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▼ A primer for website design

Joe Dysart¹

Joe Dysart is a consultant and speaker specializing in website design who is based in Thousand Oaks. CA. (e-mail: joe@joedysart.com).

Partly art, partly science, good website design is important for fledgling biotech companies.

While bioentrepreneurs need to subject every new line item in their budgets to brutal economic triage, the decision about when to create a website is not nearly as labored. Quite simply: if you've reached a point in the development of your company where you have your own telephone number, and you have, or need, startup capital, you have reached the point where you need a website.

"The Web is destined to become the new television," says Barry Silverstein, author of Business-to-Business Internet Marketing $^{\perp}$. "As it flourishes, the manufacturers of cereals and soaps and cars and computers and just about every other kind of product embrace it. Why? Because they firmly believe it is the next mass media channel."

This article offers some practical advice for helping your company "go live," and addresses some important issues—whether to design your own site or enlist the help of a website designer, what to include on your company website, and most importantly, how to get your site before the eyes of the people you most want to see it.

Where to begin

Fortunately, despite what some website designers would have you believe, designing your own website is a lot easier than you may think. If you're already comfortable with Windows and perhaps a word processing program, learning to design a website merely involves transferring the skills you already have, and adding a few new ones.

Equally good news is that most of the popular programs allow you to design a website by cutting and pasting images in a 'what you see is what you get,' design environment. So if you prefer, you never even need to know what HTML (hypertext mark-up language) really means.

Whether you design your own site or decide to outsource it, your success will hinge on the realization that a company website is much more than 'a flag on the Net,' or a 'billboard in cyberspace.'; Instead, the best websites are virtual places of business, a first contact, an interactive tool, where prospective and existing clients can learn about your business and begin conducting business with you—at least on a limited scale.

What a website is not is a technological homage to yourself, or to the website designer who might have helped you establish a presence on the Net. Technological homages—showy sites that take forever to download—impede rather than promote commerce. Such websites are an all too common sight on the Web. Don't become another statistic in this genre.

If you're designing your own site, you'll need to start with a good website authoring tool that will let you design a basic site, which can subsequently be enhanced with specialty design programs. For beginners, a decent authoring program with a relatively short learning curve is Microsoft Front Page. A more advanced tool, which has a reputation for greater versatility and greater reliability in rendering integrity across all types of Web browsers is DreamWeaver by Macromedia.

Before you begin your design, you will want to visit some information clearinghouses that offer ideas on what works best in website design. A popular site is <u>Webbie World</u>, home of the oft-cited Webbie Awards. For the flip side, you can feast your eyes on the prosaically titled "<u>Web Sites That Suck"</u>. What the site lacks in decorum, it makes up for in an illuminating perspective on website design disasters (see "<u>Ten website design pitfalls</u>").

Key elements

Box 1: Ten website design pitfalls

Mark Williams

In the report, *The Homepage Report: A Study of the Latest Crop of Biotechs*, a team of Internet specialists analyzed 57 biotech websites for design consistency, organization, and information delivery. Overall, new scientific companies scored poorly. Of the companies in the study, 54% allowed poor design to undermine their work and reputations. Just over half presented themselves in what the team judged to be an "excellent, exciting, and professional" fashion¹.

Here is some advice to avoid common pitfalls:

