



Improving Intranet Search

SAMPLE PAGES

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Step Two DESIGNS
www.steptwo.com.au



Step 4: Refining the search results

The search results page is probably the single most crucial element of the search solution. If this is not well-designed, then staff will have little chance of finding the intranet content they require.

While most users enter only a few search terms, they still expect the desired information to be clear and obvious on the results page. While this relies on the underlying tuning and configuration of the search engine (see page 75), it also means that the search results page must be easily scanned and interpreted.

Unfortunately, the out-of-the-box design for the search results page provided by most vendors is extremely poor. Work is therefore required to improve the layout and content of this page.

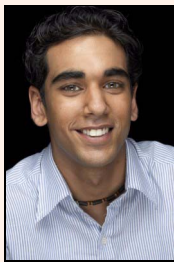
The good news is that even a few hours spent on this task will have a huge impact on the effectiveness of the search engine, and the level of trust that staff have with the results.

At a glance

There are a number of basic questions to ask (page 51) when designing the search results page. These will guide decisions about which elements to include, or remove.

The redesign of the search results then focuses on two main elements, the first of which are the options for the page as a whole, a summary of which can be found on page 57. It is equally important to refine the presentation of the individual search hits, and this is summarised on page 64.

Finally, the aesthetics and overall design (page 74) of the search results page should be improved, to build trust, and to help users to quickly scan the results.



Upwards of 50–80% of the out-of-the-box functionality of the search results page should be stripped out to best meet the needs of Patrick Hunt (page 35). He is looking for a clean and simple design that gives him the key information needed to find a page, and nothing more than that. This includes removing the URL (page 68), file size (page 71) and last updated date (page 71).



Lisa Turnbull (page 36) has more demanding needs of search, and will likely require a richer set of search results. As Figure 11 on page 54 shows, the results for specialist users may provide considerable information for each hit, designed to help Lisa narrow down the specific document that is being searched for.



Avoid 'search within results' for general intranet searches (page 60).

Only specialist users are likely to use saved searches (page 63).

Use 'start index' and 'stop index' markers to improve page descriptions in the search results (page 66).

Display human-readable information on where the page is located in the site (page 69).

Avoid displaying relevance as a percentage (page 70).

General principles

Revisiting some of the general principles of effective search:

- search should work like magic (page 12)
- ensure relevance (page 12)
- provide strong 'information scent' (page 13)
- build trust and confidence (page 14)
- it's not a training problem (page 16)

All of these principles must be considered when refining the search results page. In practice, this means:

- greatly simplifying the results page, to allow it to be easily scanned
- eliminating irrelevant or useless information and functionality
- focusing on information that helps users to select a hit
- adding additional information that gives strong 'information scent'
- improving the overall presentation of the search results page

Questions to ask

When redesigning (and simplifying) the search results page, ask the following questions for each element on the page:

- Does this provide useful information or functionality?
- Will users understand the information or functionality, without requiring training?
- Does it help users to find the desired page or document?
- Does it help users to choose between the search hits?
- Is it useful for staff throughout the organisation?
- Will it be used frequently by staff?
- Can it be presented in a clear and simple fashion?

If in any situation, the answer to one or more of these questions is 'no', then the element should not be included. The starting assumption should always be to minimise the amount of information presented, with an element included only once it has satisfied the criteria outlined above.

These stringent requirements are equally relevant for the general search and the solutions designed for specialist users. While specialist search solutions are likely to provide much richer information, this information must still be useful, and used.

Search results for general users

The starting point for improving the standard intranet search is to strip out as much as 50–80% of the information and functionality on the search results page. On many intranets, the search results are cluttered with irrelevant and little-used information that simply makes it hard for staff to scan the page and to distinguish between search results.

This is not helped by the default configuration provided by most vendors for the search results pages. In the majority of cases this is extremely poorly designed, and seems to be intended to showcase every possible feature of the search engine, rather than to provide a 'best-practice' design.

