

# ASK THE HOMEGURRRR!

## Well-Tooled Elegance

BY LYNDA WEINMAN

Excerpted and edited with permission from Lynda Weinman's newest book on Web design, <deconstructing web graphics.2>, published by New Riders Publishing and distributed in Canada by Prentice-Hall.



**B**osch Tools originated in Germany and is renowned in Europe, where it is considered the Mercedes-Benz of powered hand tools. Here in North America, Bosch tools are prized for their balanced ergonomic

design, comfortable grip, sturdy manufacture, and rugged dependability. From a design perspective, the tools themselves are quite beautiful. These are premium tools for master woodworkers and serious tradespeople who know the wisdom in buying the best. These tools help them to accomplish their best work.

The purpose of the Bosch site is to provide a web-based added value campaign for current and prospective users of Bosch Tools. The different areas of the navigation clearly reflect the site's purpose; there is information about the tools, features of current tools, updates on new tools, information on where to purchase tools, where to obtain tool repairs, and how to find customer service. Plus, there's considerable value in the form of downloadable tips, tricks, plans, and projects — all delivered in PDF format.

Bosch also wants to use the web to build relationships with their customers. As part of their plan to add further value to the site by initiating a dialogue, the site includes a web-based sweepstakes to win free Bosch Tools. In order to enter this sweepstakes, the visitor surrenders information. Thus, Bosch is registering both their loyal and prospective users. This registry will also be used to develop web-based forums for their various client trades as, for example, a "Woodworkers Forum."



### Bosch Power Tools

<http://www.boschtools.com>

This award-winning site is noteworthy not only for its simple clarity and strength of organization, but also for the manner in which the site successfully conveys the personality of Bosch Tools. There is no technological overkill here, just information presented with a well-designed, consistent interface where every detail has been crafted with exemplary care. This article describes behind-the-scenes techniques for color themes, JavaScript rollovers, 3D animated GIFs, and imagemap creation.

