

Turning Search into Find

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What we'll cover in this session

- Why search is important
- The obstacles to Find
- Innovative approaches to search on the Web
- Top 10 factors that help turn Search into Find
- Some practical pointers towards implementation



Why search/find is so important

- Search is not necessarily the most effective tool for finding information
BUT
- It is the tool that users prefer to use
[Hood, Henderson, Jordan, 2003]
- Many Help systems now omit an Index



We used to find things...



- Now we search...



What are the obstacles to Find?

- Don't know what search keywords to use**
- Can't ask questions**
- Too many search results**
- Search does no linguistic analysis**
- Search is not picking up synonyms**
- Can't specify search tightly enough**
- Zero search results**
- Don't really know what I'm looking for**
- Search takes no account of semantics**
- Not clear which search result is best**
- Search has no understanding of the domain**
- Best search result is at the bottom of the list**



SOME INNOVATIVE APPROACHES TO SEARCH ON THE WEB



Turning Search into Find

Google™
UK

Google Search I'm Feeling Lucky

Search: the web pages from the UK

Google Suggest
(Predictive Search)

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Google™
UK

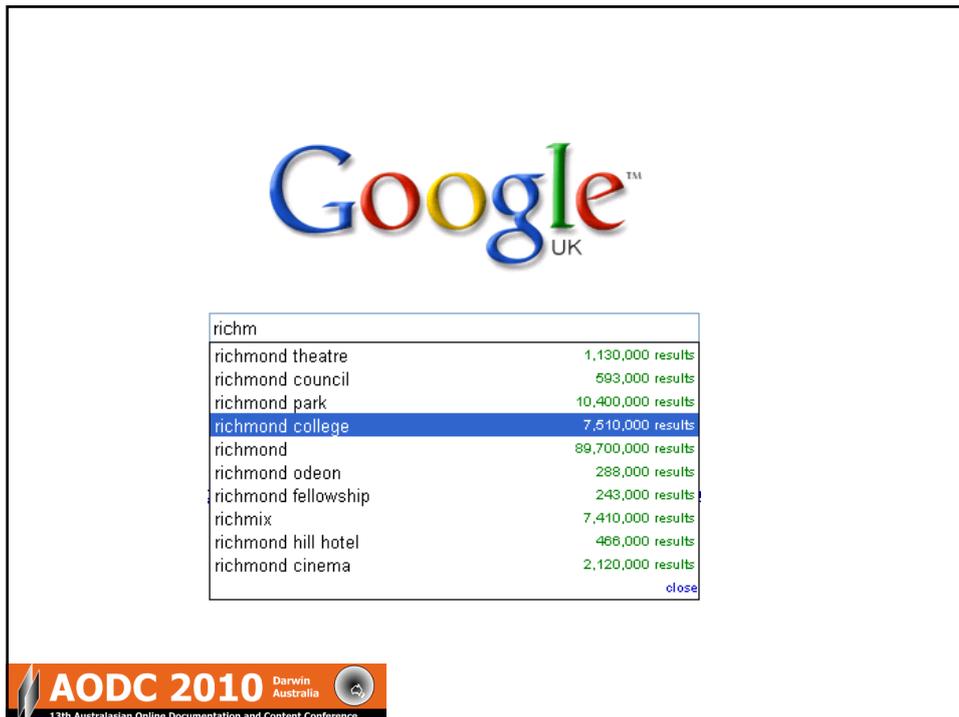
r

| | |
|---------------|---------------------|
| ryanair | 8,300,000 results |
| rightmove | 3,420,000 results |
| river island | 26,500,000 results |
| royal mail | 45,700,000 results |
| radio 1 | 192,000,000 results |
| route planner | 3,640,000 results |
| runescape | 18,200,000 results |
| rbs | 9,220,000 results |
| red nose day | 6,750,000 results |
| richer sounds | 436,000 results |

[close](#)

