



Research Article

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## Theory of how to design the site easy to navigate

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### ABSTRACT

*Web design is a kind balance art. On the one hand, you want the page beautiful and vivid, but on the other hand, you need it can quickly be downloaded otherwise people will go to other sites. A successful website can attract visitors, in addition to the rich content and the characteristic columns, a cordial and friendly interface, unique style web design, reasonable man-machine interface can make them linger. For surfers who looking for information online, they hope quickly and efficiently find information they need, web designers need to provide a convenient, quick links and navigation. This paper analyzes how to establish reasonable and effective man-machine interface in the website from the perspective of consumer psychology, especially interpret view of the problem of navigating human-computer interaction system and how to create a convenient navigation system.*

**Key words:** Navigation; Web page design; The human-computer interaction

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### INTRODUCTION

Human's the most significant inventions of the 20th century may be the computer and network technology, experts scholars and news media calle it another revolution after the industrial revolution. Because the Internet has characteristics of great capacity of information dissemination, diverse, fast and convenient, global coverage, liberty and interaction, it has developed into new media, so global companies, institutions have set up their own Web sites.

Technically, the Internet has brought the communications revolution, it makes people's communication become so convenient and quick, that has no concept of distance on the Internet; Economically, the network technology brings about e-commerce, makes the traditional industry and its business model facing great opportunities, and challenges; Culturally speaking, network technology really bring us into the information society, has brought new changes to people's production mode, life style, concept; From the perspective of cognitive science, the Internet is a new cognitive structure, through its individual and social interaction, makes knowledge extended

As the Internet is popular around the world, a growing number of computer enthusiasts and enterprises set up their own "home" on the Internet- make your own homepage, in order to make your own information gallops in the information highway, network has been applied sufficiently in business activities, the transmission and access to information has been the necessary means to develop and enrich state, enterprises and even personal, and web design arises under the condition of abundance information.

The global Internet market develops rapidly, China's Internet market is in rapid rise become a stage for supplier site fully display capability, Show individual character style. Rich content and excellent situation is the goal of the pursuit of all designers, easy navigation become indispensable component. If we want to make a web site system, the first thing to do is to determine the overall planning of the entire site system, to introduce the content of the scope and purpose, the file directory and tree structure, etc. Second is to prepare a lot of media according to guidelines set by the material, the main content are text and image data. When define hyperlinks according to the media materials, to make the level of the whole system structure clear, achieve an obvious effect, and to make the system to form a certain mesh cross structure, so that the user can cross index. Web pages' easy conductivity

interface is best for the two versions, the Chinese and English interface to expand the customer.

A successful website can attract visitors, in addition to the rich content and the characteristic columns, a cordial and friendly interface, unique style web design, reasonable man-machine interface can make them linger. For surfers who looking for information online, they hope quickly and efficiently find information they need, web designers need to provide a convenient, quick links and navigation. In this paper, several problems mentioned above are discussed.

#### **ABOUT NAVIGATION AND LINK STRUCTURE**

Navigation is an important part of the website. If describe a web site as human body. Muscle tissue is a webpage, and navigation is the bones of the site. Web page presented the content to the audience through the organization of the navigation. The success of a website largely depends on the site's navigation. If the navigation structure chaos, visitors can't find it. The content of the prepared will be all wasted. What is called wine is also afraid of deep alley. Common form of navigation is display the column with a navigation bar in super connection method.

The website should be easy to navigate, to achieve the best access with less click. I think the detailed planning of information structure is the basis of reasonable navigation and user interface design. In the print media, the navigation is a kind of problems with little attention. Now many web designers know very little about the navigation technology of application in the network. Printed navigation rules is a state of freedom based on web page by order. Electronic pages in a state of freedom their order set purely random.

The default home page -- index. Hemi - not the home page arranged according to the traditional concept of page size, creation date or letters. For a combination with unrelated document, as a designer, starts from the complete chaos. If a page has not been finished, if readers want to see the rest of the part only turn to the next page, in order to help readers find the information they find, thoughtful designer will provide a table of contents, or offers index for complex documents.

