

Weaving A Tangled Web

It is no longer a question of whether you are going to get on the web. Nor is there even any time left to worry over what shade of site wallpaper to use. No, those times are long gone. For we are very rapidly approaching where: *Iffen it ain't on the web, it don't exist.*

Today, no *Midnight Engineer* can afford to ignore the Internet. Your commercial web home page has long ago become a far more essential tool than such frivolities as mail service or a voice telephone.

I have been webmastering a site at www.tinaja.com for nearly a year now. And sure seemed to have learned a lot of things the hard way. In a surprisingly big hurry.

Let us go over a few first principles of webmastering. Particularly those that seem to be working for me...

Content AND gateways— It should go without saying that the three most important features of your site should be *content, content, and content.* Lots of uniquely original *sole sourced* materials that your end users find essential.

Beyond content, though, you should give a user a strong reason to visit often. The best additional way to do this is with dozens of *gateway* links to other sites. Try to become the *definitive* access point for some *entire* special interest field. Or a group of them. Examples I personally use are site links for electronic engineering, PIC microprocessors, pseudoscience, PostScript, and webmastering.

Make sure you annotate each gateway link with a lucid sentence or two. Tell your user *why* you like this link and *why* they might want to go there. Focus on smaller, unusual, or little known offerings. Rather than sending them to the biggies that everybody else does.

In addition, make your site deliver for you. Your site should hold *everything* that you *personally* need to wander around the web. For if it works for you, chances are it will work for others. Be sure to provide really basic stuff.

Assume some not-too-bright neighbor stops in. One who happens to be about as sharp as five pounds of raw liver. And wants to know what this net excitement is all about. Be able to answer his questions using *only* your site.

Note that you can hide any link by putting it in a non obvious place. Such as under a graphic bar or in an obscure corner. This lets you test new features before you really "go public" with them.

To sell a little, give a lot away— Yes, it is possible to show a net positive cash flow. If you are in it for the long term. If you are primarily seeking indirect results. Such as referrals, product awareness, and contacts. And if you have totally

unique products offered at a more than fair price.

Your key secret here is to have great heaping bunches of free stuff available on your site. Free stuff of apparent high value. Preferably both unique and sole sourced.

Even when you charge for premium files, be certain they are clearly identified and labeled on the free side. Use trial software that expires after a short time. Or samplers. Such as a schematic and the first two instruction manual pages. Scott Edwards has several good examples of this sort of thing on the PIC Shelf of www.tinaja.com

Promote aggressively but thoughtfully— How do you get others to find out about your new site? It turns out there are several very effective routes you can use.

But first note that it is *not* a good idea to try and promote your site for at least six months. Chances are that what you think your site is going to be and what it really is will be totally different. You might also change your ISP or your page layouts a number of times in the first few months.

A good rule: *Do not begin to promote your site until it has so much content and so many fun things to do that it cannot possibly be covered in a single visit.*

Start your promotion with those major search services. www.lookup.com/Homepages/73107/search.htm has got an immediate access to nearly a hundred of them. So does plain old *yahoo.com* Each search service will have an *add url* button. Use these aggressively.

Sites such as www.2com.com/~upfront/launch/ offer instant promotion services. Both free and for hire. Links to both of these appear on my www.tinaja.com

Next, you create *exchange links*. Provide free annotated gateway links to sites you value; then ask them for a return link. Netiquette demands they repay in kind.

Any time you are randomly surfing the net, be on the lookout for site awards. Click on all these and request site reviews. And any time you see a site that has links to sites similar to yours, ask to be included.

You'll want to contact the major printed web magazines. They are continuously looking for stuff to review. Chances are they will welcome your request.

And finally, of course, do be certain to include your site address in all your advertising, mailings, advertorials, tech articles, business cards, whatever.

Understand "demand pull" advertising— Your online ads can easily be the most popular portion of your site. And the files most often viewed or downloaded. *Provided* that (A) they are *clearly labeled* as such; and (B) the visitor must

specifically request their personal access to them.

