10 Tips for Optimizing Search for HTML5 Outputs

PRESENTED BY
Matthew Ellison, UA Europe
MATTHEW ELLISON

- Consultant and trainer for User Assistance tools and technologies since 1993
- User of MadCap products since 2006
- Certified Flare Instructor
- Based in the UK
WHAT WE’LL COVER THIS AFTERNOON

• Some usability test observations that reveal common Search pitfalls

• 10 tips for improving your users’ Search experience
MY USABILITY TESTING IN 2017

• Approximately five hours of observing user behavior
• Seven participants
  – Friends and family
  – Mix of age and gender
• Focused on two issues
  – In-page navigation
  – Overall design and navigation
    (of a Help system)
• Major revelation: the “fragility of search”
PARTICIPANTS

1. Female 70-80
2. Female 60-70
3. Female 50
4. Male 17
5. Male 50-60
6. Female 15
7. Female 50-60
“What is a Target?”

“As they've presented the Search in the middle, I'm going to use it. They are obviously confident in it.” (7)

“Those searches up there in the top right-hand corner never seem to come up with good results.” (7)
"I'm not impressed!" (7)

"If I hadn't seen 'About Targets' at the bottom of the list, I would have given up." (7)
“What is a Target?”

Building Output Using a Batch Target
Use the following steps if you want to generate and/or publish one or multiple targets in a batch from the user interface, perhaps scheduled to run at a specific time. Example: Let’s say you have a project with 17 targets and you need to build and publish 12 of those targets at the beginning ...

About Building and Publishing Output
About Building and Publishing Output. After you have created a project, added and formatted content, and developed a target, you are ready to build and publish the final output. Of course, you can build the output at any point during the development process, but if you make additional changes to ...

Enabling WebHelp Plus Output
Enabling WebHelp Plus Output. If you want to take advantage of server-side search, searching of non-XML files, you must enable ...

Enabling HTML5 Server-based Output
Enable server-based functions in an HTML5 Help system created ...

What’s New?
Find out what’s new in the latest version of Flare. Introduction/Flare/Whats-New-Flare.htm

Associating Conditions with Targets
Basic and advanced methods for associating condition tags in ...

Viewing Output
View the build output for projects generated with MadCap Flare ...

Proceeded to find answer using Top Nav menus

“That didn’t work” (4)
“How do you change the presentation/format of breadcrumbs?”

“Ah - zero results” (4)

Gave up after briefly exploring the Top Nav menus for ‘bread crumbs’
“How do you change the presentation/format of breadcrumbs?”

“None of the results seem useful” (5)

Gave up
“How do you turn on the option that makes Flare save your document automatically every few minutes?”

Gave up after briefly exploring the Top Nav menus (4)
“How do you change the language of a project, say to French?”

“I couldn't search as easily on the second version (1)”
“How do you add a Master Page to your project?”

“Possibly you could click on these to find it??” (1)
LESSONS LEARNED

• Search is important

“It was easier to search for stuff because there was so much stuff” (4)

• BUT…search within Help is inflexible
• …it frequently fails
• …users are not skilled at crafting effective search queries
• We should be anticipating frequent search queries and ensuring they give useful results
Tip 1: Train users to search smarter
TRAINING

• Train users to help themselves

• Search tips
  – Enter keywords, not questions
  – Implied Boolean AND. Use OR to broaden Search
  – Try variations of a word or phrase
  – Enclose phrases within quotes for exact match
  – Consider using a filter
Tip 2: Consider selecting partial search
BENEFIT

- log → login
- window → Windows
- bot → robot
- AWD → L-AWD345R
Performance

- Chunk Large TOCs
- Chunk Large Glossary Files
- Chunk Large Search Database Files
- Enable Partial Word Searching
  - Minimum Word Size: 3
POTENTIAL DISADVANTAGES

• Longer build time

• Too many Search results
Tip 3: Wording of topic titles is critical
WORDING OF TOPIC TITLES

• Try to use words that your users will search for

• Clearly convey the purpose and nature of the topic

• Be specific and complete
WORDING OF TOPIC TITLES

• “Import from Word”
  or
  “Importing from Word”?

• “Security credentials”
  or
  “Overview of security credentials”
  or
  “Introduction to security credentials”
  or
  “About security credentials”
Tip 4: Add words that users might search for
ADD WORDS THAT USERS MIGHT SEARCH FOR

• Consider including users’ own terminology within your text

• Consider including alternative terms (perhaps in parentheses)

• Refer to the problem/issue that you are solving
Tip 5:
Create a synonyms file
CREATE A SYNONYMS FILE

• Focus on Group Synonyms (rather than Directional Synonyms)
• Add the Synonyms file to your “global” project
• No need to select within Target file
• Only used by HTML-based outputs (and not CHM)
Enter synonym groups in the following format:

car = automobile
bicycle = tricycle = bike = trike

If the stem box is checked, all forms of each word will be included. For example, "bike", "bikes", and "biking".