- 1. Skip animated introductions. The study revealed that biotech visitors are extremely goal oriented: they don't want to be entertained, and have very specific reasons for visiting a website. Animated graphics programs like those on 20% of the homepages sampled require a complex download, which can frustrate even experienced users. Plus homepage animation can deprive biotech companies of premium placement in search engines like Google and Yahoo!, which is critical if users are to find a new website without memorizing the Web page address (URL). Automated programs used by search engines cannot index content on animated pages—rendering sites almost invisible to the majority of users. The fact is, animation is better suited for material hosted deeper within a site. "Don't send reporters elsewhere just because they can't get beyond the homepage," counsels Web usability expert Jakob Nielsen². If you simply must animate your homepage, prominently display a 'Skip Intro' button. For appropriate use of animation see Syrrx's "Gene to Drug Tour" at http://www.syrrx.com.
- 2. Meet the need for speed. Slow download speeds undermine user confidence in the quality of content and products. And download speed will remain a problem. Noted Internet commentators at Forrester Research report that only 19% of online consumers have broadband connections—and 57% say they don't want it³. It is a mistake to assume potential investors and employees will be surfing the Internet via high-powered corporate networks: consequently website owners are advised to create pages that load quickly.
- 3. Avoid confusing navigation: place clearly labeled information markers in the same place on every page. Poor designers force users to hunt for key links. Using a website should be easy and intuitive. Finding your way around should not require a rulebook. Over a third of the sites surveyed do not maintain a consistent navigational structure and inadvertently hide important content deep within the site.
- **4. Don't hide important information from visitors.** Commonly accessed data should be available within one click of the homepage. Seventy-four percent of sites surveyed got this right—but one in four hid contact information deep in the site or required users to request information by e-mail. Researchers at the University of Maryland found that users performed best on sites that put content no more than two clicks away from the homepage³.
- **5. Ditch misleading misnomers.** Good designers test their creations with members of their target audience before publishing their site. Internet usability specialists recommend that website managers design for the lowest common denominator: in digital@jwt's judgment, site managers are on the right track if an 11-year-old can find information without assistance. The life science community is increasingly international, and site managers cannot assume that everyone visiting their new website is a PhD perfectly fluent in English. Label information carefully and if in doubt, use secondary text to describe the choice to users. On one surveyed site, clicks on 'Media' led to press releases and news coverage: most of the sites in the sample present company press releases in sections labeled 'About Us' or 'Press Release.' Wise designers study rivals to determine appropriate naming conventions—and follow them religiously.
- **6. Don't forget to register your website with Internet Search Engines such as AOL and Yahoo!** Many visitors will arrive at your website from a search engine. Only e-mail use outranks search engine queries as an online activity, with 52% of Americans checking their e-mail on a typical day, compared to 29% who use a search engine⁴. Make it easy for them to find your new website by making it a priority to submit the site to relevant Internet directories and search engines.
- 7. Don't take your eyes off the big boys: Larger companies can spend millions redesigning their websites to make them easier to use. Don't limit yourself by only comparing your website with immediate rivals who may have designed their websites on limited budgets. Look beyond them by analyzing the design decisions of big corporations—industry leaders like Amgen and Medtronic have spent considerable time and energy understanding what users want from their websites. And the lessons they have learned are clear to any visitor. You won't go far wrong if you follow their lead. That's not to say smaller Biotechs do not offer effective online experiences. For simple, well-designed but modest websites check out some of the best sites from the report: Caliper Technology, ViaCell, and Somalogic.
- 8. Remember the only constant is change. Most of the website managers digital@jwt surveyed were planning to modify their site. Good site managers use technologies that make constant editing and approvals easy. Without an easy way to update content, simple data changes or revisions in the management team frustrate many site managers. One in five sites surveyed did not provide material fresher than 90 days: nothing kills repeat visitor enthusiasm as quickly as out-of-date content. What's to stop visitors from assuming that if your site is shoddy, your science will be, too?
- **9. Don't forget to describe your business.** Sixty-one percent of new Biotechs fail this test. Too often Biotechs place vague marketing-speak on their homepage without the support of a detailed and straightforward description of purpose. Most visitors will arrive at the website out of context—especially if they are following a link from another site or a search engine. The information on your homepage will be the first thing they learn about your company. Make it compelling as the whole world is only one click away.

10. Get a memorable and easy to spell URL. New Biotechs love fancy sounding URLs that are hard to spell and difficult to remember. In a recent Nielsen Norman Group Study², "Want Reporters to use your website? Start thinking like they do," about half of the journalists surveyed assumed that http://www.yourcompanyname.com would take them to the correct site. Site managers are advised against fancy monikers—like http://www.geneticXchange.com or http://www.xcyte.com. It's the first law of marketing: if they can't find you, then they won't buy your products.