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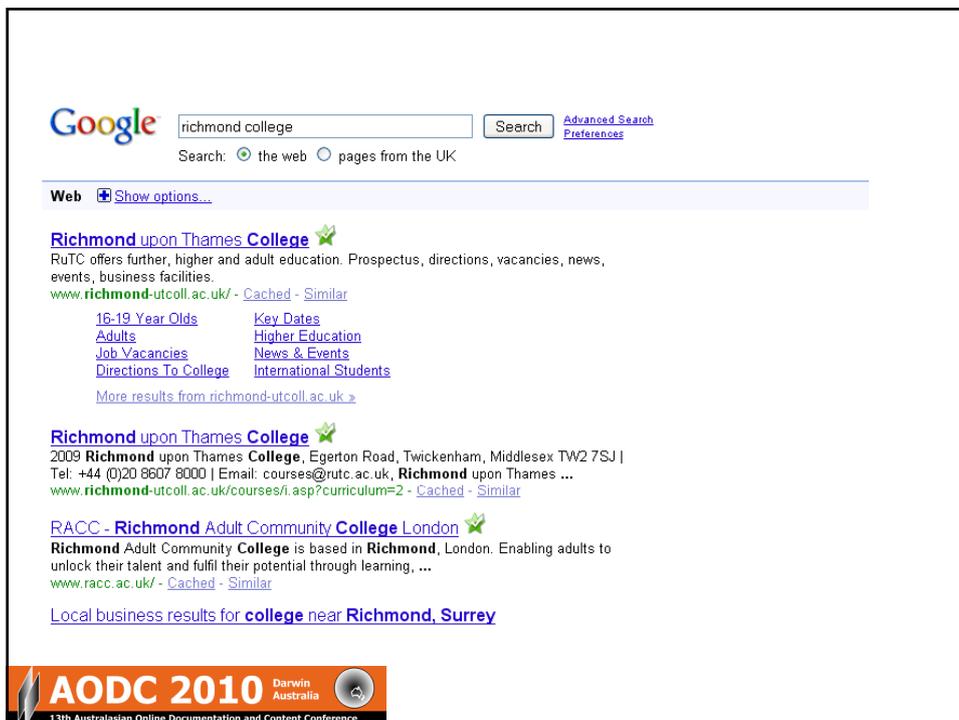
Turning Search into Find



The screenshot shows the Google UK search interface. The search bar contains the text 'richm'. Below the search bar, a dropdown menu displays a list of search suggestions with their corresponding result counts. The suggestions are:

| Suggestion | Results |
|-------------------------|--------------------------|
| richmond theatre | 1,130,000 results |
| richmond council | 593,000 results |
| richmond park | 10,400,000 results |
| richmond college | 7,510,000 results |
| richmond | 89,700,000 results |
| richmond odeon | 288,000 results |
| richmond fellowship | 243,000 results |
| richmix | 7,410,000 results |
| richmond hill hotel | 466,000 results |
| richmond cinema | 2,120,000 results |

A 'close' link is visible at the bottom right of the dropdown menu. At the bottom of the screenshot, there is a banner for 'AODC 2010 Darwin Australia 13th Australasian Online Documentation and Content Conference'.



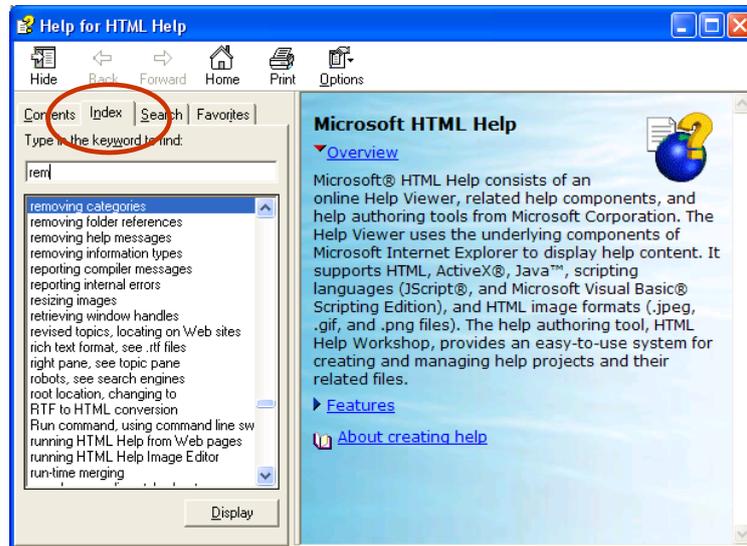
The screenshot shows the Google search results page for the query 'richmond college'. The search bar contains 'richmond college' and the search button is visible. Below the search bar, there are links for 'Advanced Search' and 'Preferences'. The search results are categorized under 'Web' and include the following entries:

- Richmond upon Thames College** (marked with a star)
RuTC offers further, higher and adult education. Prospectus, directions, vacancies, news, events, business facilities.
www.richmond-utcoll.ac.uk/ - [Cached](#) - [Similar](#)
[16-19 Year Olds](#) [Key Dates](#)
[Adults](#) [Higher Education](#)
[Job Vacancies](#) [News & Events](#)
[Directions To College](#) [International Students](#)
[More results from richmond-utcoll.ac.uk >](#)
- Richmond upon Thames College** (marked with a star)
2009 **Richmond upon Thames College**, Egerton Road, Twickenham, Middlesex TW2 7SJ |
Tel: +44 (0)20 8607 8000 | Email: courses@rutc.ac.uk, **Richmond upon Thames** ...
www.richmond-utcoll.ac.uk/courses/i.asp?curriculum=2 - [Cached](#) - [Similar](#)
- RACC - Richmond Adult Community College London** (marked with a star)
Richmond Adult Community College is based in **Richmond**, London. Enabling adults to unlock their talent and fulfil their potential through learning, ...
www.racc.ac.uk/ - [Cached](#) - [Similar](#)

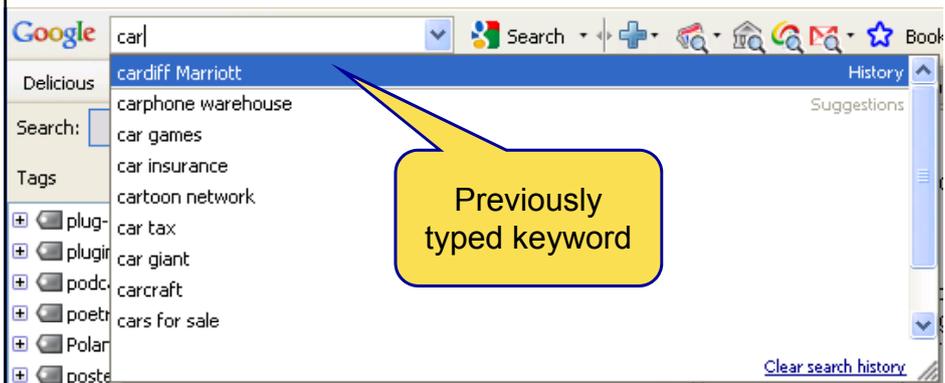
At the bottom of the screenshot, there is a banner for 'AODC 2010 Darwin Australia 13th Australasian Online Documentation and Content Conference'.

Turning Search into Find

Remind you of anything?



Google toolbar



Turning Search into Find

Google toolbar update

A screenshot of the Google search interface. The search bar contains the text 'wr'. Below the search bar, a list of search suggestions is displayed, including 'writersua', 'wru', 'wrc', 'wrestling news', 'wrexham council', 'wrap', 'wrexham fc', 'writing a cv', 'writtle college', 'wrestlezone', and 'wrexham and shropshire'. A yellow callout box with a blue border and a pointer to the search bar contains the text 'No History section'. At the bottom right of the search results area, there is a link that says 'Clear search history'. At the bottom of the slide, there is a banner for 'AODC 2010 Darwin Australia 13th Australasian Online Documentation and Content Conference'.

BBC I-Player

A screenshot of the BBC I-Player website. The top navigation bar includes the BBC logo, 'Text only | Help', and a search bar containing the text 'mic'. Below the search bar, a dropdown menu shows search results: 'After Midnight with Mick...', 'Mic Check', 'Michael Ball's Sunday Br...', and 'Michael McIntyre's Comed...'. Below this, there is another search bar containing the text 'ag', with a dropdown menu showing results: 'Seven Ages of Britain', '6 Music Plays It Again', and 'I'm Sorry, I'll Read That...'. The word 'Update:' is written in blue text to the left of the second search bar. At the bottom of the slide, there is a banner for 'AODC 2010 Darwin Australia 13th Australasian Online Documentation and Content Conference'.

Turning Search into Find

Confused.com

Car Insurance Quotation for Matthew Ellison

About You Proposer The Car Your policy Get results

Drivers

Your Occupation

What is your employment status? Director

What is your main occupation? IT

- Computer Analyst
- Computer Consultant
- Computer Dp Manager
- Computer Editor
- Computer Engineer
- Computer Operator
- Computer Programmer

Do you have another occupation? Yes No

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Railsaver.co.uk

RAIL saver travel for less in conjunction with **raileasy**

journey type One way Return

passengers Adult 1 Child (5-15) 0

travelling from rib

travelling to Ribblehead
Ferriby
Horton-in-Ribblesdale

departing Wed Leaving after 18:00

returning Wed 29 Jul 09 Leaving after 18:00

Are the 2nd and 3rd suggestions useful?