Traditional advertising is *push* advertising. Where you literally try to shove all your offerings down somebody's throat. Hoping those very few who don't gag might end up as buyers or customers.

Push advertising flat out does not work on the web. In fact, it's more than likely to get you flamed. Or worse. Pull advertising instead goes only to those who genuinely want to see it. Among many other benefits, pull advertising is self-targeting and much more efficient.

Never spam an ad message! Sending it out unsolicited to great unwashed masses. And *never* cause a message or a file description to be misleading in *any* way.

But: you can send an unsolicited *short* semi-commercial *invitation* message to a reasonably targeted audience if (A) it also contains genuinely useful non-commercial info; (B) needs a "click here" to get to your commercial part; (C) is *never* done more than once a month; and, most importantly (D) has a "click here if you do not want to receive future messages of this type" final line feedback.

Speed triumphs over glitz— A lot of web users leave a site before their first page completely loads. For an impatient or a bored user is a gone user. You should *quickly* tell the visitor what your site is all about and how to navigate around in it. Any screens that needs longer than *one second* to download should be delivered to them only *after* they specifically ask for them. And *Never* before.

I've purposely used a glitz-free "retro" look on my own www.tinaja.com Through repetitive use of small graphical elements. Which load and display fast. I invite you to visit and see the big difference that fast nav makes.

Similarly, most other bells and whistles have definite downsides. Sure, frames make navigation easier and your site more flexible. But they also dramatically reduce the pixels available for real content. Giving erratic viewing.

And excessive mousing around for your users.

Most animation gets worse than annoying after the first second or two. Web counters are cutesy but slow. That is when they are working. When not, they just spill Java all over your page and ruin your credibility. Wallpaper should be subtle. And never call attention to itself.

Think twice about gee-whiz glitz. More often than not, it will drive your users away. Or up the wall.

The desirability of HTML lies somewhere between Herpes and AIDS— To me, it is ludicrously insane to call HTML a language. At best it is a *crayon*. A dull and melted one that studiously goes out of its way to *prevent* your end reader from seeing exactly what you want.

In precisely the way you want them to see it.

Instead, use *Adobe* Acrobat when and where possible. Acrobat completely blows HTML away on *all* counts. For openers, Acrobat is ridiculously more legible, owing to the anti-aliasing that Adobe calls *text smoothing*. Acrobat also instantly magnifies or demagnifies. And smoothly wipes or glides from page to page. Or column to column.

More importantly, Acrobat gives you total control over *exactly* what your end user should see. In a near infinite variety of fonts. With text, halftone photos and graphics smoothly integrated into a single fast loading and tightly compressed file. In an industry standard format.

Net friendly Acrobat 3.0 or higher strongly favors the

end user. A properly organized *.pdf* file will download its first text screen, quickly followed by first screen graphics. The rest of the document then seamlessly downloads in the background. While you are viewing the first page.

Free Acrobat readers are now available everywhere from thousands of sources. Including www.adobe.com

Use your log files— Your ISP should maintain two files for you known as the *log file* and the *error file*. It is extremely important that you gain access to these textfiles.

Your log file tells you who visited which pages of your site in what order. Your error file can tell you about any incorrect or non-working *internal* links on your site. It also tells you the basic error rate of your ISP delivery. In the form of timeout errors. You can easily view these files with any old word processor or data base. Even simple searches can tell you a lot in a big hurry.

What if you really want to know how many left handed Brazilian cat fanciers visited your site on 2 am Tuesday mornings? To answer questions like these, specialized *site analysis software* exists. Some of it is commercial, some is shareware, and some is free.

Site analysis software mines your log files. Extracting useful info, and converting it into fancy graphs.

One freebie example I've found useful is the *WebTrack* software. You download a copy from www.lds.com

But note that this particular program is a real disk hog. One which forgets to erase its old temporary data stashes. Easily gobbling *hundreds* of megs. Be certain to clean up your disk drive after each and every use.

Hits are misses— A *hit* is an obscenely bloated and utterly misleading measure of a site's popularity. A hit is any visit on to any page for any reason. A typical visitor will cause dozens of hits in a single session. As will random dropins, web timeouts, reloads, or snooping web crawlers.