The best access with less amount of clicks. Make web page more human, during the design of navigation system and the user interface, everything designers really need to do is to make the visitor easy and effective to get what they want, so that they can leave the site with a smile.

Provide the best access with a minimum number of clicks. The purpose is to make the visitors only need to click two or three times, and access to any page. Obviously increasing of website content will become more and more difficult, it can hold the space for navigation elements. So pages can use rarely navigation mark, so the important thing is to understand the needs of the visitor and navigation systems, try best to fulfill their needs, make them achieve their purpose. If Site can be organized very well, the navigation system can be designed correctly, The reader can quickly understand the main composition and type of content each page contains and do not need site map..

We know that surfers are often in a hurry. If the contents of the site hide too deep, they can't find the information they need in hurry, So don't let them to guess where is your stuff, but should guide them in the right position.

The navigation bar is a set of buttons or text links, it should try to add to your site's each page, usually on the top of the page, on the left or below. Pay attention to put them in the same place in every page, consistency is the key. If your page is too long, you should add simple text navigation on the bottom of the long page, so that people don't have to return to it when change page in the bottom.

At the same time, it should let people know your site's location. you can make the bar button or the text in navigation bar on behalf of page represents different appearance, such as making them darker, brighter or use a different color, etc.

Each navigation bar should include a home page button and contact information, if your site is very big, you should consider using a site map (SiteMap), it can fully show the outline of the entire site. Additional on-site search also is very good idea, your visitors can find relevant content through some key words.

An excellent navigation system is always very important, which is quite critical on a web site. Arrange appearance and carefully planned information is the basis of reasonable navigation and user interface design, only by understanding its operation mechanism, this kind of structure can looks simpler. A man who just get to the Internet, want to find the information he wants, if it's very complicated, will lose interest in browsing your website. You should consider what to do now, ask yourself the following questions before build the site: who is the object I built site for and how to make them benefit, purpose, unique and can access your site again. According to the logical

classification of idea, content, and write down the outline of the content, this will help you to determine the site arrangement, if you don't provide some valuable information, then it has no meaning to set up a website.

No matter what you build a web site for, they have one thing in common, that is to try to get all the visitors can easily browse. But if your site lack of valuable information, even good navigation is also little lame - content first, navigation only plays a supplementary role.

Determine the content of the site and column what you should pay attention to is:

Remove columns has nothing to do with the theme as much as possible.

List the most valuable content in section.

Convenient visitors' browse and query as much as possible.

The purpose of link structure the site we studied is: browse efficient with the least amount of links.

In general, there are two basic ways to establish the link of website structure:

### 1. The tree link structure (1:1)

The directory structure similar with DOS, the home page link to the first page, first page link to the second page. Three-dimensional structure looks like a dandelion. For such link structure, enter and exit step by step. Advantage is clear, your visitors know where they are, don't get lost. Disadvantage is low browsing efficiency, a section of child pages to another section of child pages, must be over the front page, as shown in figure 1.



Figure 1 link structure

### 2. The star link structure (one-to-many)

A link similar with a web server, establishing a link among each page. Three-dimensional structure such as the steel ball of Oriental pearl TV tower. This link structure has the advantage of convenient browsing, visitors can reach their own page at any time. Drawback is that too many links, visitors get lost easily, not sure where are they, to see how much content is shown in figure 2.



Figure 2 a one-to-many

These two basic structures are ideal way, in the actual web site design, the two structures are always get mixed. We hope that visitors can conveniently quickly get to the page they need, and clearly know their place.

With the promotion of electronic commerce, the website competition is become more and more intense, the requirement for link structure design has not only confined to rapid browsing, but also pay more attention to individuation and relevance. For example ,a love child theme website, on a page about 8 months infants nutrition questions, you need to add eight months baby health problems link, intellectual training links, or links about milk powder propaganda, a book, a toy links. Because it is impossible for parents to find information about eight months baby down to each column, they might left the site after they find the problems they need. How to keep visitors as much as possible, is the question web designers must consider in the future.

