

Message 4

msg 4 describes some website development and design key-points. Writing for a medium in real space is different than composing information for a medium that retrieves it from cyberspace.

Le Corbusier (in L' Esprit Nouveau) said that "A regulating line is a safeguard against arbitrariness; it is a way of checking a work created in enthusiasm." I believe that a regulated online environment -- the regulation here pertains to website development and design principles -- is a safeguard against the Internet's arbitrariness; it is the only way of bringing in cyberspace the work that you have created in real space, as well as the only way of checking it with enthusiasm.

It has been said that a picture is worth a thousand words. This becomes more evident than ever in cyberspace wherein words and everything else appear as pictures. Therefore, in cyberspace a picture is worth a thousand words, indeed, unless you are talking about an online picture of a thousand words.

Many of the key-points that are addressed in msg 4 refer to mistakes that I have already made in my online endeavors.

Success in the Web design goes beyond technology and fashion.

First Steps in developing your website:

- Define your goals.
- Identify your potential visitors so that you can structure the website to meet their needs and expectations.
- Decide on the website production team -- in-house, outside people or a mix of the two options.
- Decide on the manager of the website production.
- Decide on the manager of the website content.
- 6. Decide on the manager of the website maintenance.

Stages in website development:

- Website definition and planning.
- Information architecture.

- Website design.
- Website construction.
- Website marketing.
- 6. Website evaluation and maintenance.

The following webpages discuss key-points that focus:

- On User Interface.
- On Website design.
- On Webpage design.
- On Typography.
- On Editorial Style.
- On Graphics.
- On Multimedia.

On User Interface:

The User Interface (UI) of your website comprises of the interaction means -- texts, images, videos, audios, animations, slides, graphics etc -- and concepts which are used to convey function and meaning in the communication process via the Internet.

Instead of requiring from users to conform to a UI that might place obstacles in their paths, UI's goal is to provide for the needs of all potential users by adapting technologies to their expectations.

The best design strategy is to apply a few fundamental document design principles consistently in every webpage of your website.

Classical Journalism in the Internet

Every webpage should include information that answers the classical journalistic:

- who
- what
- when
- where

This information should be included in the title of the webpage -- not the title of the webpage properties.

Minimum Elements of webpages

Every webpage needs to include:

- An informative title -- the title of the webpage properties.
- The creator's identity (author or institution).
- The creation or revision date.
- 4. The link to the homepage as well as the link to the main page of the subsite wherein the webpage belongs.

Basic UI considerations

1. Clear navigation aids

The main UI problem is the lack of a sense of where you are within the local organization. Navigation within the website should always be easy via links that are present in every webpage.

Consistency of links' interface does matter.

2. No dead-end webpages

A dead-end webpage is one that does not contain any links to the home page or to the local subsite main page. Dead-end webpages lock out the users from the rest of the website.

3. Direct access

Users want to get to the information they are interested in with the fewest possible steps. Studies indicate that users prefer menus that present at least five to seven links and that they prefer a few very dense screens of choices to many layers of simplified menus.

4. Bandwidth

Studies indicate that users' threshold of frustration is about ten seconds. Webpages that download in more than ten seconds stand chances of being skipped.

5. Simplicity and consistency

UI should be simple, seem familiar, and logical. UI should be built on a consistent pattern of modular units that all share the same basic grids, graphic themes, editorial conventions, hierarchy of information and organization.

Consistency of titles, subtitles, page footers, navigation links etc reinforce the user's sense of context within the website. Graphics and images provide visual cues to the continuity of information.

6. Feedback

A well designed website provides links for direct communication to the person responsible for the content and the maintenance of the website.

7. Disabled users

A website that caters for the disabled users provides alternate messages so that users who cannot see graphics and text on screen can still understand the basic function of the website.

On Website design:

Cognitive psychologists have known for decades that most people can hold only about four to seven discrete chunks of information in short-term memory.

