



Best Practices for Developing a Web Site

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Best Practices for Developing a Web Site



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Developing a Web Site Strategy

By Paul Chin

In the mid-1990s the business question of the day was “Do you have a Web site?” A well-designed Web site was a new and exciting marketing medium that businesses and users alike saw as a novel, nice-to-have tool. Fast-forward a decade and nice-to-have has given way to necessity, and questions of Web presence have given way to questions of Web purpose.

Nowadays, it’s no longer about whether you have a Web site but rather how your Web site represents your business, and whether you’re using the medium to its fullest potential. A Web site is a business’s face to the world; and as such, it must reflect the tone and style of the business in a professional and polished manner. So why, after 10 years, are there still so many poorly designed business Web sites? Simple: Because they’re easy to build.

With all the commercial and freeware do-it-yourself Web tools on the market — and the relative ease with which they can be used — everyone who knows how to turn on a computer considers themselves a Web designer. But Web sites are much more than the sum of the bits and bytes that makes up its design. There are a lot of pre-development planning and strategy issues to deal with before you can successfully represent a 3-D business on a 2-D medium.

Representing your business on the Internet requires preparation and a well thought out strategy. You should never adopt a quick-and-dirty solution simply because the advertisement for a particular Web tool boasts that it can get you up and running in 20 minutes. Professional Web sites don’t come in a box — they need to be created, not unwrapped.

A truly effective Web site reflects not only the image of the business, but also its objectives. Settling for a cheap and amateurish site will devalue your business and can do more harm to your professional image and reputation than not having a Web site at all. Remember: Building a Web site might be easy, but building a good Web site is not.



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Understanding Form and Function

A professional Web site is a perfect marriage of form (i.e., how it looks) and function (i.e., what it does). The site must be aesthetically pleasing, and sometimes even entertaining, in order to catch the audience’s attention. But the site must also be informative and functional in order to provide value for the audience’s time and to get them to come back.

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Best Practices for Developing a Web Site

Your Web site must convey a message about your business to potential clients and customers. Unfortunately, many business owners place too much emphasis on the flash and not enough on the substance. The purpose of your Web site's design is to complement its message, not overshadow it. People rarely go to a Web site solely to ooh and aah the design — and if they do, they're unlikely to return because non-functional design gimmicks can get old very quickly.

When planning your Web site, it's important to keep in mind that what you can technologically do with your Web site should never take precedence over what you

must logically do with your Web site. Try to observe a three-to-one ratio of functional content and design elements to non-functional, purely esthetic elements.

Maintaining this balance, however, can be difficult for some — especially businesses developing their very first Web site. People can be easily blinded by their enthusiasm for design because that's always the fun part. Content and functionality seem too much like work in comparison. But a well-rounded Web site must be equal parts form and function; otherwise, it will seem a little lopsided. ■

Defining the Web Site Concept

The most challenging part of building a Web site is not so much the nuts and bolts of development; it's the planning and conceptualization. Before any actual designing and development can take place, you need to define your Web site's main purpose, what message you wish to convey, and how this message will be conveyed.

- Business's brand identity
- Industry type
- Target audience
- Web site's purpose
- Web site goals
- Online expectations
- Long-term business goals

You will also need to have a firm understanding of your core audience, and cater to its needs and style. A graphic design firm's Web site, for example, shouldn't look like a financial institution's Web site because they convey different messages to different audiences. The design concept for the former must project a creative and hip style whereas the latter must convey trust and security.

No one can tell you your Web site concept. This is something you need to determine on your own. Although there are many business- and industry-specific factors that contribute to a Web site concept, most are based on your:



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Representing Your Brand Identity

Every business projects an image, or a brand identity. Millions of dollars are spent creating these brands. They can be represented by logos (e.g., McDonald's golden arches, Nike's swoosh, Apple's bitten apple), mascots (e.g., the Energizer Bunny, the GEICO Gecko, the Pillsbury Doughboy), slogans, or catch phrases (e.g., Nike's "Just do it," Mastercard's "Priceless," Verizon's "Can you hear me now?"), personal brands (e.g., Martha, Oprah, Trump), or a combination of all

these. What a business does and how it treats its clients and customers also contributes to its brand identity.

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Brands are used to promote a business in various forms of media, from TV and radio ads to business cards and letterheads to brochures and posters — and of course, Web sites. But a branded Web site must go beyond sticking a company logo on a Web page.

Web sites differ from other forms of promotion. They require the Web developer to understand not only how audiences interpret visual content such as a hard copy brochure, but also how audiences interact with multimedia content. The advent of blogs and other Web 2.0 technologies over the last several years have given businesses even more creative and interactive ways of promoting brand identity.