It is this out-of-the-box design that causes the majority of problems with intranet search. As shown in figures 9 and 10, there is much that can be removed, even for a relatively clean design.

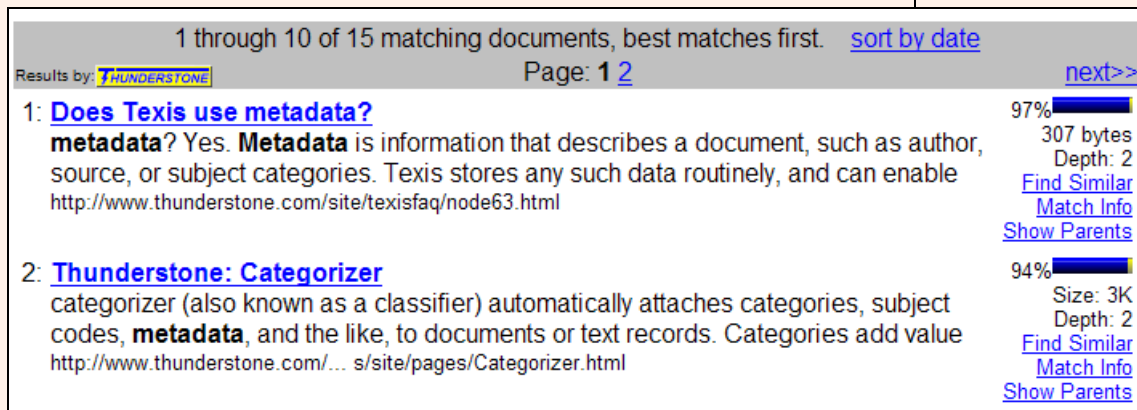


Figure 9: Typical default design for the search results page, as provided out-of-the-box by search engine vendors.

(www.thunderstone.com)

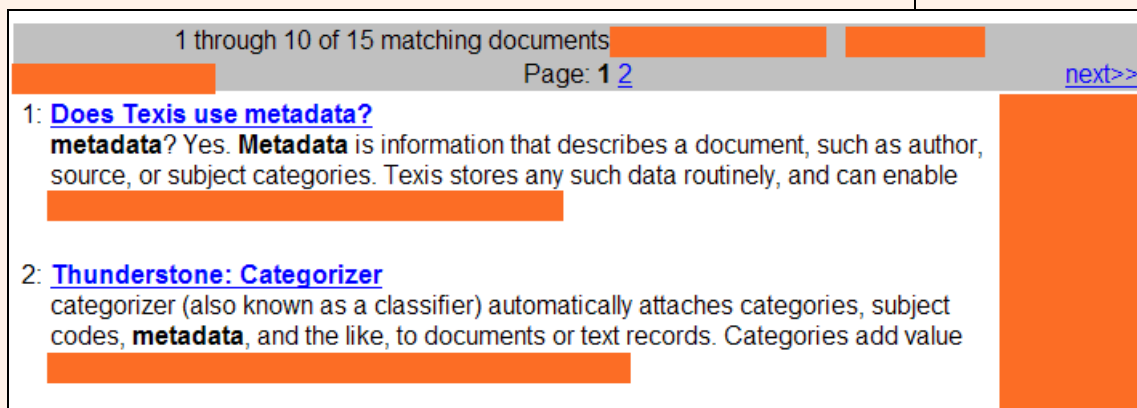


Figure 10: Elements marked in orange should be removed, as they are irrelevant, provide little useful information, or are likely to be rarely (if ever)

The good news is that only a few hours of work is generally required to make a huge impact on the design of the search results page. Most search engines have a straightforward set of 'template files' that define how the results are presented. These can be edited using Notepad (or any other text editor) to remove the unneeded elements.

Once the page has been simplified, additional information can then be added back in, such as a clear indication of the file type (page 67), or a human-friendly description of the section of the site the page is located in (page 69).

