

# ***Seven Commonly Used Navigational Systems—The NS Model***



**IA Design & Usability: White Paper**

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**Topic: Navigation Systems Design and Information Architecture**

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**Seven Commonly Used Navigational Systems for Websites, Web Pages, and Subsites**

After the research was completed and information distilled, it was determined that there were seven navigational systems used for the design of navigational systems.

For effective navigation within a Website, navigational systems are integrated together—research revealed these seven commonly used navigational systems:

1. Hierarchical Navigational Systems,
2. Global Navigational Systems,
3. Local Navigational Systems,
4. Integrated Navigational Systems,
5. Remote Navigational Systems,
6. Ad Hoc Navigational Systems, and
7. Search Engines in Websites.

### Brief Discussion— Hierarchical Navigational Systems

Many different types of navigational systems are used for Website design in conjunction with browsers.

For the most part, hierarchical structure is one of the more common types of a navigational system used, which includes one home page or an index page with other subpages underneath it (see Figure C.1).



Figure C.1

In other words, the entire Website may be organized by main categories (the global navigational system) and subcategories (the local navigational system). Specifically the home page or index page would have links that take the end user directly to the subpages within a Website. The seven navigational systems are generally integrated together for effective navigational systems.

In terms of moving from one Web page to the next Web page or subsite or URL, the purpose of hierarchical navigational systems is to provide the end user with the ability to have vertical and horizontal movement when navigating.

Two types of commonly used hierarchical structures (narrow and deep, broad and shallow—see Figure C.2) may be used to organize contextual elements, as well as navigational systems.

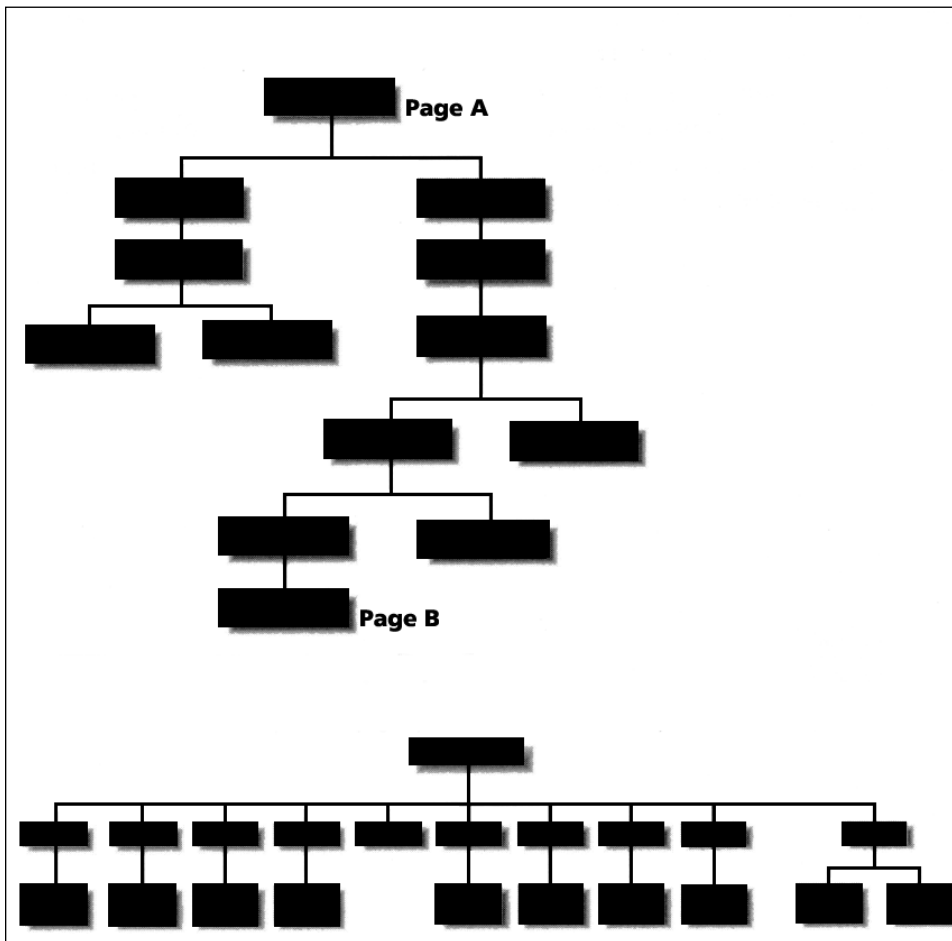


Figure C.2

### **Brief Discussion— Global Navigational Systems**

The global navigational system is the main navigational system used universally and consistently throughout an entire Website. For consistency, the same elements or graphical design of icons should be used throughout the entire Website.

It enables greater flexibility and movement throughout a Website. Global navigational systems are used and allow the end user to access information that has been organized under main categories, which is consistently utilized as a navigational system (see Figure C.3).



Figure C.3

This supplements the hierarchical navigational system by allowing the end user greater movement, vertically and horizontally—throughout the Website (see Figure C.4).

