gt;Create run-time file (e.g., QuickTime movie or Shockwave for Director file)</td>
</tr>
<tr>
<td>Audio</td>
<td>Edit&lt;br&gt;Optimize for Web delivery and playback&lt;br&gt;Embed in HTML or PDF file, or build into QuickTime or Shockwave movie</td>
</tr>
<tr>
<td>File Structure</td>
<td>&quot;Chunk&quot; the information, build file structure, and establish file naming conventions for optimal online delivery</td>
</tr>
</tbody>
</table>

Source: Thompson et al., 1996, p. 39
Image As. The image can be saved to a folder on the hard drive. When using a Windows machine, use the mouse to point to the desired image. Right-click the mouse button. The menu, with an option to "Save Image As," should appear. The image can then be saved to a location on the hard drive. The image is labeled with the appropriate file extension (.gif or jpg) by the browser and stored.

Backgrounds, either full-screen or tiled, can also be downloaded by the same process. A full-screen background can take up 40 to 70 kilobytes, which would be a large file. A tiled background comprises many small images that are repeated throughout the background. When this type of background is downloaded, the image received is a small version of the large background. It is more efficient to download one tile from a tiled background, because it is a small file that will load quickly. Rebuilding the full background can be accomplished easily in HTML.

**Legal Considerations**

Although downloading graphics is easy and quick, many legal issues must be considered. Copyright laws (discussed in Chapter 11) protect material posted on the Internet. Before using someone else's graphics, use common sense and ask for permission. This may seem like a lot of trouble, but it can avoid legal problems. Common sense dictates that taking a graphic of Mickey Mouse from a Disney site and using it without permission will create problems. Not all corporations care if material is copied from their site, but some corporations aggressively pursue individuals who use identifiable graphics without permission. Copying a simple small graphic of an envelope or some other generic object is probably safe, but copying a trademarked logo or a complex graphic created by the original owner at some expense is asking for legal problems.

When in doubt about copyright issues, simply ask permission before using any graphics created for other Web sites. This process is often relatively easy. Many Web sites give viewers the opportunity to give feedback with a "Contact Us" icon or menu item. Other Web sites list the Webmaster's e-mail address as a link for the purpose of contacting the Webmaster quickly and easily. When asking permission, state the reason for using the graphics and explain how they will be used. When the Webmaster responds to the request, make a copy of the response and save it. Corporate policies and Webmasters can change, so a copy of the permission to use the graphic material will provide the necessary protection against legal action.

Downloaded graphics can be changed and then reused. In such cases, permission for use of the graphics and the changes should be requested. If changes are made to downloaded graphics so that the original is not recognizable, then permission may not be necessary, but if the changes are so extensive, it may be best to start from scratch.
The best rule of thumb for downloading and reusing graphics is simply "When in doubt, ask permission." Material posted on the Internet should be considered as having been published. Individuals and groups who publish deserve to have their materials protected.

**Graphics Differences among Browsers**

Until recently there were significant differences in the ways that browsers handled graphic material. Graphics designed for Netscape Navigator did not always look good on Internet Explorer and vice versa. Even in the late 1990s, simple graphic elements like underlining did not translate well from browser to browser. In the more recent versions of browsers, most of the graphic inconsistencies have been reconciled, and graphic display is now mostly standardized. Some Web sites also try to standardize the images that viewers receive by placing a line on the first page of the site with a suggestion to adjust the browser to fit that line or adjust screen resolution. This minimizes differences among browser displays of the Web site.

Plug-ins that used to be browser-specific are now almost always produced for both Netscape Navigator and Internet Explorer. Authoring software has also helped make Web pages consistent among browsers. Differences among browsers are now more attributable to differences in the default settings that users set themselves than in the way browsers handle graphics. As the Web continues to develop technologically, increased standardization will help both Web users and Web developers to communicate efficiently and effectively.

**Using Graphics Wisely**

The saying "Less is more" is appropriate for Web page design. Overly busy Web pages can be confusing to the viewer and aesthetically displeasing as well. Well-designed Web pages use graphics sparingly and only when there is a strong need for them. Following are some simple rules for designing a good Web site using graphics.