### TALK ABOUT WEBSITE STYLE

Style (style) is abstract, refers to the visitor's comprehensive feelings about the whole image of the site. Positioning style of website is the first consideration for web page's beautification. the difference between ordinary website and web with style: ordinary web site you see is information piled up together, you can only describe in the feeling of the rational, such as amount of information such as size, browsing speed. But after you read style website you can have a deeper sense, such as site that has grade, amiable, a teacher, a friend.

Any web page's style and form should be decided by the content of the subject, because only the perfect unification of form and content, can achieve the ideal effect of propaganda. Now the application range of the current web page expands, including almost all industries, all-encompassing, but generally there are few classified into some categories: news organizations, government agencies, science and education, culture, entertainment and art, e-business, network center, etc. For the different nature of the industry, should embody the different web page style, like the dress, in accordance with different gender and age groups. Government web page style, for example, the general should be more serious, while the entertainment industry can be lively; Cultural education department's web page style should be elegant, while business home page can be closer to the folk custom, make the public benefits.

Style is based on valuable content. A website has style but with no content, like a bag of grass embroidered pillow, like an arrogant but illiterate people character. The first thing you must guarantee is the quality and value of the content.

Home page style's formation mainly depends on the format design of home page, depends on the page's tonal processing, and the combination of picture and text form. These questions seem simple, but often require the homepage design and a certain quality and culture art of maker, we need to find out the most distinctive features of the website, which is can best embody the website style, and with it as the focus of website characteristics to

strengthen, propaganda. Specific practices do not have stereotypes, here are some suggestions:

Put your logo appears on every page as soon as possible. Header or footer, or background.

Highlight your standard color. Text link color, the main color of picture, background color, border color as far as possible use in accordance with the standard color.

Highlight your standard font. The key title, menu, use unified standard font in the picture.

Think a catchy slogan. Do it in your banner, or in the striking position, tell visitors your web site features...

Use the unified voice and said. Even more personal cooperation maintenance, let the reader feel it's written by the same person.

Using the unified image processing effect. For example, the direction of the shadows, thickness, ambiguity must be the same.

To create a unique symbol or icon in your site. For example, you can use a point before a link, ☆※○◇□△→- (you can see location in the code), and so on. A change although very simple but give person a different feeling, (why I did not think of that?).

With their own designing lace, lines and points.

Show your website's honor and successful work.

Tell friends about your true stories and ideas.

The formation of the style is not a position, you can continue to strengthen, adjustment and modification in practice.

### **THE SITE OF THE OVERALL CI DESIGN**

The so-called CI, is a borrow advertising terms. (CI is English corporate identity), means to unified enterprise image by visual. An outstanding sites, like Entity Company, also need the overall image packaging and design. Accurate、creative CI design, have better effort in promotion of the web site.

#### **1. Design the website logo (logo)**

Logo design creation come from your website's name and content.

(1) The site representative figures, animals, flowers and plants, they can be used as a design blueprint, add cartoonish and art, such as Disney's Mickey Mouse, cartoon sohu fox, ShaWei basketball athlete of sharks.

(2) Professional site, can use a representative objective in this item as a symbol. Such as the copper logo for bank of China, steering wheel in Mercedes car.

(3) The most common and simple way is to use your site marking the English name. Using different fonts, letters, the deformation of the combinations of letters can be easily made their mark.

#### **2. Design web's standards color**

Website, the first impression that gives a person comes from the visual impact, to determine the site standard colour is a very important step. Different colours have different effects, and may affect the visitor's emotions. "Standard colours" refers to image that can reflect web site and extends the connotation of the color. A practical example is understood: IBM's deep blue, KFC's red strip, Windows' logo on red blue yellow green, all make us feel very appropriate, very harmonious. If IBM switch to green or yellow, what felling we will have? In general, a website's standard colour does not exceed 3 kinds, too much, make person dazzling. Standard color used for a sign of website, the title, the main menu and primary colors. Give person the sense with unified. As for the other colors can also be used, just as the ornament and foil, can never replace the host's role. In general, suitable web standard colors: blue, yellow/orange and black/grey/white three series.