If in doubt, provide less information. Ruthlessly assess each and every element on the page using the questions listed earlier (page 51). If an element is not deemed to be important, it should be removed, as every additional piece of information or functionality reduces the inherent usability of the search results.

Further information is provided on this later in this section, including a commentary on each element of the search results page as a whole (page 57), as well as the elements within each search hit (page 64).

Search results for specialist users

While general intranet users are looking to quickly scan the search results in order to find the required page, search practices may be very different for specialist users.

In most cases, specialist search users have much more demanding needs than general staff. They are working with a very large collection of information, and need to drill down to find the specific piece of information required.

Figure 11 shows a search results page developed for a specialist user group, in this case lawyers querying a repository of past legal decisions. This matches the similarly complex and powerful search interface shown in Figure 2 on page 40.

Search Results

Your search for:
Title = "harb"
Returned: 3 results.

1. [Harb v Commissioner for Fair Trading, Office of Fair Trading \(2005\) NSWADT 171](#)

Decision date: 1 August 2005
In front of: Molony, P
In the: Administrative Decisions Tribunal (NSW)

Relevant legislation: Home Building Act 1989; Home Building Regulation 1997

Fair Trading legal officer(s): Grey, Tony; Wilson, Andrew
Fair Trading notes: Peter Harb - Decision to cancel licence affirmed - sets aside determination. Imposes a penalty of disqualification commencing 1 August 2005. Steven Harb - guilty of improper conduct, is to be reprimanded for that of \$1,650.

2. [Commissioner of Fair Trading v Harb & Anor \[GD\] \[2004\] NSWADTAP 17](#)

Decision date: 24 May 2004
In front of: Britton, A; Hennessy, Nancy; Mapperson, K
In the: Administrative Decisions Tribunal (NSW)

Relevant legislation: Administrative Decisions Tribunal Act 1997; Consumer, Trader and Tenancy Tribunal Act 2001; E

Fair Trading legal officer(s): Grey, Tony
Fair Trading notes: Appeal by First Appellant, Commissioner of Fair Trading, is allowed: 1. Each of the orders made by the Tribunal is set aside. The case is remitted to be heard and decided again by the Tribunal as originally constituted, without the hearing of full evidence. Appeal by Second Appellant, Peter Harb, is dismissed.

Figure 11: Custom-designed search results page developed for lawyers looking up past legal decisions.

(Screenshot courtesy of the NSW Department of Commerce.)

As can be seen, the search results for specialist users may provide considerably more information than the stripped-down design for general intranet search. This matches the search behaviour of the targeted users, who are conducting *in-depth research* rather than *scanning* the results.

Designing specialist search results

No two search results pages designed for specialist users will be the same, as each must match the specific tasks and needs of the targeted audience. As a result, some will display a rich amount of metadata (such as the example on the previous page), while others may focus on providing more advanced functionality (such as filtering options, or search within results).

The same general principles for designing the search interface apply to refining the search results page. As these were discussed earlier in the report (page 40), they will only be summarised here:

- The design of the search results page (and associated functionality) should be informed by research conducted with the targeted group of staff (page 41). This will allow the solution to closely fit the specific needs of each group of specialist users.
- Staff should be involved throughout the design process (page 41), as they will have concrete and constructive input into the requirements and resultant design.
- There is no place for a generic 'advanced search' results page. Instead, there should be one design per group of specialist search users (page 41). Each design therefore targets one specific group of users, ensuring that the functionality offered is a close fit for the daily needs of the staff involved.
- Usability testing is critical to ensure that the designs are practical, efficient and useful (page 42). This testing will generally be small in scale, involving just the targeted search users.

As can be seen from the list above, there are no hard-and-fast rules for how to design a search results page for specialist search users. For this reason, when the search options are explored in the following pages, a search persona ('Lisa Turnbull') is used to provide a concrete example on which to base discussions.

It should therefore be highlighted that the specific recommendations of what to include (and what not to) are based on this persona. In practice, functionality implemented will vary greatly from situation to situation.