**Web Design Firm:** Cramer-Krasselt Interactive

**Client:** Bosch Tools (S-B Power Tools Company)

**Original URL:** <http://www.boschtools.com>

**Archived URL:** <http://www.uncom.com/dcw2>

**Type of Site:** Catalogue, Brochure, Added-Value for the Brand

**Server:** Wintel Platform

**Operating System:** UNIX

**Server Software:** Apache

**Webmaster:** Heath Greenfield

**Account Executive:** Heath Greenfield

**Management Supervisor:** Greg Reifel

**Creative Director:** Marshall Ross

**Art Direction:** John Taylor, Stuart Cohn

**Writer:** Bob Volkman

**GIF Animations:** John Taylor, Stuart Cohn

**HTML and Programming:** Cramer-Krasselt Interactive and Associates

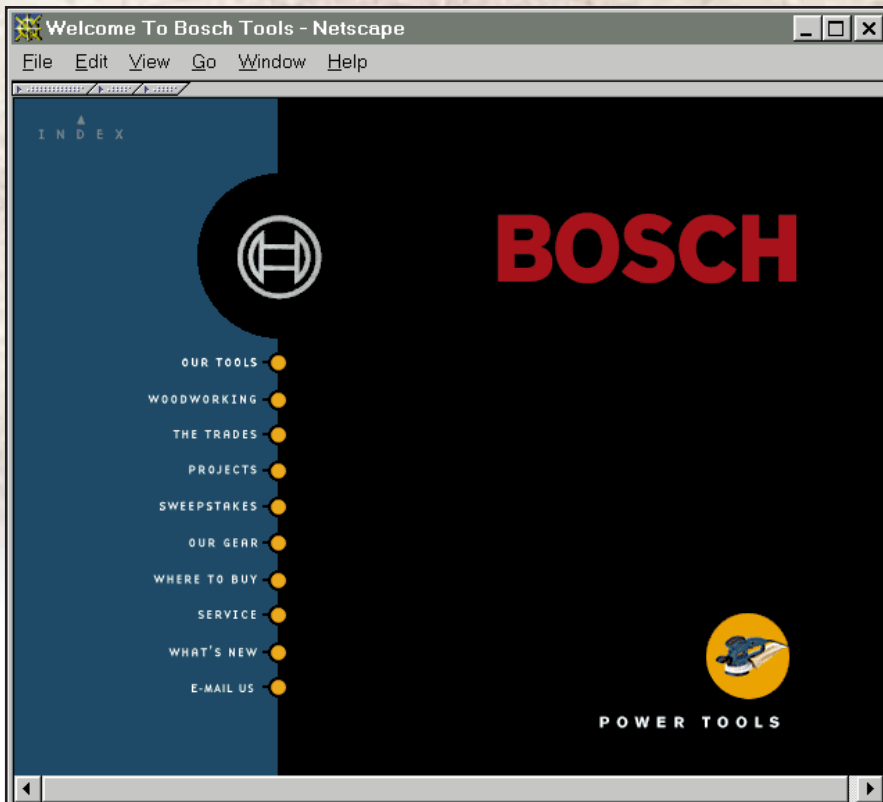
**Photography:** Jim Arndt

**Development and Production Platforms:** UNIX/Windows

**Design Software:** Adobe Photoshop, Adobe PageMill, HomeSite

**Downloadable Project Files:** Adobe PageMaker, Adobe Acrobat

**Programming:** CGI, JavaScript, Java



Here is the Main Directory page of the Bosch Tools site. Note the appealing balance of form, color, and space that is established here and remains consistent throughout the site. This page has a link at the upper left "INDEX" that expands this graphical directory into an index of the site in outline format.

### THE BOSCH CREATIVE TEAM

The look and flow of the Bosch site was developed by two designers at Chicago advertising agency Cramer-Kraselt, John Taylor and Stuart Cohn, who came to this project with respectable digital abilities but no real HTML or web experience.

Regarding the expertise which he brought to this project, John Taylor said, "My main emphasis is in print. I really don't do a lot of web stuff. In fact, while I can look at HTML and figure out how someone got something to work, I don't write it myself. I'm mainly just the 'art guy.'"

Stuart Cohn is a Chicago native who obtained his art training in an unlikely way. He entered a "Draw Tippy" contest (like you see on the inside of a matchbook) and won. He claims, "That was enough to get me into art school and that's where I got my basic art and design training."

Like John, Stuart is self-taught *Photoshop* and, also like John, he confesses, "Of HTML, I do not know a thing. No coding here. I'm strictly the design and art direction guy."

The point to be recognized here is that both these designers were — and, to a large degree still are — neophytes to the technical side of web site creation. The success of their site is largely attributable to two things: the excellence of their design sensibility, and their ability to clearly communicate and collaborate with the people who actually implement their designs.

### DESIGN CONSTRAINTS AND CONCERNS

The Bosch site has a very organized and clean feel to it, much like its printed brochure. The look and tone is consistent with the current Bosch advertising campaign, as well as with the look of the tools themselves, which feature small dabs of orange and red color in their detailing and buttons. The designers determined that this familiar color scheme and the overall tone of the site helps the audience feel less intimidated about the web and the technology being used.

The designers knew that the audience for this site probably wouldn't be as technically adept with computers as they were with their sanders, routers, and radial-arm saws. They also expected that while many contemporary craftsmen would perhaps have computers, it might be ludicrous to expect them to have the high-end computer hardware.

According to technical director Heath Greenfield, "We tried to minimize the use of high-tech programming while still projecting a contemporary, quality site." The design team anticipated that many people

were going to be visiting this site through older browsers and would have neither the time nor the inclination to wait several minutes for pages to appear or to download many special plug-ins. The site includes a number of buttons that link to downloadable plans, projects, and articles regarding the various crafts and tools. These optional items can only be viewed with the Adobe *Acrobat Reader* — yet the actual site is fully navigable without this plug-in.