#### **3. The standard design websites font**

Like the standard color, standard font is used for signs, the title, the special font of main menu. Our web page is the default font song typeface. In order to reflect the site's "different" and special style, we can choose some special

fonts according to needs. For example, in order to embody the professional can use coarse imitation song, manifests the beautifully designed can use advertising font, reflect kind optional can use handwriting and so on. Of course, you can choose the more appropriate fonts according to their own websites' express connotation. At present there are 20 or 30 kinds of common Chinese fonts, common English font has nearly hundred kinds, Internet also has many special English art fonts can be downloaded, find a satisfactory font is not difficult.

#### 4. Design website propaganda slogan

Also can saying is the spirit of the site, the goals of the site. Generalize in one sentence or a word. Similar advertising gold sentence in actual life. For example: "delicious" magpie nests; Maxwell's "good things need share with good friends"; Intel's "give you a pentium heart".

#### THE HUMAN-COMPUTER INTERACTION

In web browsing activity, as human-computer interaction participants (users and computer) can be used as initiator and the responder, finish independently, or cross prompt, if system give the user response; Users click on the button and so on. In more cases, the product is a combination of both. Such as prompting the user to click on the button, users can enter on the next page and fill in the page 2, then send the results, the computer give feedback.

In web design, very exciting thing is that the interaction of the user start is the interactive navigation. Such as when the mouse appears to the image, text, change the original image, it has two advantages: the attention and not interfere with the page.

On the site the ultimate goal of establishing reasonable human-computer interaction system is user operation is simple, quick, accurate, interactive system easy to use. In the process of human-computer interaction, the user should get feedback information from the computer side, feedback information should match with the characteristic of the user, knowledge. All display help 、 error information should be more clear and easy to understand. And the system can provide immediate and visual feedback. It should be pointed out, too little and too much information can make user confused shown in figure 3.

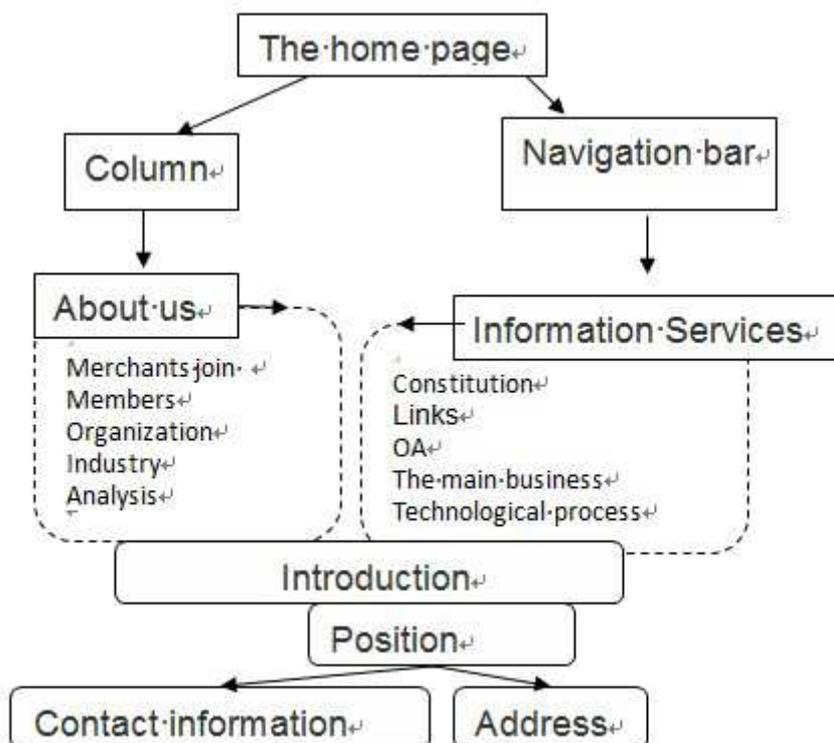


Figure 3 The topological graph

In web design, there's a phrase, called "link well-chosen should not and cannot be put on every page on the same button. Use the page button to a risk is not the same. Have a special project, pages with less visitors, delicate and efficient link it back to the main part of the can, thus moving towards again elsewhere.