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Railsaver.co.uk

RAILsaver travel for less in conjunction with **raileasy**

journey type One way Return

passengers Adult Child (5-15)

travelling from water|

travelling to

- Wateringbury
- Water Orton
- Waterbeach
- Waterloo (Merseyside)
- Blackwater
- Bridgwater
- Fairwater
- London Waterloo
- London Waterloo East
- London Waterloo Interntl
- Virginia Water

departing Wed

returning Wed

ticket type

journey route

Imagine I'm searching for Waterloo (London)

Required station included

GoogleTM
UK

and bec

and because love battles

and because love battles in spanish

and because love battles analysis

and because

New and because love battles spanish

and because love battles pablo neruda

and because it is my heart

and beckett

run and become

posh and becks

[Advanced Search](#)

[Language Tools](#)

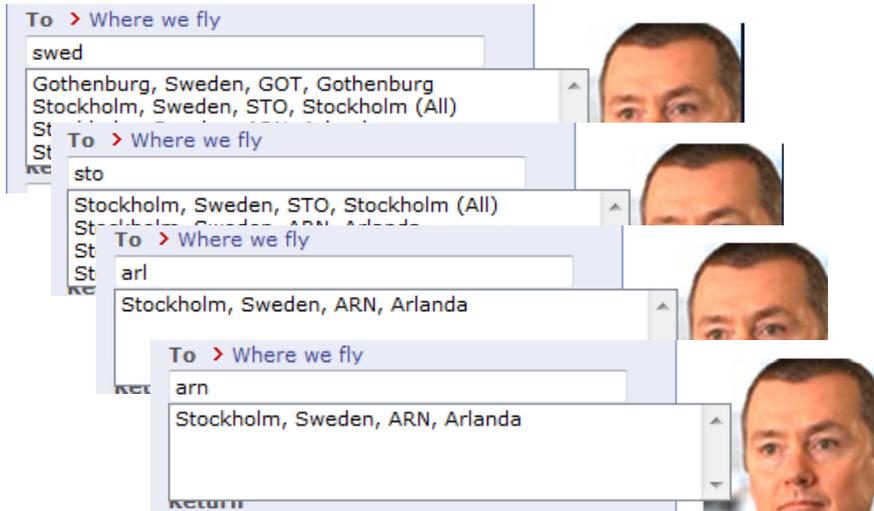
[es](#)

Google Search I'm Feeling Lucky

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British Airways (BA.com)



Need to Balance search functionality and simplicity/ease of use

HTML Help – Simple Search

HTML Help – Advanced Search

Should we ever require users to understand Boolean logic?

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Need to Balance search functionality and simplicity/ease of use

- Two online bookshops:
 - Borders (UK) – ~~popular high street bookseller~~ **Now out of business**
 - Blackwells – strong links to academic institutions and libraries
- Compare their approach to search



Borders

The screenshot shows the Borders website interface. At the top, there is a search bar with the text 'Search All title, author or ISBN' and a 'GO' button. To the right, there is a 'My Basket' section showing '0 items' and a 'Sign in to view your account' link. Below the search bar, there are navigation tabs for 'Home', 'Fiction books', 'Non-fiction books', 'Children's books', 'eBooks', 'DVDs', 'Offers', 'Borders TV', and 'Our stores'. A 'Shop by category' sidebar lists 'Fiction', 'Non-Fiction', 'Children & Education', 'eBooks', and 'Audio Books'. A large promotional banner reads 'Up to 20% OFF Back to School' with the text 'FREE UK DELIVERY TO STORE & ON ORDERS OVER £10*' and '*TERMS AND CONDITIONS APPLY'. Below the banner, a product listing for 'World Champion Speed Reader, Anne Jones races through the Dan Brown's new novel in under 42 mins...' is shown. The price is listed as '£12.99' (reduced from '£18.99') with a 'YOU SAVE £6.00 (32%)' label. There are 'Add to basket' and 'Add to wishlist' buttons. The product description includes a quote: 'But what did she make of the much-hyped follow-up to The Da Vinci Code? She described the book as having "all the usual Brown fare: clues and codes, mysteries and conspiracies, a race against time ... and a gruesome'.

