Jakob Nielsen's Alertbox, May 13, 2001:

Search: Visible and Simple

Summary:
Search is the user's lifeline for mastering complex websites. The best designs offer a simple search box on the home page and play down advanced search and scoping.

Users love search for two reasons:

- Search lets users **control their own destiny** and assert independence from websites' attempt to direct how they use the Web. Testing situations routinely validate this. A typical comment is: "I don't want to have to navigate this site the way they want me to. I just want to find the thing I'm looking for." This is why many users go straight to the **home page** search function.
- Search is also users' **escape hatch when they are stuck** in navigation. When they can't find a reasonable place to go next, they often turn to the site's search function. This is why you should make search **available from every page** on the site; you cannot predict where users will be when they decide they are lost.

Search is a big deal: the usability of the search on intranets we have tested accounted for 43% of the difference in employee productivity between intranets with high and low usability.

Search Should be a Box

Users often move fast and furiously when they're looking for search. As we've seen in recent studies, they typically scan the home page looking for *"the little box where I can type."* We've long known that users scan, and the implications are clear:

- On home pages, search should be a **type-in field and not a link**.
- The search input field should be **wide enough** to contain the typical query;

if the box is too small, the query will scroll and diminish usability.

When I changed the useit.com home page to include a search box instead of a link, **search engine use increased by 91%**. Small change, big effect (as is often the outcome when implementing usability guidelines).

(Interior pages may use a search link if they have a very simple design; complex interior pages should use a search box.)

Query Reformulation: Not

Given that search is becoming old hat on the Internet, you might think users would develop advanced search skills. Not so.

Typical users are very poor at query reformulation: If they don't get good results on the first try, later search attempts rarely succeed. In fact, they often give up. We recently studied a large group of people as they shopped on various e-commerce sites. Their search success rate was:

First query: 51%

Second query: 32%

Third query: 18%

In other words, if users don't find the result with their first query, they are progressively less and less likely to succeed with additional searches. Many users don't even bother: In our study, almost half the users whose first search failed gave up immediately.

There is no question that we need to develop methods to help users hone their searches. Probably the only long-term solution is for the school systems to teach kids strategies for query reformulation. In the short term, search interfaces could show users easy ways to extend queries.

Realistically, though, search design should assume that most users won't be willing or able to refine their queries. Given this, the emphasis should be on increasing users' success on the first attempt.

Another reason to emphasize early success is that users typically make very quick judgments about a website's value based on the quality of one or two sets of search results. If the list looks like junk, they may abandon the site completely. At

a minimum, they'll forgo the site's search in favor of external search engines like Google.

Advanced Search: Not

In our recent search study, the mean query length was 2.0 words. Other studies also show a preponderance of simple searches. Most users cannot use advanced search or Boolean query syntax.

This has two implications for search design:

- **Emphasize your search engine's ability to handle single-word queries** and very short multi-word queries and still produce high-quality results.
- **Do not offer advanced search** from the home page. Advanced search leads users into trouble, as they invariably use it wrong. When it makes sense, offer advanced search as an option users can link to from the search results page: "Didn't find what you were looking for? Try advanced search."

Scoped Search: Maybe

Scoped search lets users limit the search to results from specific areas of the site (the search scope). In general, *this is dangerous*. Users often overlook the scope, or they think they are in a different site area than the one they are actually searching.

However, as websites continue to grow and offer multiple services in a single site, my attitude toward scoped search is changing. I now believe scoping can be sufficiently useful if you offer it in areas of the site that are both clearly delimitated and address specific problems.

If you choose to use scoped search, I recommend following a few basic rules:

- Set the default search scope to "all" (search the entire site).
- When the user chooses a narrow search scope, explicitly state the scope at the top of the results page.
- Offer one-click access to enlarge the scope. It is especially important to give users a highly visible way of searching the entire site if their scoped search fails to return any results.
- If a search returns too many results, give users suggestions for limiting the scope.

First Results Page is Golden

Users almost never look beyond the second page of search results. It is thus essential that your search prioritize results in a useful way and that all the most important hits appear on the first page.

Also, look through the most common queries in your search engine logs and determine the optimal landing page for each common query. You can then manually tweak the search engine to show these pages as the #1 hit.

Read More: 29 Design Guidelines for Search

My full list of 29 guidelines for search user experience is available for download as a **51-page report**.

In middle of 2002, we scored 20 sites for the degree to which they followed best practices for usable design. One positive finding was that **search design has improved significantly**, with the average site **following 48% of the usability guidelines**. Of course it is not that great that websites follow slightly less than half of the usability principles for search, so we still have far to go before search will reach its full potential for helping web users.

Complete list of other Alertbox columns