Basic steps in organizing your information:

- Divide your content into logical units.
- Establish a hierarchy of importance among the units of information.
- Use the hierarchy to structure relations among the units of information.
- Build a website that closely follows your structure for the hierarchy of information.
- 5. Analyze the functional and aesthetic success of your website in delivering the hierarchical structured information.

Basic considerations in "chunking" -- organizing into units -- of information:

- Most users do not prefer to read long documents online. They either save long documents to disks or print them out. Thus, a print out format of long documents is necessary.
- One to two pages (as printed) of information is about the maximum size for a discrete chunk of information online.
- It makes no sense to divide up a long document arbitrarily with the aim to avoid long scrolling down. Instead, you should facilitate users to save the whole document in one step either in its print-out format or otherwise.
- Long webpages of information which require users to scroll down for long tend to disorient users because users cannot usually remember what is off-screen.
- A logical "chunking" of information allows users to predict where to find further information.
- Restricting links to the basic "Previous" and "Next" paging functions guarantees that users will see the same information and allows assessment of users' time of exposition to this information.
- Groupings links for other sources of information on the subject of one webpage either at the end of the webpage or on a separate webpage is a good tactic for keeping users focused on the content of the webpage that contains your message.
- If you want to educate your audience, you should consider providing the content of your message in a print-out format aside from the HTML format.

Basic information structures:

While the following are the basic information structures, most websites consist of a fifth category which shares aspects of all four types.

- Sequences
- Grids
- Hierarchies
- 4. Webs

1. Sequences

Sequential ordering might be chronological, topical, from the general to the specific, alphabetical etc.

2. Grids

Grids are good to correlate variables. However, they require an audience which understands the correlation between variables. Grids are best suited with experienced users with very good understanding of the topic and its logical organization.

3. Hierarchies

Hierarchies are particularly suited for organization of information online. Hierarchical schemes are very familiar in corporate and institutional life online.

4. Webs

Webs organize information in patterns that include dense links to information that can be found elsewhere in the website as well as in other websites (internal and external links). Too many links, though, can confuse users.

Important website design elements:

- The top of the home page as well as the top of each webpage is the most visible area of the website. Therefore information that is "above the fold" is much more visible than what is below.

- Your home page has the advantage of the highest visibility. Therefore it is ideal for posting links to news and important information as well as links to sitemaps and tables of contents.

- Menu-style webpages need not be dominated by plain lists of text-based HTML links. Graphics are often more space efficient. However, text-based

links are easier to change on short notice.

- Live information on a home page makes it more attractive and likely to generate more visitors. But you need to standardize the location and the nature of the news area within a certain home page.

- You can use your home page to split your audience immediately into interest groups and offer them specific and more relevant information in menu pages deeper within your website.

- You can use Flash technologies for your home page in order to make it more attractive. However, bear in mind that you need to make it easy to download in 56 Kbps. You also need to provide your audience with an alternative view of your website that skips the Flash introduction.

- In complex websites with multiple topic areas it is not practical to burden the home page with dozens of links because the home page grows too long to download in a timely fashion and its sheer complexity puts-off many users. Instead, you should provide submenu mini home pages for each topic that is listed in your home page menus.

- Your site map needs to include only the broadest outlines of your website's structure. Text-based tables of contents or indexes are very efficient and informative.

- You can include a FAQ webpage that gives concise answers to key questions that pertain to your strategy and policy. A FAQ webpage can also help navigation in a complex website through relevant hyperlinks.

- Even if you have the greatest website, people will still want to call you, send you mail, and fax you documents. Therefore, you need to include contact information for all means of communication with you. You also need to provide the same contact information on your stationary, marketing materials, business cards etc. The best strategy is to include your URL in all:

- print ads
- radio & TV ads
- mail campaigns

- business cards
- stationery
- statements
- products
- publications and promotional materials
- press releases
- posters and billboards

On Webpage design:

The overall webpage design is visual information management. It refers to the appropriate use of tools of layout, typography, and illustration to lead the visitor's through the webpage.