- Predictive search
- Simple UI
- Can enter title, ISBN, or author
- Matches within titles
- Two result categories: products and people

Turning Search into Find

Borders

The screenshot shows the Borders website interface. At the top, there is a search bar with the text "ce" entered. A dropdown menu is open, displaying a list of search results under the heading "PRODUCTS". The results include:

- Caribbean Food Made Easy by Levi Roots (Hardback)
- Carra: My Autobiography by Jamie Carragher (Paperback)
- Cantona: The Rebel Who Would Be King by Philippe Auclair (Hardback)
- The Catcher in the Rye by J.D. Salinger (Paperback)** (highlighted with a red circle)
- Cattle Baron: Newby Hooded AND Bachelor Dad on Her Doorstep (Romance S.) by Margaret Way, Michelle Douglas (Paperback)
- Car Fever: Dispatches from Behind the Wheel by James May (Hardback)
- Captive in the Millionaire's Castle: (Modern Romance) by Lee Wilkinson (Paperback)
- The Case for God: What Religion Really Means by Karen Armstrong (Hardback)
- The Candy Machine: How Cocaine Took Over the World by Tom Felling (Paperback)
- Capello: Portrait of a Winner by Gabriele Marcotti (Paperback)

Below the products list, there is a "PEOPLE" section with names like Carolyn Hart, Cas Clarke, Kristin Cast, and Emma Camlin. On the left side of the page, there is a navigation menu with categories like Fiction, Non-Fiction, Children & Education, etc. A large promotional banner in the center reads "Up to 30% OFF" and "FREE UK DELIVERY".

Blackwells

The screenshot shows the Blackwells website interface. At the top, there is a search bar with the text "ca" entered. A dropdown menu is open, displaying a list of search results under the heading "Search in Blackwell Online". The results include:

- Title
- All Items
- All Items
- Books
- Audio Books
- Printed Music
- Classical CD
- DVD
- eBooks

A yellow box with the text "Simple Search" is overlaid on the search bar area. Below the search bar, there is a "Blackwell Recommends" section with a "Bookseller Selected" dropdown and a "Coming Soon" section. A row of book covers is displayed, including "Lee Child Gone Tomorrow", "J.R.R. Tolkien", and "Conn Iggulden Bones of the Hills". On the right side, there is a "Shop with Blackwell" section with a list of benefits:

- Browse and search over 6 million titles
- Reserve Online Collected Instore
- Buy online - free UK postage on orders over £20
- Buy instore - over 40 shops nationwide
- Find your nearest Blackwell shop

At the bottom of the page, there is a banner for "AODC 2010 Darwin Australia" and "13th Australasian Online Documentation and Content Conference".

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Blackwells

Your Search Details

Title: And Or Exact word

Author / Composer: And Or Exact Exact word

Keyword(s): And Or Exact word

Publisher / Imprint:

ISBN / ISMN / EAN / UPC: Enter one or more separated by a space, comma or newline

Fine Tune Your Search

Media Type / Binding:

Price Range: - E.g. 5.99 - 9.99

Published Between: - Format dd mm yyyy, e.g. 02 11 1995 - 19 07 1997

Only items in the following category: All Categories

Key Stage:

Academic Level:

Interest Age:

Reading Age:

Availability: All items: Items in stock in UK:

Catalogue:

Print on Espresso:

Results Display

Results Per Page:

▪ Advanced Search

Faceted Search

- Classify information by specific characteristics (facets)
- More flexible than a TOC, which presents a single, pre-determined, taxonomic structure
- Users explore available information by choosing required facets
 - Combine facets to narrow down the search
- Can be use to refine the results of full-text search

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Example of faceted search



Browse Varietal

[Red Wines \(171\)](#), [White Wines \(149\)](#), [Bubbly \(40\)](#), [Pink Wines \(30\)](#), [Dessert/Fortified Wines \(41\)](#)

Browse Region

[French \(55\)](#), [German \(6\)](#), [Italian \(67\)](#), [New Zealand \(2\)](#), [Other European \(8\)](#), [Portuguese \(19\)](#), [South American \(4\)](#), [Spanish \(15\)](#), [USA \(255\)](#)

Browse Price

[Bargains under \\$20 \(237\)](#), [Top shelf \(over \\$100\) \(11\)](#)

Set your own Price:



(Drag pointers to select)

