

Website Design: A Guide to Establishing a Web Presence

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OVERVIEW

Establishing a presence on the Web is not something to be done without considerable forethought. You must consider many factors during the planning and design phases to ensure the resulting website meets expectations.

The following sections present (a) planning and design topics that you should consider before starting your website project, (b) a discussion of the controls that should be in place to manage the project, and (c) a brief introduction to post-implementation tasks. My goal is to provide guidance and perhaps even stimulate some ideas that will help you develop a website that will serve your company well.

Much of the terminology used in this publication assumes your company is in the business of selling products or services and that you will use your website to promote your business interests. If your organization does not fit this admittedly narrow view and/or your website will serve some other purpose, be assured that the concepts presented here apply to all types of organizations and website design projects.

PLANNING THE WEBSITE

Planning is the most important step in creating a website, and perhaps the most difficult. It is not enough to decide that you need a website—you must identify the reasons why you need a website. A site developed with inadequate planning will likely fall short of your expectations.

Initial Steps

Some basic questions must be answered before the actual process of designing the site can begin:

How will a website benefit your company? You must clearly articulate what you expect the website to do for your business by identifying specific goals that the site should help you achieve. Goals could include things like increasing revenue, reducing costs, attracting more business, reducing phone calls (regarding your location and

business hours, for example), building a mailing list, or raising your company's profile.

How will a website benefit your customers? A website cannot be effective unless it meets customer needs. Customers will visit your site with a specific purpose in mind, so the site must be designed to help them accomplish what they set out to do. The need to emphasize content and functionality cannot be overstated. A discussion on the importance of site content and functionality appears [below](#).

Who should be involved in the design process? Designing a site is a collaborative effort that requires people from different disciplines to work together. It is important to identify key players in your company who should be involved in design decisions.

Who is your competition? You probably have a good idea of who your competition is right now, but don't forget that your arrival on the Web will introduce all new competitors. Resist the temptation to simply base your site design on what the competition already has in place—instead, try to think of ways your site can be designed to give you a competitive edge.

I recommend writing a brief mission statement to define your site's purpose, its intended audience, and features that will distinguish it from the competition. It is also a good practice to state measurable goals in writing to provide an objective framework for making decisions during the course of the project.

The mission and goal statements, when approved by each of your key players, can prove invaluable in keeping your project on track.

What Can a Web Presence Do For You?

Take advantage of what the Web does best. Broadcast and print media have their purpose, but the Web offers opportunities and advantages not available in those mediums. For example, you can use your website to:

- ❖ **Reach new markets and customers** by removing geographic barriers.
- ❖ **Provide better customer service and visibility**, given that the Internet is “open for business” 24/7.
- ❖ **Encourage repeat business** by using e-mail to inform existing customers about new products and services, sales promotions, events, etc.

- ❖ **Create marketing opportunities** by obtaining e-mail addresses and other information from site visitors.
- ❖ **Save printing and postage costs** by replacing print media with Web content, e-mails, and downloadable documents.
- ❖ **Reduce bad leads and phone support costs** by clarifying who you are and what products and services you offer.
- ❖ **Measure customer interest** by examining site traffic patterns. This information can be used to forecast sales, manage inventories, and evaluate the effectiveness of your site.

In summary, it is important to recognize the unique opportunities available on the Web. Before using an existing marketing approach on your site, try to think of ways it can be modified to better suit the medium.

Content and Functionality are Key

Your mission statement, goals, and available resources will have major roles in determining what goes on your site. Company goals must be combined with customer needs in a manner that ultimately makes your site useful to your customers.

Budgetary and/or time constraints may very well limit your site's content. If this is the case, you will need to identify the core features that the site must have, and then prioritize other content that you would like to include. Your mission statement and goals will provide the objective framework needed to do this.

Functionality refers to the user-friendliness of a site's interface. This is largely the responsibility of the designer, and includes things like:

- ❖ **Navigational elements.** Menus and links should be intuitive, allowing the user to easily accomplish what they set out to do.
- ❖ **Visual elements.** Icons and symbols, if used, should be conventional to provide appropriate visual clues to the user.
- ❖ **Placement.** Menus, content, and other elements should appear where the user would expect them to be.
- ❖ **Color schemes.** Colors and color combinations should be visually appealing and complement your company's logo and branding.

Page layout, graphic content, and colors scheme options should be discussed with your Web designer, who can make design suggestions based on your preferences.