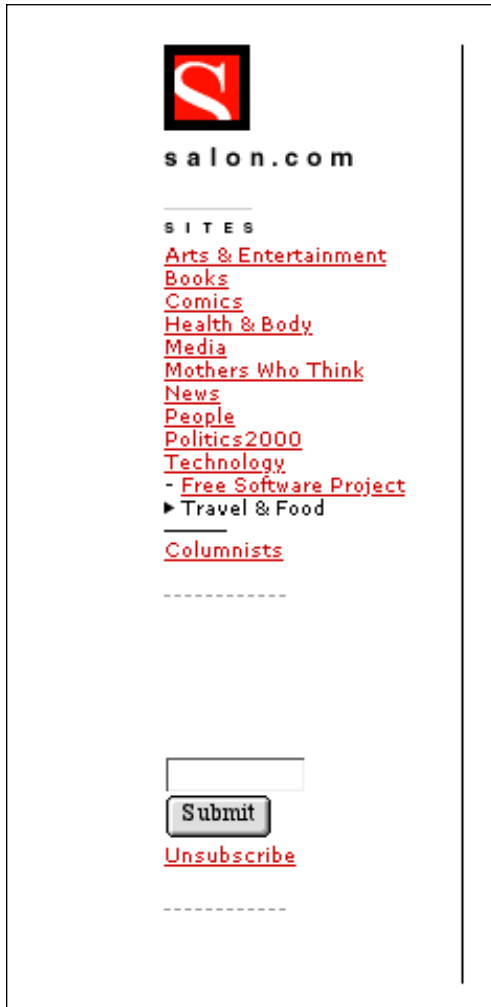


Figure C.4

An extremely basic or simple navigational system would be a graphical or hypertext navigational bar or graphical icons placed at the top or bottom or side (in any juxtaposition within the Website or Web page or subsite). Positions may be from top to bottom, from left side to right side (see Figure C.5).



Figure C.5



### Brief Discussion— Local Navigational Systems

The reason behind integrated navigational systems is that voluminous Websites have large amounts of data that the end user will retrieve via online (see Figure C.6).



Figure C.6

The combination of integrated navigational systems may coherently organize the data and make for quick retrieval of data to answer the end users questions, without the end user having to spend more time by looking up the information from written manuals or written materials (see Figure C.7).



Figure C.7

The main function of a local navigational system is to complement the main global navigational system, not to replace the main global navigational system or to confuse the end user. In other words, the local navigational system is really a set of subcategories where the information fits, in terms of rank and order, as part of information design (see Figure C.8).



Figure C.8

## Brief Discussion— Integrated Navigational Systems

The integrated navigational systems are two or more navigational systems combined together in a Website and used on a Web page or a subsite.

They include global navigational systems, local navigational systems, ad hoc navigational systems, remote navigational systems, and search engines in Websites.

Navigational bars (commonly referred to as basic/simple navigational systems), graphical icons, image maps, pull-down menus, and hypertext links are also included in this list.

Integrated navigational elements may be classified as complex navigational systems because they are many navigational systems combined—and used in conjunction with a browser for navigating (see Figure C.9, Figure C.10, Figure C.11, Figure C.12, and Figure C.13).



Figure C.9



Figure C.10



Figure C.11



Figure C.12



Figure C.13

### Brief Discussion— Remote Navigational Systems

The use of remote navigation systems is not fairly complex, rather considered to be simple navigational systems.

Because remote navigational systems usually include a table of contents, an index, and/or site map, these navigational systems cannot replace global and local navigational systems.

Generally these types of navigational systems greatly enhance the end users ability to gain quick access to information online.

If the information is organized congruently, the use of these navigational systems will coherently organize the material.

They really are only supplemental to any and all navigational systems used as integrated or nonintegrated navigational system or systems (see Figure C.14 and Figure C.15).



Figure C.14



Figure C.15

**Brief Discussion—  
Ad Hoc Navigational Systems**

The ad hoc navigational systems are usually embedded hypertext links and/or graphical icons.

They are used as part of a local navigational system since the content of the Website does not always fit into the categories of hierarchical, global, or local navigational systems.

The ad hoc navigational systems may not replace global or local navigational systems, within a Website (they are placed randomly throughout a Website), unless—of course—they are used as the global and local navigational systems (see Figure C.16 and Figure C.17).



Figure C.16



Figure C.17



## Brief Discussion— Search Engines in Websites

Search engines are used in Websites to help the end user find the information online quickly. Search engines in Websites not meant to be used as global or local navigational systems, but only as part of navigational systems (see Figure C.18, Figure C.19, and Figure C.20).



Figure C.18



Figure C.19



Figure C.20

**About (Bio) Steven Heitman—  
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My experiences and credentials are in information architecture, user experience design, interaction design, graphic design, project/product management, and usability testing.

My expertise and knowledge base are in information architecture—coupled with experiences in technical writing, editing, corporate training, instructional design, and the ADDIE model. In addition, the author and inventor of The NS Model (copyright), The IA Model (copyright)—all about navigational systems, information architecture, user-centered design, usability testing, including why and how information architecture may be professionally practiced, accomplishing high-quality products.

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- <http://www.foreign-currency.com>—[Direct FX]
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- <http://www.razorfish.com>—[Razorfish]

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