<http://facetmap.com/browse/>



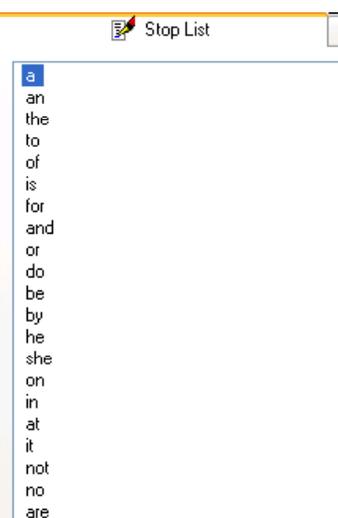
Combining FTS and faceted search

The screenshot shows the sportsshoes.com website. At the top, there is a navigation bar with links for HOME, SHOES, CLOTHING, EQUIPMENT, MEN'S, WOMEN'S, JUNIOR, Running, Football, Outdoors, Gym, and More. A search bar contains the text 'saucony grid' and a 'SEARCH' button. To the right of the search bar, there are links for '0 items £0.00', 'VIEW BASKET', and 'Check out'. Below the search bar, there is a 'Facets' section on the left with a red arrow pointing to it. The facets include GENDER (Womens (66), Mens (57), Junior (6)), SPORT (Running (121), Outdoors (17), Gym (4)), SIZE (6 (11), 6½ (10), 7 (31), 7½ (33), 8 (35)), and TYPE (Cushioned / Neutral (53), Support / Moderate Op (46), Trail (13), Motion Control (10), Cross Training (4)). The main content area shows 129 'saucony grid' products. The first three products are: 1. Saucony Progrid Triumph 6 Running Shoes (Our price: £54.99, Save: £35.00, PRICE BEAT promise). 2. Saucony Progrid Omni 7 Running Shoes (Our price: £44.99, Save: £40.00, PRICE BEAT promise). 3. Saucony Progrid Triumph 7 Running Shoes (Our price: £94.99). Each product listing includes an image of the shoe, a brief description, and a 'Tell me more...' link.

FACTORS THAT HELP TURN SEARCH INTO FIND

In reverse order...

#10 Stop words – facility to exclude specific words from search matching



- Common words that are not indexed by search
- Marginally reduces file size and increases search speed
- Might cause problems when searching for phrases
 - Example: sort by date

#9 Facility to exclude specific topics from search

- Option to exclude topic from search
- Enables you to ensure topic only appears in a specific context
 - Context-Sensitive Help topics
 - Pop-ups
 - Topics with pre-requisites

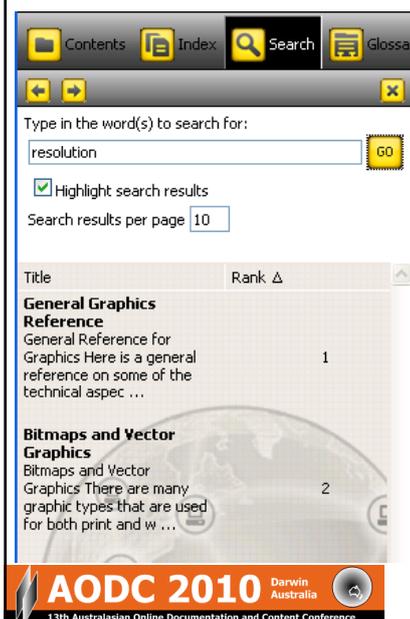
Searchable

- Include topic when full-text search database is generated

This feature is available for DotNet Help, WebHelp, and WebHelp Plus targets only.



#8 Search result synopses (context)



- Show first few words or key extract for each search result
- Similar to Google's presentation of search results
- Enables user to assess relevance of search result



#7 Boolean search

- AND, OR, NOT
- Enables users to combine keywords for advanced search
 - Using AND decreases number of results
 - Using OR increases number of results
- Most Web search engines use Boolean **AND**
- Most Help search engines use Boolean **OR**
(perhaps afraid to offer zero results)



Comparing search provided by HATs

| Help format | Boolean Ops | Other features |
|------------------------------|--|---|
| Adobe AIR Help and WebHelp | <ul style="list-style-type: none"> ■ Supported ■ Defaults to OR | <ul style="list-style-type: none"> ■ Ranking ■ Highlighting ■ Context ■ Substring |
| MadCap WebHelp | <ul style="list-style-type: none"> ■ Supported ■ Defaults to OR | <ul style="list-style-type: none"> ■ Ranking ■ Highlighting ■ Filtering |
| ComponentOne NetHelp | <ul style="list-style-type: none"> ■ Not supported ■ Defaults to OR | <ul style="list-style-type: none"> ■ Ranking (no numbers) ■ Highlighting |
| Author-it Browser-based Help | <ul style="list-style-type: none"> ■ Supported ■ Defaults to AND | <ul style="list-style-type: none"> ■ Ranking + hit count ■ Match partial words |
| WebWorks Help | <ul style="list-style-type: none"> ■ Not supported ■ Defaults to AND | <ul style="list-style-type: none"> ■ Ranking (arbitrary numbering) |

#6 Phrase matching (quoted keywords)