Instead, you should get concerned about how many genuinely useful visitors you are attracting. Your best way to do this is to measure how many *complete downloads* of a crucial and sole-sourced file are actually happening.

Rules of thumb: To find your number of useful visitors, divide your hits by 60. Or log file characters by 4500.

Practice Kaizan— *Kaizan* is a uniquely Japanese concept that roughly means *continual small improvements*. Try to add something new to your site each day. And be sure to tell your viewers about it. In a "what's new" section.

Or at least as a *Last Update*: entry on the bottom of your home page. And check your error files every now and then to make sure your latest additions do not create any new problems of their own.

Never post any "under construction" sign. To nearly all viewers, "under construction" means "never".

A *site map* page can also be a useful end user feature. Especially on more complicated layouts. Site maps let a user zero in on the info they really need. While minimizing the mouse clicks and time needed to do so.

It also pays to write down your short and long term site goals. And to review them often. Visit *thousands* of other sites. To see what works and what does not.

I've found it best to link each major file in at least *two* locations. For instance, a reprint on my *tech musings* shelf might also appear on the *math stuff* shelf. One by series,

WEBMASTER RESOURCES

Adobe Acrobat
1585 Charleston Rd
Mountain View CA 94039
(800) 833-6687

Inter@ctive Week
100 Q Roosevelt Blvd #508
Garden City, NY 11530
(516) 229-3700

Internet Life
One Park Avenue
New York NY 11016
(212) 503-3500

Internet World
20 Ketchum Street
Westport CT 06880
(203) 341-2872

Internic Registration
505 Huntmar Park Dr
Heron VA 22070
(703) 742-4777

I-way Magazine
86 Elm Street
Peterborough NH 03458
(603) 924-7271

LDS/WebTrack
571 Central Avenue
Murray Hill NJ 07974
(800) ASK-LDSI

Netscape Gold
501 E. Middlefield Road
Mountain View, CA 94043
(415) 528-3777

Synergetics
Box 809
Thatcher AZ 85552
(520) 428-4073

Webmaster
492 Old Connecticut Path
Framingham MA 01701
(508) 872-0080

WEBsmith
Po Box 55549
Seattle WA 98155
(206) 782-7733

WEB Week
20 Ketchum Street
Westport CT 06880
(708) 564-1385

one by subject. For the user, this makes navigation a lot easier. And creates the appearance of a richer site.

After all, anything worth saying is worth saying twice.

For More Information

I've listed a few webmastering resources for you in the sidebar. Your key starting point for your own web site is www.internic.net. Use their *whois* feature to find out what names remain available. Then follow their site registration procedure. Registration cost is \$100 for your first two years. Registration *must* be done online.

The best site editing tool is *Netscape Gold*. It is available free through www.netscape.com Free Adobe Acrobat 3.0 readers and new beta tools are found at www.adobe.com Be *certain* to use their net-friendly v3.0 or newer. Your site delivers Acrobat content fastest when your ISP provides HTTP *byte range retrieval*.

For onscreen viewing, the Acrobat reader plug-in must install itself *inside* Netscape, so *always get Netscape first, Acrobat second*. And verify your installation.

Specific step-by-step details on getting yourself online can be found in [RESBN55.PDF](#) and [RESBN56.PDF](#) on my www.tinaja.com More details on byte range retrieval plus extensive other web tools and annotated links to bunches of web-useful sites can also be found there. ♦

Microcomputer pioneer and guru Don Lancaster is the author of 33 books and countless articles. Don maintains a US technical helpline you'll find at (520) 428-4073, besides offering all his own books, reprints and various services.

Don has a free new catalog crammed full of his latest insider secrets waiting for you. Your best calling times are 8-5 weekdays, Mountain Standard Time.

Don is also the webmaster of www.tinaja.com where a special area has been set aside for Midnight Engineering readers. You can also reach Don at Synergetics, Box 809, Thatcher, AZ 85552. Or email don@tinaja.com

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