Important webpage design elements:

- Contrast is important. A dull page of solid text will repel the eye as a mass undifferentiated grey, without obvious cues to the structure of your information.
- The most effective designs for general Internet audiences use a careful balance of text and links with relatively small graphics.
- Consistency is important. Repetition of webpage design creates and reinforces a distinct sense of "place" and makes your website distinct and memorable. Besides, consistency tends to help visitors adapt quickly to your design and predict with confidence the location of information and navigation controls across your webpages.
- Suppose that it's bad enough to have to scroll in one direction (vertical scrolling), having to scroll in two directions (horizontal scrolling) is intolerable.
- If your webpages are long enough to scroll down or your information on one subject consists of many webpages, you should always provide your visitors with the option of printing out your information in one print-out formatted webpage.
- Graphic "safe area" dimensions for a webpage layout designed to print

well:

- maximum width = 535 pixels
 - maximum height = 295 pixels
- Webpages that require long scrolling down tend to disorient visitors. You should always help your visitors keep their sense of context by keeping navigational buttons and major links always visible in your webpage.
- You can make long webpages friendlier by positioning "jump to top" buttons at intervals equivalent to one small screenful of the webpage (about 300 vertical pixels).
- You should favor webpages without any scrolling for:
- your home page and submenu webpages
 - your information that is intended to be read online
 - your webpages with large graphic
- You should favor webpages with some scrolling for:
- your webpages with content in one piece (print-out formats)
 - your webpages with content easy to download
- The layout of your each one of your webpages should not be judged by viewing the whole webpage as a unit but rather by dividing the webpage into visual and functional zones.
- The header area of every webpage should contain a prominent title at or near its top.
- The footer area of every webpage could contain a set of links to other webpages in addition to the essential data offered through that webpage.
- Reading online becomes uncomfortable when there are more than twelve to fifteen words per line.
- Margins provide contrast and visual interest. Not only should you use margins but also you should use the same margin pattern consistently throughout your website.
- The use of borderless tables is the best tool for controlling the layout of

information online.

- Each webpage should contain:

- title
- author
- institutional affiliation
- revision date
- copyright information
- link to the home page
- link to the submenu webpage

- Subtle pastel colors typically found in nature make the best choices for colored elements online. Use bold, highly saturated primary colors only in regions of maximum emphasis.

- Use graphic embellishments such as horizontal rules, bullets etc sparingly. Avoid patchy and confusing layouts.

On Typography:

Important typography elements:

- Avoid centred and right-justified texts.

- Avoid using all-uppercase headlines.

- If you use initial capital letters in your headlines -- in all the words of your headlines, not just the initial word -- you disrupt the reader's scanning of the word forms.

- Typefaces such as Times New Roman are excellent for reading online. Typefaces such as Georgia and Verdana have also been designed for online texts. A good mix is the use of a serif typeface such as the Times New Roman and Georgia for body texts and a sans serif typeface such as Verdana and Arial for headlines.

- Avoid using more than two typefaces in one webpage.

- Avoid using more than one emphasis parameters in one webpage.

- Avoid using Underlined text to add emphasis. Most users have their browser preferences set to underline links, thus underlined can be easily

confused with hyperlinks.

- Avoid using colored text that makes use of the same colors for Active and Visited hyperlinks.
- Capitalized text is one of the most common but least effective methods for adding typographical emphasis.
- Consistency of typographical elements does matter.
- Bear in mind that on PCs typefaces look 2 to 3 points larger than the equivalent typefaces on Apple computers. Thus a 14-point typeface in PCs will look like a 12-point typeface in Apples.
- Cascading Style Sheets (CSS) is an excellent means of typographical consistency online. Versions of 5x Netscape and Microsoft browsers support CSS.

On Editorial Style:

Important editorial style elements:

- The "inverted pyramid" style in journalism works well online with the conclusion appearing at the beginning of the text and important facts appearing near the top of it.
- For long texts, break the information in logical "chunks" connected with hypertext links. Divide your information into comprehensive segments.
- Prefer concise and factual information online. Avoid vague and verbose information.
- Always remember that your webpage's title in the page's properties will most probably be in the long list of bookmarks.
- Hypertext links can disrupt the flow of content in your website by:
 - inviting the visitor to leave your website
 - damping the visitor to unfamiliar territory without preamble explanation
- Most of your links should drive visitors to other resources within your

website that have the same layout.