- Examples:
 - “currency conversion”
 - “topic templates”
 - “content explorer”
- Usually unnecessary with sophisticated search engines
- May help to filter out unwanted search results

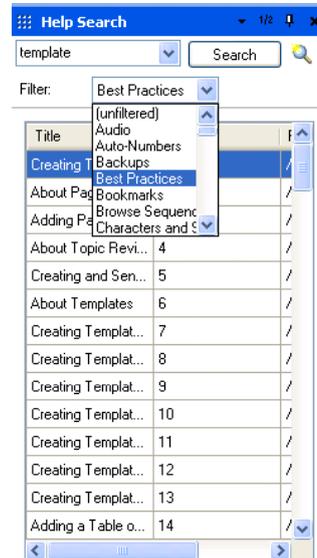


#5 Fuzzy matching linguistic analysis

- Suggesting misspellings
- Offering close matches
- Stemming and parts of speech
 - Cow finds cattle
 - Translate finds translation and



#4 Search filtering and faceted search



- Concept of “Information Types” coined by Microsoft in 1996 for HTML Help
- Commonly used on e-commerce sites
- Achievable with Concept Keywords and Search Filters in Flare’s WebHelp and DotNetHelp



Facets for software user assistance

Sports Shoes

- Gender
 - Men
 - Women
- Sport
 - Running
 - Gym...
- Size
 - 4,5,6,7,8
- Type
 - Cushioned
 - Trail

Software user assistance

- Role
 - Administrator
 - User
- Software module
 - Accounts
 - Human resources
- Experience
 - Novice, intermediate, advanced
- Required info
 - Step-by-step
 - Field descriptions...

#3 Ranking of search results

- What determines sequence?
 - Number of occurrences of keyword
 - Meta data
 - Concept of “best bet” in MS Vista Help

The screenshot shows a search interface with a search bar containing 'template' and a 'Go!' button. Below the search bar is a filter dropdown set to '(unfiltered)'. The search results are displayed in a table with two columns: 'Title' and 'Rank'. The results are ranked from 1 to 14, with 'Creating Templates' at rank 1. To the right of the table is a 'Rank Title' list showing the corresponding titles for each rank.

| Title | Rank |
|---------------------|------|
| Creating Templates | 1 |
| About Page Layo... | 2 |
| Adding Page Lay... | 3 |
| About Topic Revi... | 4 |
| Creating and Sen... | 5 |
| About Templates | 6 |
| Creating TEMPLAT... | 7 |
| Creating TEMPLAT... | 8 |
| Creating TEMPLAT... | 9 |
| Creating TEMPLAT... | 10 |
| Creating TEMPLAT... | 11 |
| Creating TEMPLAT... | 12 |
| Creating TEMPLAT... | 13 |
| Adding a Table o... | 14 |

Rank Title

- 100. About the Template
- 89. Working with the Template
- 86. Chapter 1 The Sample Template
- 20. Adding Functional Elements to your Online Content
- 10. About the Stationery File
- 6. Context Sensitive Help
- 6. Creating Related Topics Menus
- 3. Character Styles
- 3. Creating Context-Sensitive Help
- 3. Creating Dropdown Hotspots
- 3. Creating Popups
- 3. Dropdown Hotspots
- 3. Marker Styles
- 3. Paragraph Styles
- 3. Popups
- 3. Quick Reference
- 3. Related Topics Menus

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#2 Meta Data

- The key to flexible and effective search
- Enables you to avoid zero search results
 - Topics found even if they don't contain the search keywords within the visible text
- RoboHelp 8:
 - option to add search keywords manually
 - automatically adds index keywords as search keywords (you must not enable substring search)

The screenshot shows the 'Search Options' dialog box with three checkboxes: 'Show Context in Search Result' (checked), 'Enable Highlight Search Result' (checked), and 'Enable substring search' (unchecked). There is also a dropdown menu set to 'Text'.