1. Select good-looking, appropriate fonts that are readable on screen.
2. Keep graphics simple, and use only graphics that are needed.
3. Try to keep the file size as small as possible to allow short loading times for viewers.
4. Keep in mind that sites with too much happening graphically will lose viewers quickly.

Another technique for saving file space is using "thumbnail" images. Thumbnail images are small, low-resolution versions of photos or other high-resolution,
many-color images. A large full-color image can take up almost 100 kilobytes; a thumbnail takes up about 6 to 8 kilobytes. Thumbnail images serve as links to the full images when the viewers do not need to see the full image immediately. This can be especially helpful when there are several images on a page from which the viewer can select. To see a good use of thumbnails, go to the Alternative Entertainment Network site and click on "Programming Guide." For an example of an all-in-one graphics tool, look for PaintShopPro at the Jasc Software site.

TIPS FOR EFFECTIVE WEB SITE DESIGN

While there are no hard-and-fast rules governing site design, there are guidelines for effective organization and easy navigation. Some of the basic principles of good Web site design include the following:

1. Start small and let the site take on a life of its own. Test and analyze a site's performance and visitors' reactions before posting more pages. Design the site to suit the customers' needs and tastes.

2. Start with an attractive and easy-to-understand homepage or menu page to pique visitors' interest and induce them to explore the site further. The homepage should be the entrance to the site and should be the site's menu, not the full meal. Visitors should not be overwhelmed with too much text or blinded with excessively bright and flashy graphics.

3. Homepages should post the e-mail address of a contact person, a copyright statement, and the date of last changes.

4. Keep the opening page uncluttered. Put information where visitors can quickly find what they are seeking, and make sure content is never more than three clicks away from the menu. Burying material frustrates visitors and often causes them to give up their search. Add a separate table of contents or pull-down index on complex, multilayered sites.

5. Post clickable icons and other navigation buttons where they are easy to find, and avoid those that may be hard to interpret.

6. Make it easy for users to travel through the site by linking pages back to the homepage and by posting location markers that show visitors where they are within the site. Also, frequent postings of logos or other identifiers help visitors remember which site they are traveling around in.

7. Include a search engine on complex, multilayered sites to direct visitors quickly to specific content.

8. Use a consistent look throughout a site. Colors, type font, and graphics should follow some sort of scheme so that visitors will know that they are still
within the same site. For example, a page with an orange background will seem out of place if the rest of the pages have a green and purple background.

9. Use graphics, audio, and video icons that are visually stimulating and inviting, but beware of ones that take too long to download or are irrelevant to the site. Visitors may become impatient and leave.

10. Stress interactivity through image maps and clickable icons that provide quick and direct access to the information consumers are seeking. Games, contests, and other value-added interactive content set an exciting Web site apart from a mere online brochure. Attract visitors through a creative, fun, and imaginative site.


12. Balance content-heavy sites with graphics, audio, and video. Write in smaller blocks of text for quick reading and scanning.

13. State privacy policies. Inform users if personal information is kept confidential.

14. Always include an e-mail address or other means of encouraging visitor feedback.

15. Provide links to other sites with caution. Create additional pages if necessary to keep customers from straying to other sites.

16. Last, give visitors a reason to return. Keep sites fresh by frequently updating and changing content. Promote upcoming products, services, and other activities and let users know when new information will be available online ("Building Profits," 1996; Del Prete, 1997; Hawn, 1996; Henley, Gennarelli, Hon, & Kelleher, 1996; Judson, 1996; Sargeant-Robinson & Kaye, 1997; Sweetman, 1997; Thompson et al., 1996).

More information on Web site design can be found on the Web itself. Vincent Flanders' Web Sites That Suck page is a great tutorial for site design. Working from the premise of "Learn good design by looking at bad design," Vincent presents examples of the worst of the Web with suggestions for creating the best of the Web. Users learn about "bad, bad buttons," "pretentious front page," "free backgrounds that suck," "sucky pages," and many other topics of site design through fun, yet informative, lessons. There is also an icon taking visitors to the book Web Pages That Suck, which was spun off from the Web site.

