17

Search

Many websites allow users to search for

information contained in the site. Users access the search capability by entering one or more keywords into an entry field—usually termed a 'search box.' When there are words in the website that match the words entered by users, users are shown where in the website those words can be found.

Each page of a website should allow users to conduct a search. Usually it is adequate to allow simple searches without providing for the use of more advanced features. Users should be able to assume that both upper- and lowercase letters will be considered as equivalent when searching. The site's search capability should be designed to respond to terms typically entered by users. Users should be notified when multiple search capabilities exist.

Where many users tend to conduct similar searches, sometimes it works best to provide search templates. Users tend to assume that any search they conduct will cover the entire site and not a subsite. The results presented to users as a result of searching should be useful and usable.

Guideline: Provide a search option on each page of a content-rich website.

Relative Importance:
①②③④⑤

Strength of Evidence:
①②○○○

Comments: A search option should be provided on all pages where it may be useful—users should not have to return to the homepage to conduct a search. Search engines can be helpful on content-rich websites, but do not add value on other types of sites.

Designers should be careful not to rely too heavily on search engines. They are not a substitute for good content organization, and do not always improve users' search performance. Designers should carefully consider the advantages and disadvantages of including a search engine, and whether their website lends itself to automated searches.

Sources: Detweiler and Omanson, 1996; Farkas and Farkas, 2000; Levine, 1996; Nielsen, 1996a; Nielsen, 1997e; Nielsen, 1999d; Spool, et al., 1997.

Example: As users delve deeper into the site's content, the search capability remains immediately available.

17:2 Ensure Usable Search Results

Relative Importance:
①②③④⑤

Strength of Evidence:
①②③④○

Guideline: Ensure that the results of user searches provide the precise information being sought, and in a format that matches users' expectations.

Comments: Users want to be able to use the results of a search to continue solving their problem. When users are confused by the search results, or do not immediately find what they are searching for, they become frustrated.

Sources: Amento, et al., 1999; Dumais, Cutrell and Chen, 2001; Nielsen, 2001a; Nielsen, et al., 2000; Pollock and Hockley, 1996; Rosenfeld and Morville, 2002; Spool, et al., 1997.

Example: Returned search results in the main panel contain snippets of the searched page with the user's search terms highlighted (allowing the user to gain a sense of the context in which the terms are used) and a clustered list of related search terms is contained in the left panel.

These search results are difficult to use. There is no discernable order and no ability to sort results by characteristics (e.g., price, size, etc.)

17:3 Allow Simple Searches

Relative Importance:
①②③④⑤

Strength of Evidence:
①②③④○

Guideline: Structure the search engine to accommodate users who enter one or two keywords.

Comments: The search function should be easy to use. Most users tend to employ simple search strategies, and will use few search terms and even fewer search features (e.g., Boolean operators, query modifiers). If most users are inexperienced Web searchers, provide simple instructions and examples to help guide users' searches.

Sources: Bayles and Bernard, 1999; Koyani and Nall, 1999; Nielsen, 2001a; Nielsen, et al., 2000; Pollock and Hockley, 1996; Spink, Bateman and Jansen 1999; Spool, Schroeder and Ojakaar, 2001b.

Example:
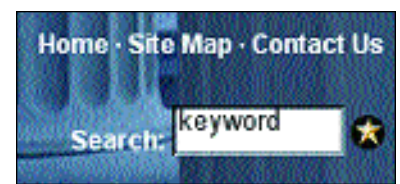
Simple search engines will accommodate most users' search strategies.

This search page is far too complex for the average user. Such advanced search capabilities are best presented on a page dedicated to advanced searches.

17:4 Make Upper- and Lowercase Search Terms Equivalent

Guideline: Treat user-entered upper- and lowercase letters as equivalent when entered as search terms.

Relative Importance:
①②③④○

Comments: For example, "STRING," "String," and "string" should be recognized and accepted equally by the website. When searching, users will generally be indifferent to any distinction between upper- and lowercase. The site should not compel a distinction that users do not care or know about, or that the user may find difficult to make. In situations when case actually is important, allow users to specify case as a selectable option in the string search.

Strength of Evidence:
①②○○○

Sources: Smith and Mosier, 1986.

17:5 Design Search Engines to Search the Entire Site

Guideline: Design search engines to search the entire site, or clearly communicate which part of the site will be searched.