Stay Focused

Website projects run the risk of expanding beyond their original scope, which can happen when team members stray from the mission and goals, and the project is pulled in too many directions. If creativity is left unchecked, the site can quickly lose its identity. Don't let this happen, because it will result in a bloated project that will likely exceed your budget and result in a site that falls short of your goals.

You can avoid this risk by clearly defining what you're creating, deciding how decisions will be made, and learning how to say no to ideas that are inconsistent with your original plan.

Other Planning Considerations

Two additional matters need to be addressed at some point when planning your site:

- ❖ **Name and register your site.** Don't underestimate the importance of choosing a good domain name. Try to keep your site's name as short as possible and free of symbols (like hyphens). Many desirable domain names have already been taken (especially if you want a dot-com name), so your first choice may not be available.
- ❖ **Choose a Web host.** Care must be taken when choosing your Web hosting service to ensure it offers the services and features needed to support your site. Your Web designer should be able to help you select an appropriate host.

Although these are not core components of the planning phase, they should not be left to the last minute either.

MANAGING THE PROJECT

Project management can be defined as a concerted effort to fulfill the goals a project. It is a discipline that focuses on the nature of projects and offers ways to control their progress. As applied to website design, the “project” includes the following items:

- ❖ **A specific and measurable goal.** The project is complete when the website has been successfully launched.
- ❖ **A specific timeframe.** The success of the project can in part be measured by how well the website is designed within the timeframe allotted to it.
- ❖ **Resources.** This generally includes money and human resources. The Web project’s success can be measured by how well these resources are allocated and coordinated.
- ❖ **Interdependent, but individual, tasks.** If a particular task is not completed on time, it typically affects other tasks and the overall schedule.

If you are already familiar with project management, you will no doubt realize that creating a website is, in essence, a project, so don’t hesitate to apply what you already know. The project can be controlled more effectively when the various elements of the project are preplanned and progress is examined on an ongoing basis.

DESIGNING THE WEBSITE

This section deals with some of the more technical aspects of Web design. You need only understand the general concepts presented here so you can make informed decisions about your site.

Standards

The World Wide Web Consortium (W3C) is an organization that develops Web standards. It issues protocols and guidelines intended to promote the Web’s evolution and ensure Web technologies work well together.

The W3C has established Web standards to provide guidelines for building websites. A primary W3C objective is to standardize Web production by promoting the use of Extensible HyperText Markup Language (XHTML) to structure content and Cascading Style Sheets (CSS) for layout.

It is not important that you understand XHTML or CSS. What is important is that you are aware that Web standards exist, and that you should expect your Web designer to comply with them whenever possible.

The advantages of a standards-compliant design include:

- ❖ **Faster load times.** Less code means faster loading pages.
- ❖ **Easier maintenance.** It will be easier and less expensive to update and redesign your site.
- ❖ **Better visibility.** Standards-based designs are structured logically and are more easily interpreted by search engines. This can improve your search engine visibility and ranking.
- ❖ **Improved accessibility.** Your site will reach the highest number of browsers and devices possible. Accessibility is discussed [below](#).
- ❖ **Forward compatibility.** Compliance with today's standards will ensure your site will be readable in tomorrow's browsers and devices.

It is widely recognized that many (and probably most) Web designers use well-established but obsolete methods to produce websites. Such websites may work well on the surface, but they are often constructed using bloated markup that doesn't offer the advantages of standards-compliant designs.

In fairness, CSS layout is not well supported by some older Web browsers, and this has been a major obstacle in the widespread adoption of CSS. However, the use of such browsers today is minimal, so the compatibility issue should no longer be seen as a valid reason for not using CSS.

Compatibility

Compatibility is probably the most vexing problem faced by Web designers. There are compatibility issues in:

- ❖ **Browsers.** This category includes not only well-known Web browsers like Internet Explorer, Firefox, Netscape Navigator, and Safari, but

also screen readers, PDAs, phones, and all other visual and non-visual browsers. The biggest problem is inconsistent support for CSS layouts.

- ❖ **Platforms.** Windows and Mac are the most common, but these and other platforms affect both functionality (especially for Java and JavaScript) and appearance (colors and available fonts vary).
- ❖ **Plug-ins.** Sites that include Flash, QuickTime, and similar content will not display as intended unless the viewer has the appropriate plug-in installed.
- ❖ **Monitors.** This refers to the wide variety of screen sizes and screen resolutions that are in use. A web page displayed on a small monitor set to a resolution of 800x600 will look quite different than it will on a large monitor.