- Put only the most salient links within the body of your text. Group all minor links at the bottom of the body text.

On Graphics:

The parameters that influence the display of graphics online are:

- the user's display hardware
- the bandwidth capacity

Important graphic elements:

- A very good strategy is to increase the graphics loading of your webpages gradually. As visitors become more engaged with your content, they will be more willing to endure longer download times because of graphics embedded into your content.
- It is good if each one of your webpages contains no more than 100 kb of graphics.
- It is more practical to standardize on the JPEG format for most photos online. Alternative options are GIFs and PNGs.
- Avoid using large or visually complex background patterns.

On Multimedia:

Important multimedia elements:

- Use stable technology that works with the majority of client machines.
- Avoid using too many Flash elements in the interior of your website. Flash elements should always be relevant to your content.
- A significant amount of compression is required for your multimedia elements online.
- Always inform visitors before they enter a high bandwidth area and give them the tools they might need to experience your content in a broad

bandwidth environment.

- Multimedia options for your content might be:

- audios
- slide shows
- videos
- animations

- For video options, it is recommended that you:

- shoot original videos
- shoot close-ups
- shoot against simple monochromatic background
- minimize camera movement
- avoid zooming and panning
- use hard cuts between video shots
- prefer video clips with minimum motion

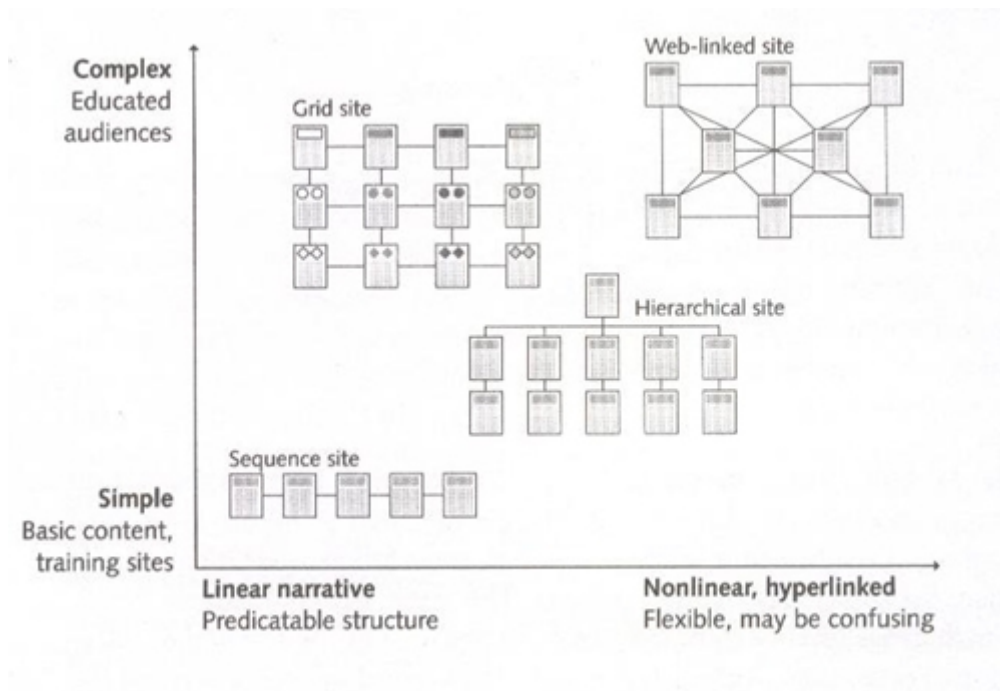
- The best delivery of multimedia elements depends on three factors:

- the server
- the network
- the client machine

- You should prefer streaming media technologies because they:

- permit movies to be viewed at any point in the video stream
- demand low storage capacity in the client machine

Basic information structures



references

Patrick J. Lynch and Sarah Horton, *Web Style Guide*, Yale University Press, 1999