Nature readers can receive a free copy of digital@jwt's white paper, *The Homepage Report: A study of the latest crop of Biotechs*, by e-mailing the author, Mark Williams (mark.williams@jwt.com).

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Mark Williams, senior partner with website design firm digital@jwt (a member of the J. Walter Thompson group of companies), has published two studies of biotechnology company websites.

When designing an interactive corporate presence, the first design element to focus on is themed pages. Just as all your stationery is coordinated with the same look, feel and corporate logo, so should your website. Microsoft Front Page comes with a number of predesigned, themed corporate page sets that can be tailored to your own needs.

If instead you plan to design your own theme from scratch, be sure to pick colors that make sense. Granted, the 'proper' colors for a website can be entirely subjective; but if you know you are color-blind, getting some advice on this design facet is a good idea.

No matter what the ultimate look and feel, you will also want to be sure your home page—the first page visitors will land on—communicates clearly who you are and what you are offering. No matter how you decide to do this, use graphics sparingly to ensure the page downloads quickly, and offer quick jumps via links to key interest areas. Some examples of deftly designed home pages in the biotech industry include $\underline{\text{Genelabs}}, \underline{\text{Amgen}}$ and $\underline{\text{Immunogen}}$ (see Fig. 1).

Figure 1 Amgen's home page offers the key elements for fast and easy site navigation, while clearly branding the firm in visitors' minds.



Once you have a broad-strokes design, incorporating a website search engine on your home page should be your next priority. These tools enable any visitor to quickly find the specific information they need on your site by entering a few key words. Many advanced website design packages include easy to install templates for website search engines. BioTools B&M Labs, S.A. offers a site search engine on its home page, and Genentech has created a search engine to enable journalists to quickly find the specific Genentech news they need.

A complementary component to the search engine is the data drill. This tool groups hotlinks on your home page, enabling visitors to quickly point and click to a specific subject area of interest within the website. All advanced website design packages offer virtually effortless tools that let you quickly create a grouping of hotlinks. Good examples of this design concept in action can be found at Abbott Laboratories, which offers data drills on its home page for businesses, products and conditions, and Shimoda Biotech (see Fig. 2).

Figure 2 Abbott offers three data drills on its home page for enhanced navigation to various information domains.



Once you have a home page, you will want to replicate the look and feel that has been established there throughout the key information domains featured on the site. For biotechnology companies, those domains should include a company mission statement, biographies of key company executives, current products and products-in-development and, if applicable, an investors' information section.

You should also use your presence on the Web to recruit staff by establishing a virtual career center. Such a center can actually help you reduce hiring costs. "No matter the industry in which you work, high-quality Internet recruiting can be achieved for zero to minimal monetary costs," says Barbara Ling, author of *Poor Richard's Internet Recruiting*².

Besides presenting your startup's best face to potential employees, your career center should sell job seekers on your company's unique culture, according to Ling. In addition, she advises companies to create a separate search engine in the jobs domain if the company offers—or soon will offer—a number of positions across a wide spectrum of departments.

AstraZeneca offers an example of a well-designed career center, as does Cell Genesys.

You will also want to establish a virtual press center. Ideally, a deftly designed press center offers journalists all the tools and information they need for researching stories in cyberspace. These include press releases sprinkled with executive quotes, downloadable digital images of key company personnel, quotable company views on current events, a link to financial information on the company (especially if the company is public), and voice- and e-mail information for key press contacts within your organization. An extremely well-stocked press center can be found at Biogen.

Finally, no matter how many bells and whistles you add to your site, always design a 'text only' version—a version devoid of graphics, multimedia and other elements. Too often, companies forget that many people cruising the Web want pure, unadulterated raw data, or are cruising the Web with 56K, dial-up modems. Why frustrate these people, when you can easily accommodate them?

Outsourcing website design

Given the substantial learning curve required to design a truly exceptional website, you may want to outsource the responsibility to an established professional. Finding someone you can count on requires knowing the tough questions to ask before you hire, and knowing from the start the technical specifications you need to nail down in writing.