Although Web sites provide innumerable possibilities, your business must already have an established brand. You should never undertake a Web design or redesign project if your business is undergoing an identity crisis, or if you haven't yet determined how you want your business to be represented. Trying to figure out your brand identity and your Web site at the same time can cause further confusion.

Choosing an Effective Domain Name

The domain name plays a very important role in the establishment of your business's online brand identity. It's important to consider how your domain name will be interpreted not in print, but in speech. In print, there's very little possibility for error because the domain is spelled out. But when you're trying to give someone your Web site address verbally — such as when you're speaking with someone on the telephone and don't have the luxury of handing them your business card — there's far too much room for interpretation.

So before you register your domain name, keep the following tips in mind.

1. For businesses, a .com top-level domain (TLD) is a must. Even if you have a .biz, .net, or .org TLD, people will always associate an e-mail or Web site address with a .com.
2. If someone else has already registered your desired .com domain name, try to avoid settling for an equivalent domain with a different TLD — for example, settling for acmeinc.net because someone else already

Are You Redesigning an Existing Site?

Web sites, like everything else, have a life cycle. Sometimes they need to be updated, and sometimes they need to be redesigned entirely. Whatever the case may be, you must understand your motivation for doing it. Are you looking to change some design elements to freshen up an outdated design? Are you updating the entire site to reflect a new brand identity? Or are you redesigning your site for the sake of redesigning it?

Web site redesign projects must be purpose-driven. They shouldn't be done simply because you're bored with your site and have nothing else better to do. Your redesign must contribute something to your business and, more importantly, to your audience. Doing it for the sake of doing it shows lack of focus and commitment on your part. And although users may appreciate a new design every few years, it can be disorienting to encounter a drastically different design too often during a short period of time. ■

registered acmeinc.com. When you verbally express your Web site or e-mail address to someone who doesn't happen to be sitting in front of a computer, they will most likely type acmeinc.com when they get back to their computer and get someone else. While this might not be a big deal with Web sites, it may pose a problem with e-mail addresses—especially if the .com owner has an e-mail catchall address. Your e-mail won't reach your intended recipient and you won't even know it.

3. An effective domain name requires little to no explanation when expressed verbally. Unless your brand depends on it, try to avoid:
 - a. Using numbers because you'll always have to follow up by saying either "That's the number '3'" or "That's the word 'three' spelled out."
 - b. Substituting phonetic letters such as "magik" instead of "magic" because you'll always have to follow up by saying, "That's 'magik' spelled with a 'k'."
 - c. Out-of-context homophones. For example, "WriteOfWay.com" (right of way) because you'll

always have to follow up by saying, "That's 'write' as in writing a letter."

d. Using acronyms to substitute a long business name. For example, when spoken, "V's" will sound like "B's", "X's" will sound like "S", and so on. Plus, no one will remember a name like "aiwsdd.com"!

4. Keep it short. For clarity, avoid using more than three or four separate words. AcmeDesigns.com is OK, but AcmeIncWebSiteDesignAndDevelopment.com is too much.

5. Try to avoid using hyphens because they can be awkward to say aloud. If you must use a hyphen (see the next point), use only one. Saying

"MyCompanyhyphenNamedotcom" is fine, but saying "MyhyphenCompanyhyphenNamedotcom" is far too cumbersome.

6. Be conscious of word arrangement. Sometimes, due to an unfortunate arrangement of words, a hyphen is necessary to protect the integrity of your brand identity. For example, the IT support community Web site Experts Exchange wisely used a hyphen in their domain name, www.experts-exchange.com. Without the hyphen, the domain name can be interpreted as www.ExpertSexChange.com. Even minor things like word arrangement can affect the image of your brand. ■

Web Site Anatomy 101

When people hear “Web site” they immediately think of its design, the flash and the wow-factor. But Web sites are made up of many interrelated components that are dependent on your specific business and goals.

Although every business has its own Web site vision, most sites have a basic set of components that need to be included and issues that need to be addressed regardless of the business:

Design elements: Design elements define a Web site’s look and feel. They include layout (e.g., minimalist, spacious, multi-columned), typography (e.g., traditional, modern, unconventional), and color scheme (e.g., bold, subdued, monochromatic).

Site navigation: Site navigation type defines the logical organization of content. It’s the mechanism by which users navigate from one location to another. Common navigation types include tiered menus (parent-child), sequential menus (brother-sister), and site maps (overview).

Site navigation mechanism: The manner in which the navigation is carried out and represented. Common

navigation mechanisms include static menus, drop-down menus, and pop-up windows. Whatever mechanism you choose, it must remain consistent throughout the site. Don’t use a drop-down menu on one page and a pop-up window in another.