Allnighter Webmaster University is cleverly written and claims "no fees, no registration, no grades, no diploma, internet poison ivy league." The "core curriculum" includes tutorials in HTML, advanced HTML, a glossary of Internet terms, and creating Net sites. The site basically serves as a link to other existing Web design sites.

Glassdog is a comprehensive site dedicated to creating interesting and effective sites. Users will find some pretty thorough instruction on HTML, Web site construction, site design, and Java Scripting, as well as other useful information.
EVALUATING A WEB SITE

BOX 8.3 GUIDELINES FOR EVALUATING A SITE

Rate the site on a scale of 1 to 5.
1 = not at all, 2 = not very much, 3 = somewhat, 4 = moderately so, 5 = very much.

Purpose and Goals
A. Does the site have a clear purpose and goals? 1 - 2 - 3 - 4 - 5
B. Does the site attract the target audience? 1 - 2 - 3 - 4 - 5
C. Is it easy to identify the site’s sponsor? 1 - 2 - 3 - 4 - 5
D. Are logos and other identifiers posted throughout the site? 1 - 2 - 3 - 4 - 5
E. Is the site easy to navigate? 1 - 2 - 3 - 4 - 5
F. Is most information three clicks away from the homepage? 1 - 2 - 3 - 4 - 5
G. Is it easy to find information within the site? 1 - 2 - 3 - 4 - 5
H. Is the site’s organization logical and easy to understand? 1 - 2 - 3 - 4 - 5
I. Is the design consistent from page to page? 1 - 2 - 3 - 4 - 5
J. Do links keep visitors within the site? 1 - 2 - 3 - 4 - 5

Total Score

45-50 = excellent, 40-44 = very good, 35-39 = average, 30-34 = below average, below 30 = poor

EVALUATING A WEB SITE

Creating a Web site is a complicated task that takes a good deal of time to complete and requires keen attention to detail. Even the smallest error can result in technical glitches or some other problems that may keep users from revisiting the site. Every page of the site must be thoroughly evaluated and tested before going online. Once a site is up and running, frequent reevaluation alerts site owners to any problems that may be occurring or any basic changes that should be made.

Having a clear, thorough, and systematic method of assessing a site speeds the evaluation process and assures providers that the site is free from error. While there are existing site evaluation guidelines, it is ultimately up to providers to set their own standards of excellence. Many providers have come up with ways of judging their sites based on a checklist of criteria unique to their goals and objectives.

The rating system presented in this chapter is not set in stone. Individual providers may wish to alter, omit, or add their own criteria to the guidelines.

The book Web Wisdom (Tate & Alexander, 1999) provides tips for evaluating Web sites in general, business Web sites, advocacy sites, informational sites, news sites, entertainment sites, and others. The authors point out the important features unique to each type of site. They recognize that elements that belong on a business...
BOX 8.4 GUIDELINES FOR EVALUATING PAGES WITHIN A SITE

Rate the site on a scale of 1 to 5.  
1 = not at all, 2 = not very much, 3 = somewhat, 4 = moderately so, 5 = very much.

1. **Purpose and Goals**
   - A. How clear are the page's purpose and goals?  
   - B. Does the page attract the target audience?  
   - C. Does the page encourage repeat visits?  
   - D. Is the page title meaningful?  

2. **Accuracy and Credibility**
   - A. Can posted information be easily verified through other sources?  
   - B. Are all materials properly cited and attributed to their sources?  
   - C. Is the information credible?  
   - D. Is the source reliable?  
   - E. Is the information free of grammatical errors?  
   - F. Is the information free of spelling and typographical errors?

3. **Readability**
   - A. Does the text stand out from background colors and patterns?  
   - B. Is the typeface consistent throughout the page?  
   - C. Is the color scheme attractive?  
   - D. Is the page uncluttered?  
   - E. Is the reading level appropriate for the target audience?  
   - F. Can the text be read quickly?

4. **Content**
   - A. Is the content appropriate to the overall objectives?  
   - B. Is the content appropriate for the target audience?  
   - C. Is the content meaningful?  
   - D. Is the content interesting?  
   - E. Is interactivity stressed?  
   - F. Is the provider presented in a favorable light?