Chris Pfaus, VP of Marketing at S-B Power Tool, stated,

#### ■ note

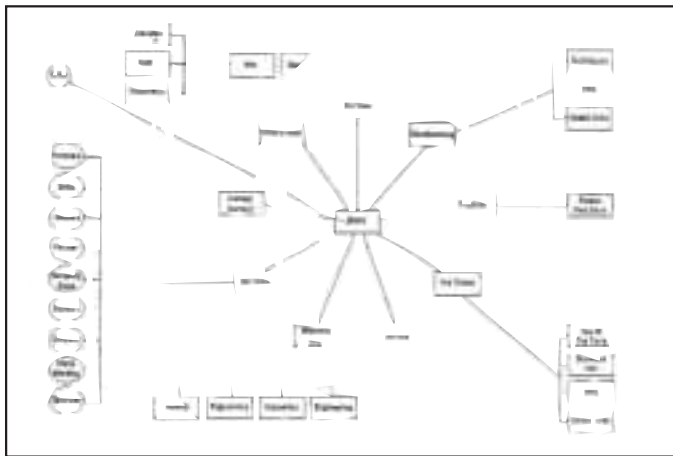
#### CONTROLLING THE EXPERIENCE

The Bosch site has provided a means for users to enter the site and obtain a browser to view the site with optimal results. This is good information architecture. The general objective is to greet the visitor with a universally accessible "splash" page or entryway, which will be sufficiently interesting to ensure that the visitor will opt for the full site experience, even if it requires plug-ins or even a browser upgrade. An effective splash should clearly delineate the objectives and style of the site and generate sufficient excitement to retain the audience.

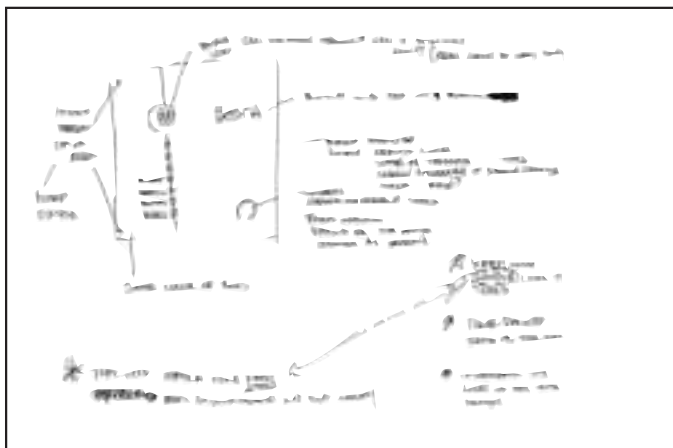
“Greenfield and his team wanted to stay true to the tone and attitude of the professional tool users and their market.” This is not a techno-boutique for premium tools. The copy speaks the language of tradespeople and woodworkers, and the site provides plenty of no-nonsense, useful information. The writing itself is consistent and clear. Like Bosch Tools themselves, both the graphical site and the information it delivers are intended to be a functional tool for the pro tool user.

### AOL COMPLIANCE

AOL promotes its own browser which does not acknowledge many of the tags and features included in the Bosch site. A major design concern was to create a web site that would work well with Netscape Navigator, Microsoft Internet Explorer, and America Online because they felt it was important to build consistency across platforms so that the site would remain true to the corporate image for design and dependability.



This early organizational diagram helps to explain the continuity and smoothness experienced by visitors to the Bosch site. Every area of the site (and its relationship to the rest of the site) is clearly delineated within this diagram.



This plan for the Main Directory page is one of many concept sketches that the designers used to communicate their design sensibility to the HTML and programming team at Cramer-Krasselt Interactive.

### INFORMATION ARCHITECTURE: THE PLANNING

Information architecture must be planned carefully. The Bosch site is exemplary for the way in which various areas and types of information are organized to create a “sense of place,” unified with an easily-navigable interface. Early attention to this aspect of the design was a fundamental factor in the ultimate success of the site.

### DESIGN CONSISTENCY

Whoever says that designers have no control over their designs on the web should take a good look at the Bosch Main Directory. Great attention was paid to establish a graphic identity and color identity throughout the site. The navigation design was integrated seamlessly with the visual design.

The color theme was chosen for its relationship to the colors of the Bosch Power Tools and was consistently maintained throughout the site. Browser-safe colors were chosen because they reproduce consistently across platforms and browsers.

Color was a powerful component of the overall visual interest of the site because the colors were varied relative to the function of specific types of pages. For example, the dramatic dark blue-green and black background of the splash and home pages is exchanged for a white background wherever text-laden pages occur. On these pages, the original left-side black band becomes blue-green, the text background is white, and the text is black. This scheme creates optimal legibility and generates an unspoken visual vocabulary that enhances the information.