Site and content architecture: Site and content architecture defines the physical organization components (such as applications and databases) and content. Site administration, manageability, and security will greatly influence your architecture.



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Content: The content you wish to present to users. This can include information about your company’s history, employees, and mission; information about your products and/or services; a portfolio of work; a list of past projects and clients; and contact information.

Content formats: The format of your content.

Common Web site content formats include text, images, PDF files, and audio and video files.

Style and tone of content: The style of your design elements and the tone of your Web copy will define the overall mood of your Web site. Style and tone can be formal, casual, humorous, or offbeat.

“The style of your design elements and the tone of your Web copy will define the overall mood of your Web site. Style and tone can be formal, casual, humorous, or offbeat.”

Optional components: In addition to the basic components described above, you can also make use of many other Web site features: blogs, streaming media, online chatting, search engine, search engine optimization plan, interactive applications, electronic shopping cart (for e-commerce sites), just to name a few.

The following checklist will help you piece together the anatomy of your Web site (Note: If you already have a Web site, and are undergoing a site redesign, some components can be reused or retrofitted):

Defining Web Site Anatomy

Required Web Site Components	Details
Design elements	
Layout	
Typography	
Color scheme	
Site navigation	
Tiered menus	
Sequential menus	
Site maps	
Site navigation mechanisms	
Static	
Drop-down	
Pop-up	
Site and content architecture	
Content	
Content types	
Style and tone of content	
Optional Web Site Components	Details
Blog	
Streaming media	
Online chatting	
Search engine	
Search engine optimization plan	
Interactive applications	
Electronic shopping cart	
(List any other components you would like to have on your site)	

Build In-House vs. Outsourcing

There's perhaps no bigger single decision affecting the outcome of your Web site than deciding on who will build it. It takes a talented Web site designer to properly represent your business in digital form. Unfortunately, because modern Web design tools make it so easy to whip up a site, too many businesses try to save money by taking shortcuts.

Although businesses may save hard dollars by foregoing professional Web development services, they don't real-



ize that a poorly developed Web site can have a negative impact on their business and their ability to win potential clients and customers. People aren't always forgiving of established businesses that have poorly designed Web sites.

Those charged with building a professional Web site must be equal parts designer, developer, information architect, and marketer. It requires expertise in the

following fields:

Field	Purpose	Contributes to:
Design	Aesthetics	Visual appeal and overall user experience
Development	Functionality	Usability and site/content architecture
Marketing	Content	Content and message
Communications	Message	Context and the manner in which content is conveyed

Here's a look at the pros and cons of developing your Web site in-house or outsourcing the job:

Pros		Cons
In-house	<ul style="list-style-type: none"> Gives you 100% control over the project. Keeps talent and knowledge in-house, allowing for future enhancements, modifications, and redesigns without having to incur the additional expense of rehiring outside designers. 	<ul style="list-style-type: none"> Must have equal expertise in design, development, marketing, and communications. Unless already familiar with Web site concepts and technologies, there's a learning curve that your schedule might not accommodate. Web site design and development expertise can come with a hefty price tag. You will have to rehire Web site designers if you decide to make enhancements or upgrades in the future.
Outsource	<ul style="list-style-type: none"> Professional Web site designers build sites for a living and know all the ins and outs of site development. Can drastically cut down on implementation time since there's no learning curve problem. 	

In-house: Are You Ready to Do It Yourself?

Those tasked with the responsibility of building a Web site must have an understanding of the fundamental principles and concepts associated with Web development. You won't do yourself or your business any favors by leaving the job in the hands of a Communications intern with a dog-eared copy of Learn Dreamweaver in 10 Days. So before you commit to building your own Web site, answer these key questions first:

Do you have the expertise to do this?

This is the deal-breaker. If you don't have the expertise to build a Web site you don't even need to answer the other questions. As mentioned earlier, the person or team responsible for building a site must employ design, development, marketing, and communications techniques equally. If the person or team is lacking in any of these areas, your professional Web site will end up looking anything but.

Do you understand the technologies and the tools?

Web sites can be built with many different technologies (e.g., XHTML/CSS, Flash, ASP, PHP, AJAX) and just as many different tools. They all have their advantages and disadvantages. The technologies and tools you decide to use can affect the longevity of your Web site.

Web sites must be built using accepted and established standards. Choosing proprietary technologies and tools considered outside industry norms could dramatically shorten your Web site's lifespan. The owners of these proprietary technologies and tools might one day decide to stop supporting them, or they might simply go out of business. You'll then be stuck with a Web site that's based on obsolete technologies.