Whether you find your potential candidates via a quick search of the Web or through a referral, it is important to evaluate a designer's work online, says Jan Zimmerman a, author of Marketing on the Internet. "Always, always, always look at designers' work online," she says. The reason: websites showcased on laptop computers can often be hot-wired to perform much more efficiently than they do in 'real life.' On the Web, what you see is what you will get.

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Moreover, rather than signing a contract for a website to be designed from scratch, Zimmerman advises trying to cut costs by finding a website template, and then hiring a local website designer to customize the feel.

Either way, expect the rate to be \$1,500-2,000 for a basic 12-20 page site. Some designers charge \$150-300 per page, Zimmerman says, whereas others charge \$50-150 per hour. Generally, basic HTML programming is available at the low end of the scale, while more advanced programming, such as JAVA and database programming will cost significantly more.

Zimmerman says to be sure to make your request for a quote as detailed as possible. One way to avoid any confusion is to offer website designers examples of sites you like, and to detail features from those sites that you would like to include on your own. Website designers will also want to know how many pages you will need, and how often you want the site updated.

You should also make sure you retain full ownership of the site after it has been designed. Indeed, Zimmerman says, your contract should clearly state that your company owns the copyright to the website, owns any and all code associated with the site, and either physically has the site's backup disk or a full download of the site's code. Otherwise, you may end up with a stunning company site that is owned by the website designer.

Zimmerman says you'll also want to establish site testing requirements to ensure your site renders as designed in all the major browsers, including Microsoft Internet Explorer, Netscape and Opera—as well as a few older versions in each of those browsers. And you'll want to establish costs for future modifications, including charges for multimedia effects and interactive features like chat rooms, bulletin boards and e-commerce.

A word about promotion

Given the millions of websites currently competing for attention on the Web, no Web strategy is complete without a complementary website promotion plan. Indeed, without promotion, your site will most likely languish in cyberspace as little more than a curiosity to your employees, friends and family.

The easiest way to avoid this fate is to put together an arsenal of website promotion tools that should be implemented the moment your site goes 'live.' Here, the first job is to get your site listed with as many Web search engines—like <u>Google</u> and <u>Yahoo</u>—as possible.

A high-stakes game, search engine positioning is considered an art in itself on the Web, so you may want to consider seeking out the services of a Web-positioning firm if you want to seriously enter the search engine listing wars (search on key phrase: Web positioning firms). There are also some good programs for search engine positioning you can install on your company's own IT system, including Web Position Gold and Traffic Builder.

In addition, you should consider renting or buying one or more biotechnology-related e-mail lists to begin promoting your site. This is probably one of the easiest—although it may be one of the most expensive —ways to promote a website or company services on the Web.

Simultaneously, you will want to begin developing your own mailing list by offering an email-delivered newsletter on your website. These promotional tools are much less expensive to produce and distribute than hard-copy newsletters. Indeed, you can even experiment with the medium for free at sites like <u>Topica</u>, <u>Yahoo! Groups</u> and <u>MSN Groups</u>, which offer free e-mail newsletter and mailing list hosting services.

Topica, Yahoo! Groups and MSN Groups also offer already existing biotechnology newsletters and mailing lists. These lists can be used to distribute company press releases and related company promotional information for free. Applied Biosystems wastes no time promoting its company newsletter "BioBeat" to visitors: there's a sign-up for the e-mail-delivered newsletter on its home page.

Where to go from here

Given that the Web is probably the most important development in mass communication since the advent of television, you may want to delve a little deeper into the significance of the medium, as well as its enormous marketing potential. Hundreds of books have been written on website promotion and design.

Good places to start—in addition to the guidebooks already mentioned in this primer—include *Designing Web Usability*, by Jakob Nielsen 4 , *Essential Business Tactics for the Net*, by Larry Chase 5 , *Planning Your Internet Marketing Strategy*, by Ralph F. Wilson 6 , *101 Ways to Promote Your Web Site*, by Susan Sweeney 7 , and *Poor Richard's Internet Marketing and Promotions* 8 by Peter Kent and Tara Calishain.

See you on the Web.

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