All of this means it is virtually impossible to create web pages that display identically to all viewers. The only way to approach Web design is to accept this fact and attempt to minimize the differences as much as possible.

Accessibility

Accessibility has to do with making websites available to as many people as possible, particularly those with disabilities. Accessibility guidelines have been established by the U.S. government in Section 508 of the Rehabilitation Act, and by the W3C in their Web Accessibility Initiative. If your organization receives government funds or contracts, it is required by law to be accessible to people with disabilities.

Accessibility and its implication for Web design can perhaps be best illustrated by using specific examples:

- ❖ Vision-impaired users access the Web using a screen reader (which converts text to audio), or a Braille reader (which creates the Braille equivalent of a web page on an electronic Braille pad). These devices require web pages to be structured in a particular way, and to provide text equivalents for certain graphic elements.
- ❖ Color-blind users may have difficulty viewing certain color schemes and making sense of text that refers to color, e.g. “Click on the blue box for more information.”

When you comply with accessibility guidelines, it not only benefits disabled users, but it also makes your site more accessible to search engines and more compatible with future technologies.

Search Engine Optimization

Search Engine Optimization, or SEO, involves designing or redesigning a website so that it does well in “organic” search engine listings. Organic listings are sometimes referred to as natural listings, and exclude paid placement and pay-per-click programs.

Research has shown that organic listings enjoy two distinct advantages over paid listings:

- ❖ Most searchers tend to click on organic listings rather than paid listings.
- ❖ Over the long term, organic listings provide a better return on investment than paid listings.

SEO should be treated as an integral part of your website design project, and not simply as an afterthought. Some members of the SEO community would in fact argue that SEO should be considered the very foundation of a successful website. Sadly, the vast majority of websites today do not have a chance of achieving a respectable organic listing because they have not been designed with search engines in mind.

Maximizing your site's search engine visibility through SEO can be a powerful and effective part of an online marketing plan.

Other Design Considerations

- ❖ **Use an appropriate structure.** The site should be constructed to allow content to fall into natural categories that the user would expect to see. Not to belabor the point, but the site must be designed with your customer needs in mind.
- ❖ **Provide effective navigation.** This is a simple but often overlooked concept. The navigation system must simultaneously show users what you have to offer, indicate where they are, and guide them to their destination.

- ❖ **Create visual appeal.** An effective visual design provides an attractive structure to a site's content, features, and navigation system without calling too much attention to itself. Beware of using distracting and overpowering visual elements.
 - ❖ **Design for speed.** Web users are an impatient lot. Photographic images, animations, and multimedia content can take a long time to load in browsers and will test your viewers' patience. That is not to say that such elements should not be used—they can in fact be very effective in some situations, but only if used in moderation. When in doubt, err on the side of simplicity.
 - ❖ **Test for usability and compliance.** The Web designer's quality assurance program must employ tests throughout the design process to ensure the site functions as intended, and that it complies with coding standards and accessibility requirements.
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LAUNCH TIME

Launching your website is really more of a milestone than a process, because the “process” typically consists of little more than uploading your website files to your host's server. It is certainly cause for celebration though, because it represents the culmination of all your devotion and hard work.

But don't rest on your laurels just yet. Successful websites require routine maintenance and fine-tuning, as outlined in the next section.

NOW WHAT?

Web development is an ongoing process. After you launch your site, you need to analyze how it's being used and make changes to improve it. Post-implementation tasks include the following components:

- ❖ **Maintain your site.** You must update your site on a timely basis to reflect changes in your company.

- ❖ **Monitor your site's search engine status.** This involves checking your site's search engine visibility and rankings on a regular basis to ensure your SEO strategy is working.
 - ❖ **Promote your site.** This includes online promotions such as e-mail campaigns, linking strategies, and advertising.
 - ❖ **Examine site traffic.** It can be very useful to analyze traffic volume and determine where your visitors are from, how they found your site, what they do when they get there, and so on.
 - ❖ **Respond to incoming e-mails.** Incoming e-mails are essentially the online equivalent of phone calls, so prompt response times are critical.
 - ❖ **Evolve your site.** Keeping in mind your mission and objectives, learn what's working and what isn't, make changes if necessary, and follow up to determine if the changes improved your site.
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