During web design, visitors are provided according to the interactive way to browse, designers design from the website's structure design to the navigation mode, should always consider how to provide good interactivity: whether the design of the home page is attractive: whether can better guide the visitors access to the site; Created web site is more in line with the needs of the visitor is shown in figure 4.



Figure 4 human-computer interaction

As designers in addition to use it as a new field to study outside, still should remember to grasp its basic principle, and fully understand the new functions of the human-computer interaction. Indeed, design a public Web site, must suitable for all kinds of browsers, not only meet the needs of some people. It is very challenging for designers. The demand of the man-machine interaction mainly point for multidimensional hyperlinks space design. Designers must combine structure specification, navigation method, the information and document design and various aspects. Of course, On the design of the Web site, the designer should pay attention to the art of human-computer interaction design features, at the same time, should fully understand the human-computer interaction technology in the application of the navigation system. Get together the contents of a web site, and new technology invention and We technology, and give full consideration to the current technical limitations. Website design framework visitors may not be visible, but the test visitors should be able to freely roam in the multidimensional space according to the navigation system shown in figure 5.

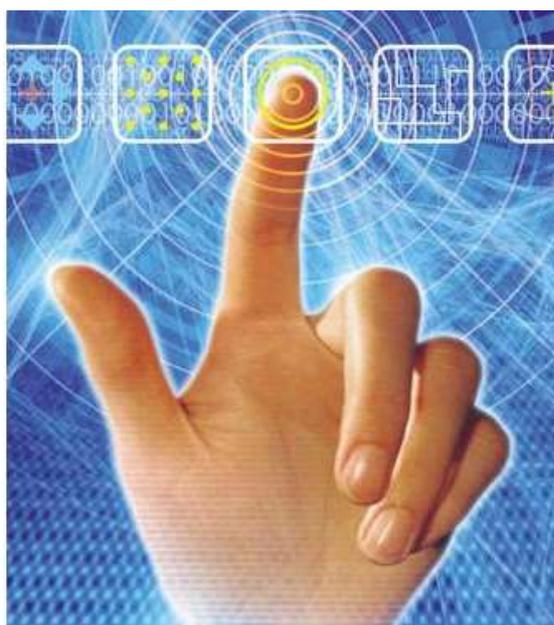


Figure 5 Handwriting recognition

Site design's goal is information's better conveying, but if users have too many choices, the user is easy to confuse and difficult to get information on demand. Analysis of the user interface essence is also based on the analysis of users, psychology of business purpose. At this time, the efficiency is higher than all in the modern commercial society, what could be more comforting than convenient user of relief、 help plan? We designers should try to planning and design more concise and practical "fool" web interface as shown in figure 6 in future.



Figure 6 "fool" web interface

In short, in the world of web design, technology and technique expression changing、 updating every time in the silent continuously, therefore, fixed design standard is not exist. Concise and refined design is not a good design, fully application of the advanced technology of web page can't say is good. Only fully understand the consumer psychology, provides a good man-machine interface and convenient navigation system, the website with their characteristics design can attract visitors, this is successful website.

The development of the design technology has brought the prosperity of web world. Especially advocating personality today, designers fully presents page design. We are delighted to see that the rigid design model is broken one by one, web design is full of vitality. However, as a web designer, not blindly only pursuit the embodiment of personality, must also take into account the user's habits, embodied web site's style at the same time, the function is more convenient for user.

Unlike other medias, as the art of WEB page design is a kind of balance. On one hand, you want your page beautiful and vivid, but on the other hand, you need it can downloaded quickly otherwise people will go to other sites. The starting point of design lies in a creation of happy、 harmonious and effective system and creative design. For the attention on itself and thinking of development. The pursuit of efficiency today, design requires not only the beautiful visual enjoyment, the key is clear logical sense, organized and elaborate organization, and the degree of friendly human-machine interface, the thoughtful consideration for user and positive suggestion and guidance. A good web page should have a reasonable structure, abundant content and friendly interface, a good website should become the bridge and the business enterprise communication tools.

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