Are you ready to commit to a deadline and accept responsibility for the project?

A Web site can help a business land new contracts and open new markets, but it doesn't bring in any direct revenue (unless you're building an e-commerce site). As a result of this, your professional Web site often takes a backseat to other revenue-generating tasks. And more often than not you'll wind up saying; "I'll work on my Web site when I have time." This can drag on indefinitely. If you're going to build it in-house, you have to treat it as a real priority or it will never get done.

What's your project scope?

The probability of success is relative to the scope of the project, the experience of the design and development team, the amount

of time you've allocated to the project, and your available resources. Even if you have in-house Web development expertise, the scope of the project might exceed your ability to carry it out.

Outsource: Finding the Right Designer

Just because you're outsourcing your Web site project doesn't mean you don't have any work to do. Your business is far too valuable to simply roll the dice when selecting a Web designer. You need to make sure you select the right people for the job.

It's never a good idea to settle on your first candidate. You should take a high level look at a broad range of designers and make a list of the potential candidates that meet your criteria. Then, narrow down your selections to three to five strong contenders for further review.

When evaluating potential Web site designers, it's best to learn as much as you can about who they are, what they do, how they do it, how long they've been doing it, and what they've done in the past before you sign a contract.

Those tasked with the responsibility of building a Web site must have an understanding of the fundamental principles and concepts associated with Web development.

Assess background, credibility, experience, and knowledge

Not all Web site designers are created equal. Unfortunately, there are plenty of designers claiming to be so-called experts who are more than happy to charge you a premium for their services. It's your job to separate the professionals from the wannabes. Interview your potential designers and developers, review their portfolio, and ask for a list of their previous clients. Also, take a close look at their Web site. Be wary of Web site designers who profess to know what you need and extol the virtues of a professionally designed Web site but have a shoddy Web site themselves.

Speak with past clients

When interviewing your potential designers, you know that they're going to promise you the moon because they want to win the contract. But experience tells us that what's promised isn't always what's delivered. Ask

What are they going to deliver?

It's normal to call your Web site designer when you need drastic changes to the site's structure or design, but you must be able to manage the content without them. Make sure that your designer provides you with the means and ability to perform content updates, and that they won't "lock" your content in binary files. For instance, it will be impossible for a business to manage its content on a purely Flash-based Web site if it doesn't have a Flash development tool and the knowledge to use it. No business should ever have to be at the mercy of its designer every time it wants to update Web content or correct a typo.

Another thing to be wary of are Web sites delivered with a proprietary content management system (CMS). Some people appreciate this because it allows them to manage their content without having to deal with the technology and inner workings of their Web site. Others, however, may find these proprietary

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your candidates for a list of past clients and get in touch with them for some unbiased opinions. Questions you should ask include:

- Did the designer(s) have a good grasp of what the business does and what it hopes to accomplish with its Web site?
- How well did the designer(s) work with the business (especially those who aren't technically inclined), and were there any interpersonal issues?
- Did the designer(s) deliver what they promised on schedule?
- Was there a steady stream of communication between the designer(s) and the business?
- Did the designer(s) answer the business's questions in a timely manner?
- Were the designer(s) receptive to the business's suggestions and ideas?
- Did the designer(s) provide adequate post-delivery support?

CMSs too constricting, preferring instead to have full access to the physical structure. Regardless, if a Web site is to be delivered with a proprietary CMS, you must ensure that the Web site can be ported away from, and "exist" outside of, that CMS. No Web site should ever be locked inside a proprietary tool.

Are there going to be any ownership issues?

Make sure that all candidates will give you full, exclusive rights to your Web site in its entirety upon completion: Design, images, source code, and content. Some unscrupulous designers will act as though they're doing you a favor by hosting your completed Web site on their servers, and will then charge you a fee if you decide to move your Web site to another Web host. Or, they will purposely write unnecessary code and call it "proprietary" technology and charge you extra for the source.

Evaluating Web Site Designers

Criteria	Designer 1	Designer 2	Designer 3
Size ¹ (number of designers in the company)			
Years in businesses			
Previous clients			
Location (determines accessibility during development and post-production support)			
Vendor neutral?			
Has knowledge and experience with (list technologies/tools)			
Technologies/tools favored			
Post-production training			
(List any other criteria for comparison)			

¹The size of a design company should only be used to gauge its ability to handle large projects, never to gauge the quality of its work. A talented solo freelance designer working out of a home office and a large company with 30 designers can both build a professional Web presence site. But the larger company will have the luxury of allocating multiple designers for a complex e-commerce site, thus cutting down development time. ■

Finding a Home for Your Web Site

Where your Web site will be hosted depends on your site components and business needs. There are plenty of service providers to choose from, each trying to outdo its competitors and promising to offer more for less money. Your job is to wade through all the marketing and find a Web site host that meets your current needs while still having enough wiggle room to accommodate future expansion.