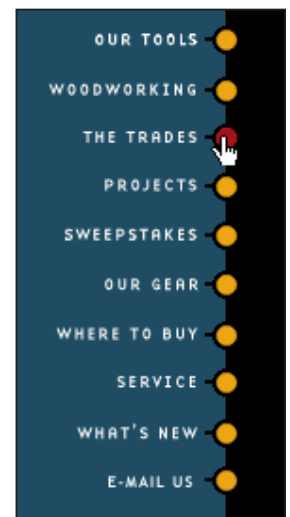
### ROLLOVERS ARE HOT

Visitors love interactive rollover buttons (also called changing state buttons or mouseovers). These types of buttons change visually as the end-user’s mouse touches them. Rollovers signify interactivity and lend a lot of added vitality to static “normal” buttons.

Some sites accomplish their rollovers via Shockwave. Others use JavaScript and Flash rollovers. Choosing which rollover technology to use is a personal decision, which should be based on the goals of your site, and the projected sophistication of your audience.

The Bosch Tools site used JavaScript for its rollovers. JavaScript is a scripting language, developed by Netscape, that is included within

Here are the changing state buttons. Note how the button has turned red in response to a mouseover. These buttons were created in Photoshop and required two images for each button: one orange dot and one red dot.

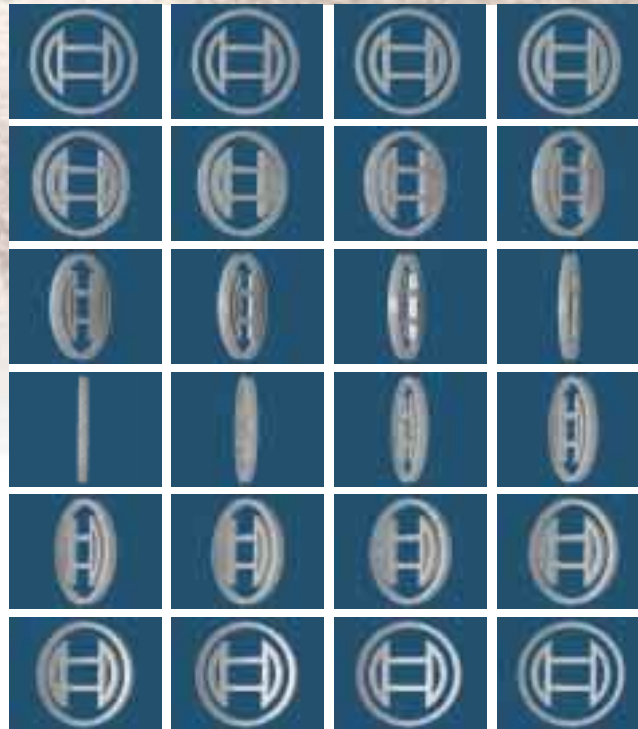


## THE BOSCH LOGO ANIMATION

The Bosch site uses animation sparingly on its opening page (<http://www.bosch-tools.com/html/WELCOME.HTML>). One of the surprising elements is that the Bosch logo first appears to be static, and

suddenly it turns a full revolution. The process of creating this animated graphic involved using 3D modelling and animation software *Ray Dream Designer* and an animated GIF authoring tool.

Here are all 24 frames of the animation assembled in GifBuilder. Note the size of this frame is 320x240 pixels. For the final iteration, each animation cell was cropped in Photoshop and re-exported at 130x130 pixels for placement within the web page layout. The background was also altered to include a black circle that, when the animation was layered over the body background tile, created the black die-cut look.



HTML and is executed by web browsers. It offers a means of creating interactive content on a web page and is used for many purposes including rollovers. JavaScript should not be confused with Java applets. Unlike a Java applet, JavaScript is included within the HTML code for a web page and is easily viewed within the browser. For this reason, JavaScript is much easier to learn than Java.

The JavaScript scrolling text that appears in the status window at the bottom of the Bosch Main page was accomplished through a JavaScript from Nick Heinle and Athenia Associates (downloadable at <http://www.webreference.com/javascript/>).

## DISTRIBUTING FILES VIA ADOBE ACROBAT PDF

One objective of the Bosch site was to create a relationship between Bosch Power Tools and the master woodworkers and skilled tradespeople who use Bosch Tools. Bosch and the site designers knew that their target audience would be receptive to plans, tips, and tricks relevant to specific areas of craftsmanship and particular trades. The big question was how to disseminate the information.

The Adobe *Acrobat* PDF (Portable Document File) format was chosen over building a web page for each document because the PDF format permits visitors to both print out and save the document to their own hard drive. Al-

though the PDF format requires a plug-in, the designers decided that the advantages to this plug-in outweighed the drawbacks of having a plug-in requirement for this content.