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#1 Predictive search

- Reduces required number of key presses
- Provides better “scent of information”
- Discourages “long tail” searches?
 - Before Google Suggest, 20 - 25% of all searches never occurred before (<http://preview.tinyurl.com/longtail25>)



Practical ways to implement predictive search

- Google Custom Search
 - Tips and guidelines available on the Web
 - Use PHP and jQuery to add auto complete (see <http://tinyurl.com/nkfw8p>)
- Turnkey auto-suggest technologies such as PredictAd
- Adobe Forums case study



Turning Search into Find

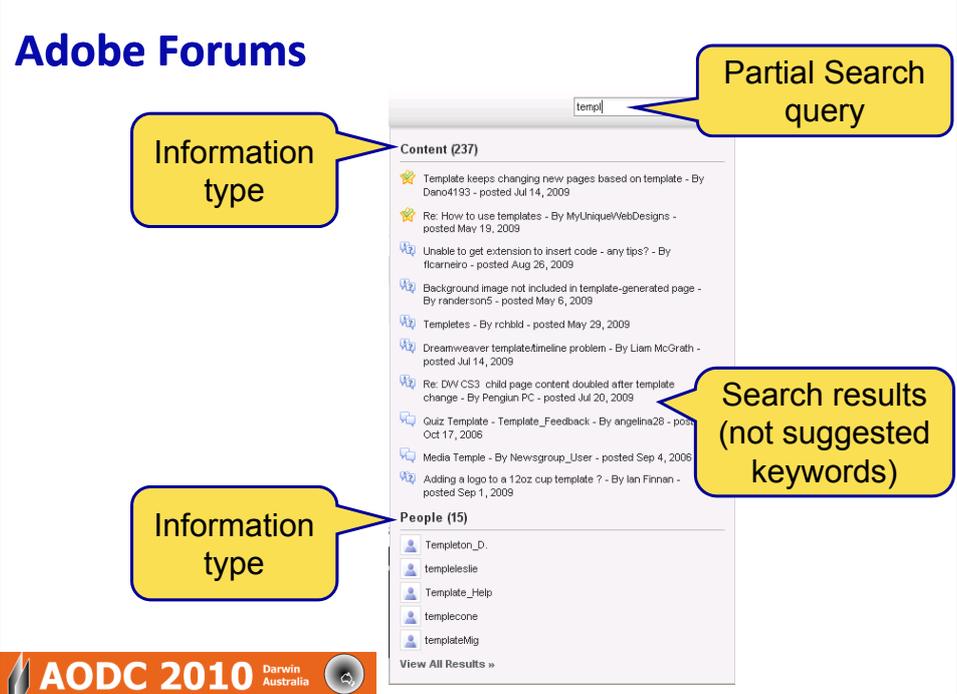


- Learns community search patterns
- Provides:
 - suggested search queries (like Google Suggest)
 - direct links to adverts, live search results, related articles, etc. (like Borders Search)
- These results can be based on:
 - partial keyword entry
 - deep analysis of content
 - the user's profile
 - the context of the search



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Adobe Forums



Information type

Partial Search query

Search results (not suggested keywords)

Information type

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Turning Search into Find

Adobe Forums

- Powered by Jive Software's Clearspace
- How the predictive search works:
 - JavaScript captures keyup events from the search box
 - after a specific number of characters, an AJAX request is sent to the server with a wildcard search based on the characters entered for example: templ*
 - JavaScript is used to create an HTML div containing HTML that formats the results
 - Other JavaScript code enables the user to use the up and down keys to move through results and the enter key to select one and go to the content



Adobe Forums - update

Ellison

New Your Stuff History Browse templates

private > Recording > Discussions

Recording

ably Answered 1 "correct" answer available (10 pts) 2 "helpful" answers available (5 pts) ACTIONS

Mar 18, 2010 1:01 PM by Captiv8r

Mar 18, 2010 12:45 PM

Recording Modes

I had a client ask me the following question: "I am trying to record in Captivate modes, Demonstration, Training Simulation and Demonstration recordings. I thought when I go back into the project I should see all three? No?"

I rarely record my own audio so I am not sure how to answer him. In doing some research it does seem like you can record to multiple modes at once, any advice that can give him would be greatly appreciated.

Reply

MORE LIKE THIS

- Training Simulation and Demonstration recordings
- Publishing Modes
- Re: can you save a demonstration session as a assessment session
- Re: FMR in Captivate 3
- Re: Capture SD Video in Premire pro CS4



References

- **Results and Implications of Testing Search vs. Index for Lookup Tasks:**
Hood, Henderson, Jordan, 2003
- **Mozilla Developer Center:**
How to implement a custom autocomplete search component <http://tinyurl.com/mkkysw>
- **Yahoo! Developer Center: AutoComplete**
<http://developer.yahoo.com/yui/autocomplete/>
- **Predictive Search Query Suggestions**
<http://www.seobythesea.com/?p=1375>
- **Enable Auto-complete Search in WordPress Blog!**
<http://tinyurl.com/lhtdqh>
- **Drupal: Keyword Autocomplete**
http://drupal.org/project/keyword_autocomplete



Questions?

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