Take a bird's eye view look at all potential Web site hosts and evaluate:

Cost: Most Web site hosts charge by the month but will offer substantial discounts for one year or multi-year contracts.

Disk space: Large documents, high-resolution images, audio files, and video files can take up a lot of disk space in a short period of time. If your Web site is going to be content and multimedia heavy, you need to ensure the Web site host provides adequate storage for your current and future files.

Transfer limits: Web site traffic will vary from month to month, but if you're expecting a lot of traffic, or you plan to stream multimedia content like audio and

video, you must make sure the host's transfer ceiling isn't too low. You'll most likely incur additional charges for exceeding your allotted monthly transfer limit.

E-mail support: If your business doesn't have its own dedicated mail server, you'll need to make sure the Web site host provides an adequate number of e-mail boxes for all your employees as well as adequate storage per mailbox.

Technology support: If your Web site is going to contain user applications (e.g., PHP, Perl, .NET) and/or databases (e.g., MySQL, MS-Access, PostgreSQL), check to see if the Web site host actually supports them.

Backbone security and fail-safes: The more fail-safe measures a host has, the more likely your Web site will survive a system crash

or failure. Fail-safe measures also help minimize service interruptions associated with blackouts. Typical fail-safe measures include regularly scheduled data backups, uninterruptible power supplies (UPS), backup generators, and a formal disaster recovery plan.

Once you've weeded out the hosts that don't meet your needs, you can use the table below to help you



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Your job is to wade through all the marketing and find a Web site host that meets your current needs while still having enough wiggle room to accommodate future expansion

narrow down your choices until you arrive at a suitable Web site host:

Evaluating Web Site Hosts

Features and Criteria	Host 1	Host 2	Host 3
General			
Windows support			
Unix support			
Cost per month			
Cost with annual contract			
Disk space			
Monthly transfer limit			
Fee for exceeding transfer limit			
Domain(s) name included in package			
FTP accounts			
Multimedia streaming support (Real, Quicktime, Windows media)			
E-mail			
Number of mailboxes included			
Size per mailbox			
Attachment size limit			
Virus protection			
Spam filtering			
POP3 and SMTP support			
IMAP support			
Catch all address			
Autoresponders			
Web-based e-mail access			
Development Support			
CGI-BIN directory			
Directory security			
Server-side include support			
PHP			
Perl			
ASP			
.NET			
Database Support			
MS-Access			
MS-SQL			
MySQL			
Oracle			
DB2			
PostgreSQL			

continued

Evaluating Web Site Hosts continued

Features and Criteria	Host 1	Host 2	Host 3
Backbone Security			
Server backups (i.e. UPS)			
Facility backup (i.e. generator)			
Data backup (i.e., tape)			
Frequency of data backups			
Disaster recovery plan			
Customer Service and Technical Support			
Toll-free number			
E-mail			
Chat (IM)			
Availability (i.e. 24/7, business hours)			
Average turnaround time			

To avoid the administration hassles of having to deal with a separate Web site host and domain name registrar, register your domain name with the same service provider as your Web site host. Or better yet, choose a Web site host that includes a free domain name registration.

If, however, you would like to register and park your domain name for safekeeping, but are not ready to subscribe to a Web site hosting package, the following table can be used to evaluate potential domain name registrars separately from Web site hosts:

Evaluating Domain Name Registrars

Features and Criteria	Host 1	Host 2	Host 3
Cost per year			
Cost per multi-year registration			
Private registration			
Auto-renewal			
Transfer lock (to prevent unauthorized domain transfers)			
Domain transfer fee			
(List any other criteria for comparison)			

3-D Vision in a 2-D World

Many professional Web sites fail due to poor planning and strategy. Some businesses do a haphazard job because they just want to get it out of the way; others are so excited about seeing themselves on the Web that they make foolish decisions without thinking them through.

Before starting your Web site project, you need to have a clear view of what you want to accomplish with your

business and your Web site. A lack of vision in your 3-D world will carry over to your 2-D world. Eventually, people will simply stop paying attention to both. ■

Paul Chin (www.paulchinonline.com) is a freelance writer and journalist. He has previously worked in the aerospace and competitive intelligence industries as a software developer and intranet specialist. He currently writes on a wide range of IT topics, including systems development and security, digital communications and media, content management and Web design.