To simplify things, the designers made the plug-in accessible directly from the page. According to Heath, this use of PDF files gave his content and design team the luxury of putting "project files" that were originally intended for print on the web quickly, without having to reformat them for the web. Besides *Acrobat*, the basic informational content of the main site is entirely accessible without the plug-in. The *Acrobat* plug-in (which is downloadable from Adobe at <http://www.adobe.com/acrobat>) is only necessary to access the added value items such as plans, tips, and tricks, which most users would want to printout in order to make full use of them.

Adobe *Acrobat* PDF files can be generated directly from Adobe *PageMaker*, *QuarkXPress*, and MS *Word*, to cite a few applications. For information or tutorials on Acrobat PDF refer to these URLs:

<http://www.adobe.com/prodindex/acrobat/main.html>  
<http://www.islandnet.com/~bigblue/apr97nl/acro3.htm>  
<http://ftp.inf.vtt.fi/pdf/lund/default.htm>  
<http://microvet.arizona.edu/help/viewingAcrobat.html>  
<http://www.purepdf.com>

## ■ step-by-step

### WebMap Imagemap Utility for the Mac

**Step 1:** The Bosch map.gif image is opened in *WebMap* and the Polygon tool is used to outline the Northern Rocky Mountain and Midwestern States. You can download *WebMap* from: <http://www.filez.com>.



**Step 2:** When the polygon is completed, the URL for this section of the map is entered into the URL field. Other aspects of image-map creation are nearly analogous to the procedures involved with *Map This!* There are excellent online tutorials for *WebMap* at: <http://www.uwec.edu/Info/UWECWeb/Wkshops/Imaps/webmap.htm> and at: <http://hyperarchive.lcs.mit.edu/HyperArchive/Archive/text/html/web-map-101.hqx>.



<http://hyperarchive.lcs.mit.edu/HyperArchive/Archive/text/html/web-map-101.hqx>.

### THE BOSCH SERVICE IMAGEMAP

Imagemaps are commonly used as navigation devices on web sites. They are so called because a set of coordinates are used to map out “hot spots” on JPEGs or GIFs, which result in multiple hyperlinks associated with a single graphic. There are two types of true imagemaps, client side imagemaps, and server side imagemaps. There’s a third method, which is an alternative to using an imagemap, that is actually a table built to hold multiple linked images. This works because the image is cut into tiles and reassembled within a borderless table.

The Bosch site employs a client-side imagemap. Client-side imagemaps differ significantly from server-side imagemaps. A client-side map permits all the map information to be stored live within the HTML document. A server side map requires that most of this same information be created within a separate “map definition file” that must be stored on the server and accessed by a CGI script.

Aside from the added complexity of creating server-side maps, they are also functionally different in two main regards: Server-side maps are slower to respond to a visitor’s actions and they also provide a far less meaningful readout in the browser’s status bar.



The status bar in the clientside imagemap yields helpful information about the link destinations.



The status bar in the server side map yields a useless set of numbered coordinates, which tell the end-user nothing about where the map directs them.

### Map This! Imagemap Utility for the PC

**Step 1:** The Bosch map.gif image is opened in *Map This!* and the polygon tool is used to outline the Northern Rocky Mountains and Midwestern States. You can download *Map This!* from <http://www.masteringcomputers.com/masteringcomputers/util/iis/mapthis.htm>.



**Step 2:** When the polygon is completed it appears as “1 poly” in the Area List. Double-clicking this item invokes the Settings dialog for Region #1.



**Step 3:** The Region Settings dialog gives the overall coordinates for the region and provides a field for the destination URL (the web page that is accessed by clicking this region of the imagemap.) It also provides a comment field for notes.



**Step 4:** When all areas of the map have been described and augmented with settings as above, final information is input via Edit: Edit Map Info. The default URL is the address for the page that contains the imagemap. Functionality of the map file format is dependent on the kind of server employed to host the page. The choices are NSCA or CERN. This required fact is obtained from the webmaster who



maintains the server where the site is hosted.

Selecting the **TECHNIQUES** from *Woodworking Page* leads a visitor to this page with downloadable Adobe *Acrobat* files. Those without the *Acrobat* plug-in can download and install it within a few minutes by clicking the “Get Acrobat Reader” button.