5. **Currency**
   - A. Is the information kept current?  
   - B. Is it easy to find when the page was last updated?  
   - C. Is it clear when the next update can be expected?  
   - D. Is the document's origination date visible?
GUIDELINES FOR EVALUATING PAGES WITHIN A SITE

6. Design and Layout
   A. Does the page download in a reasonable amount of time? 1-2-3-4-5
   B. Does the design draw readers to the text? 1-2-3-4-5
   C. Do the page elements work together? 1-2-3-4-5
   D. Is the page well organized? 1-2-3-4-5
   E. Are the links up-to-date? 1-2-3-4-5
   F. Are feedback mechanisms in operation? 1-2-3-4-5
   G. Is the author or contact person identified? 1-2-3-4-5
   H. Are the clickable icons and other navigation buttons easy to find? 1-2-3-4-5
   I. Are the clickable icons and other navigation buttons easy to interpret? 1-2-3-4-5
   J. Are logos and other identifiers visible on the page? 1-2-3-4-5

   Subtotal

7. Graphics
   A. Are the graphics of high quality? 1-2-3-4-5
   B. Do the graphics have a consistent look? 1-2-3-4-5
   C. Do the graphics enhance the text? 1-2-3-4-5
   D. Are the graphics necessary and useful? 1-2-3-4-5
   E. Are the text and graphic elements balanced? 1-2-3-4-5

   Subtotal

   Grand total

185-205 = excellent, 165-184 = very good, 145-164 = average, 125-144 = below average, below 125 = poor

Adapted from criteria developed by Dr. Diane Witmer, California State University, Fullerton, adapted from criteria developed by Jan Alexander and Marsha Tate, Reference Librarians,Wolfgram Memorial Library Widener University.

site, for instance, may not be needed on a personal homepage. Rather, each type of site should be evaluated using the appropriate criteria for its particular category.

SUMMARY: SITE DESIGN

It takes a strong online presence and personality for any Web site to stand out from the thousands of other existing sites. The Web demands that online information providers use imagination and creativity to reach their cybergoals and objectives.
Constructing a Web site takes more than HTML skills and a desire to be a "Webbie." Successful Web site design requires a knowledge of the network and of its audiences and an understanding of users' motivations for going online. Additionally, incorporating marketing strategies into the overall design and promotion can attract new customers and widen the base of visitors.

A thorough online plan should be in place before one launches into cyberspace. Some early tasks include establishing a purpose; setting goals, objectives, and specific outcomes; identifying the target audience; and hiring a Webmaster and support staff. The next step in site design involves creating the general content and any value-added components. Ideas for developing feedback mechanisms, encouraging repeat visits, and scheduling content updates and changes must also be included in the plan.

Organizing a site includes mapping or blueprinting the overall structure, grouping subjects together in a logical fashion, and establishing relevant linking pages. Once online, periodic evaluation and ratings can lead to updates and changes that will keep a site and its pages fresh and contemporary.

DISCUSSION QUESTIONS

1. What makes a Web site catchy and inviting, and what makes one uninviting and boring?
2. What do you think are the most important elements of Web site design?
3. How would you go about designing a Web site?
4. What are the different mapping systems that most sites use, and which do you think is easiest to navigate?
5. What do you think is the ideal graphics-to-text ratio for different types of Web pages?

CHAPTER ACTIVITIES

1. Find a Web site that you find dull and hard to navigate. Write down ways in which you would make the site more exciting and easy to travel around.
2. Access five Web sites of a similar type (e.g., sports, news, games) and rank them in order from most appealing to least appealing, identifying the sites' elements that you find attractive and unattractive.
3. Design a Web site on paper. Have a homepage and at least four linking pages. Be sure to indicate links, content, color, graphics, interactive tools, and other elements that you think should be included.
4. Using the rating scale in the book, assess several Web sites and pages within sites. Examine personal sites/pages as well as professionally created sites/pages.

CHAPTER LINKS

Allnighter Webmaster University- http://www.hangoutl.com/alinighter.html
CNN Interactive- http://www.cnn.com
Jasc Software- http://www.jasc.com
Saab- http://www.saabusa.com

REFERENCES