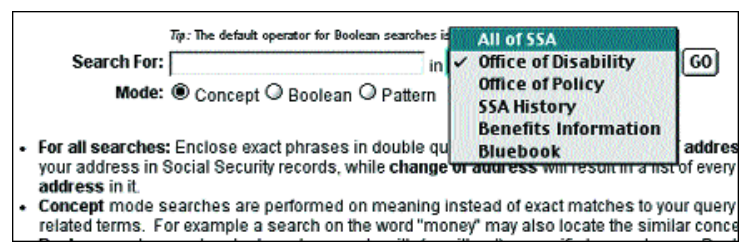**Relative Importance:**
①②③④○

Comments: Designers may want to allow users to control the range of their searches. However, users tend to believe that a search engine will search the entire website. Do not have search engines search only a portion of the site without clearly informing users which parts of the site are being searched.

Strength of Evidence:
①○○○○

Keep in mind that what a designer may consider to be the entirety of a site may not be the same as what the user thinks is the "whole" site. For example, many large sites have various subsections that are maintained by different designers, so the user may think of a site as something that designers think of as several sites. Bottom line—make sure it is clear to users what part(s) of the website are being searched.

Sources: Spool, et al., 1997.

Example:

This design allows users to easily bound their search to a selected subsection of the website, or to run an unbounded search by selecting the "All of SSA" menu choice.

17:6 Design Search Around Users' Terms

Guideline: Construct a website's search engine to respond to users' terminology.

Relative Importance:
①②③④○

Comments: Users seem to rely on certain preferred words when searching. Determining the appropriate keywords may require considerable data collection from users. Designers should research the most preferred search words for their site, and make information relevant to those terms easy to find through the site's search engine. Remember that designers' keywords may not match users' keywords, and content writers may overestimate the specialized vocabulary of their audience.

Strength of Evidence:
①②③④○

Sources: Dumais, Cutrell and Chen, 2001; Egan, Remde, Landauer, et al., 1989; Evans, 1998; Hooke, DeLeo and Slaughter, 1979; Koyani and Nall, 1999; Schiano, Stone and Bectarte, 2001; Spyridakis, 2000.
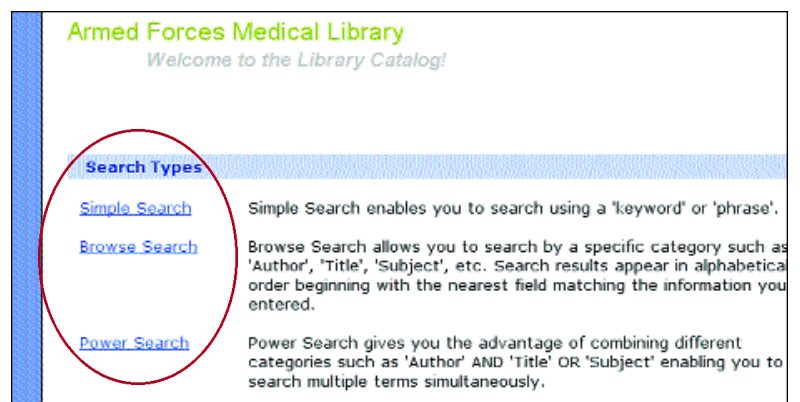
17:7 Notify Users When Multiple Search Options Exist

Guideline: If more than one type of search option is provided, ensure that users are aware of all the different types of search options and how each is best used.

Relative Importance:
①②③○○

Comments: Most users assume that a website has only one type of search. In one study, when there were multiple search types available, users tended to miss some of the search capabilities.

Strength of Evidence:
①②③○○

Sources: Bailey, Koyani and Nall, 2000; Levy, et al., 1996.

Example:

Search

17:8 Provide Search Templates

Guideline: Provide templates to facilitate the use of search engines.

Comments: Search templates assist users in formulating better search queries. A template consists of predefined keywords that help users select their search terms. The keywords can be used directly, or can help users formulate their own queries. Each template should be organized as a hierarchy of predefined keywords that could help to restrict the users' initial search sets, and improve the relevance of the returned "hits." One study reported that people using templates find seventy percent more target websites than those not using templates.

Sources: Fang and Salvendy, 1999.

Example: Some 'search template' examples include:

To find information on 'human error' use
errors	fault	miscalculation
slips	blunder	slip-up
mistakes	inaccuracy	

To find information on 'usability testing' use
user interface testing	cognitive walkthroughs
performance testing	automatic tests
heuristics evaluations	remote testing

To get more specific search results, try using the following tips:

Check spelling

Use multiple words
    Example: our free product
Use similar words
    Example: safe secure privacy security
Use appropriate capitalization
    Example: Search Template Reference
Use quotation marks
    Example: "our pledge to you"
Use plus (+) or minus (-)
    Example: +"template language"

Use field searches
    Examples:
    title:about
    desc:"Our Team"
    keys:membership
    body:security
    alt:"try now"
    url:help
    target:Atomz
Use wildcards
    Examples:
    wh*
    "wh* are"
    415-*-*

See page xxi
for detailed descriptions
of the rating scales
①②③④◯