This button is an Adobe supplied GIF, coupled with the following code linking to the Adobe Acrobat Download site: `<a href="http://www.adobe.com/acrobat"> <IMG SRC="..\gifs/acrobat.gif" Alt="Get Adobe Acrobat"></a>`.

## ■ note

### JavaScript Resources

**Designing with JavaScript** ■ Nick Heinle ■ O'Reilly  
■ ISBN 1-56592-300-6

**JavaScript Interactive Course** ■ Arman Danesh ■ Waite Group  
■ ISBN 1-57169-084-0

**JavaScript for Macintosh** ■ Matt Shobe, Tim Ritchey ■ Hayden Books  
■ ISBN 1-56830-278-9

**Nick Heinle's online tutorial**, "The Definitive Rollover Script" <http://www.webcoder.com/howto/article.html?number=6,length=4,demo=1,source=1>

The only real drawback to client side maps is that some browsers still don't support them (although Netscape and *Explorer 3.0* and beyond *do* support client side maps.) Highly conscientious web designers sometimes employ a dual map that works as both a server side and client side map!

Several imagemap authoring shareware programs are available for both the Mac and PC. In addition to shareware utilities, a number of programs' latest releases have the added capability to create an imagemap, complete with URLs. So far Adobe *Illustrator 8* has the most complete support for this function, although we can expect Macromedia *FreeHand 8* to add this feature. Most web authoring applications such as *NetObjects Fusion*, *Adobe PageMill*, and the most advanced web authoring environment, Macromedia's *DreamWeaver*, include complete tools for imagemap creation. There is an excellent online tutorial for *Map This!* located at <http://www.incontext.ca/suppor/spider/userguid/tutor/mapthis/mapthis.htm>.

### WHAT'S NEXT?

With the entire tool catalog now online, the Bosch site is being used more and more by retail customers who are looking for information on particular tools. To extend that mission, web design firm Cramer-Krasselt has many ideas in the works to make the site even more useful for their target professional and retail customers.

When asked what specific plans were in store for the near future, Heath Greenfield responded, "Aside from adding a new section for John and Stuart's baby pictures, we plan to add several new features to the Bosch web site in the upcoming year, including a retailer locator and an exclusive (password protected) distributor/retailer section. In general, we

are continuing to make the site more useful to our visitors. We want to add items that have functional value and not just items that might look cool or that might be placed there purely as a gimmick."

John Taylor volunteered, "From what I've heard, reader response has been pretty good. Many of them want to see more projects. I would like to see the Woodworker Forum brought in very soon, as well as a threaded bulletin board system that would function as a Power Tool Discussion Forum." \*

LYNDA WEINMAN IS A TEACHER, SPEAKER AND WIDELY READ AUTHOR ON WEB DESIGN, BASED IN OJAI, CALIFORNIA. VISIT [WWW.LYNDA.COM](http://WWW.LYNDA.COM) FOR MORE INFO ON BOOKS AND COURSES.

## Deconstructing the Bosch Main Directory

Due to space constraints, the code for this page is not presented here. The full, original code is archived at <http://www.uncom.com/dcwg2/bosch/html/WELCOME.HTML>. To see the code — once the page has loaded into your browser — choose View: Source in Internet Explorer or View: Page Source in Netscape.

## ■ site summary

### Bosch Power Tools

Although it doesn't include any groundbreaking uses of technology, the Bosch site is a text book example of just how much more less can be. The success of this site is largely attributable to the restraint exercised by the designers in their insistence upon avoiding gratuitous effects. They have followed the advice of the Bosch copy writers: "Artists sign the bottom of the canvas. Athletes set records. Yours is a more subtle signature, but if you do it right, your legacy won't fade. And it will never be broken."

- One means of ensuring the success of a site is to clearly identify the reasons for building the site and then establishing an information architecture that supports these reasons.
- Exemplary site design can be developed by designers with little or no understanding of HTML or web techniques. The truly important issues are clarity of design, and the capability to effectively communicate these goals to the technical team.
- Precise planning is essential to effective communication of design concepts between the designers and the technical team.
- Maintaining design and color consistency throughout the site helps develop a sense of comfort and security to the end-user.
- Judicious, restrained employment of an animated GIF logo adds a touch of elegance to a well-crafted design.
- The Adobe Acrobat PDF format is an effective means of delivering content that is intended to be printed and saved by visitors to the site.