<table>
<thead>
<tr>
<th>Group</th>
<th>Stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>window = pane</td>
<td>✓</td>
</tr>
<tr>
<td>remove = delete</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SYNONYM GROUPS

- change=modify=customize=customise=alter
- vacation=holiday
- trunk=boot
- dictionary=dictionaries
- breadcrumb=bread crumb=bread crumb

By all means, use the Stem option (but in my experience, it’s not necessary)
Tip 6: Add topic descriptions
TWO BENEFITS OF ADDING DESCRIPTIONS

• Description text is targeted by Search

• The Description text is used by Search Results (and helps users to decide if the topic is what they need)
ADD THE DESCRIPTION IN TOPIC PROPERTIES

Description: Step-by-step instructions on how to draw a curved line using the Curve tool. Includes a note about foreground and background colors.
Your search for "snippets" returned 441 result(s).

Using Snippet Conditions
Snippet conditions are condition tags that you can apply to content within snippets. With snippet conditions, you can separate certain snippet content so that it displays in some snippets, topics, or master pages but not in others. This allows you to use one snippet for many purposes, rather ...

../Snippets/Using-Snippet-Conditions.htm

Inserting Snippets
Outputs Supported After you create or add snippets, you can insert them into a content file (e.g., topic, snippet). You can do this by using user interface options, which let you search for a snippet, or you can simply drag an existing snippet from the Content Explorer or File List window pane ...

../Snippets/Inserting-Snippets.htm

Overriding Variable Definitions in Snippets
Outputs Supported The variables that you create and define in the Variable Set Editor are available to your entire project. However, if you want the definition for a variable to be different for one or more snippets in a topic, you can override the topic- or snippet-level definition of the ...

../Variables/Overriding-Variable-Definitions-Snippets.htm
Glossary definition

Snippet

An important file used for single-sourcing that acts sort of like a miniature topic. In a snippet, you can insert and format text, tables, pictures, and whatever else can be included in a normal topic. We're not usually talking about single words or phrases; that's what variables are for. The snippet is edited in one place but can be inserted into one or more topics throughout your project. You can even insert them into other snippets, creating nested snippets.

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Inserting Snippets

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BONUS TIP!

- Add the plural form of each glossary term
Tip 7: Add index keywords
INDEX KEYWORDS

- Use in combination with a Synonyms File
- A way to include a specific topic (or topics) in the results of a search for a word or phrase that is not in topic text
- A solution to the lack of support for spaces in synonyms
EXAMPLE

Index Keywords:

breadcrumb
trail
navigation path
cookie
cookiecrumb
thread
INDEX WINDOW

1 Bread crumbs

Delete this text and replace it with your own content.
Tip 8: Exploit the Include Importance option
THE INCLUDE IMPORTANCE OPTION

- **Conditional Text**
  - Include Importance (recommended)
  - Include Glossary Results

- **Search Engine**
  - MadCap Search

- **Results Per Page**
  - 20

- **Abstract Character Limit**
  - 300

- **Sitemap**
  - Generate Sitemap

- **Web URL**
AS A RESULT OF SELECTING THE OPTION…

• The number of incoming links to a topic is added to the criteria for its Search Ranking

• A measure of “popularity”

• So:
  Make sure that you include plenty of cross-references to important topics
Tip 9: Add search filters
SEARCH FILTERS

• A way of reducing the number of Search results
• Shows only the results from a specific category
FLARE’S IMPLEMENTATION OF SEARCH FILTERS

Probably too many filters to choose from
BASING FILTERS ON FUNDAMENTAL TOPIC TYPES

Could also use:
- User roles
- Product types
- Countries or regions
- Reading/learning preferences

If the curve to be, and then drag the pointer to adjust and arc. You can only create two curves for each line.
STEP 1: ADD CONCEPTS TO TOPICS

**Drawing a freeform line**

This task is useful if you need to draw a freeform line between two points.

**To draw a freeform line**

1. In the toolbox, click **Line**.
2. Drag the pointer to draw the line.

**Note**

- When you drag the pointer, the foreground color is used. To use the background color, hold down the right mouse button and drag the pointer.
TIP: YOU CAN DRAG TOPICS TO A CONCEPT
TIP: YOU CAN DRAG TOPICS TO A CONCEPT
STEP 2: CREATE A SEARCH FILTER SET
STEP 3: SELECT SEARCH FILTER SET IN TARGET

Advanced Filters:
- Exclude content not linked directly or indirectly from the target
- Use empty ALT text for images that do not have ALT text
- Auto-size Capture objects to fit text
- Prevent external URLs from frames
- Synchronize navigation elements with TOC entries
- Remove MadCap styles
- Add meta tags to content:

```
<meta http-equiv="X-UA-Compatible" content="IE=edge" />
```

Equation Format: SVG (Scalable Vector Graphics)

Master Page:
- Master Page: Resources/MasterPages/Top Nav MasterPage

Stylesheet Medium:
- Medium: (default)

Search Filters:
- Filter File: SearchFilterSet
Tip 10: Consider switching to Google Custom Search Elasticsearch!
ELASTICSEARCH

- New search option in Flare 2018
- An open-source search engine based on Lucene
- Provides “fuzzy” matching and auto-complete
ELASTICSEARCH

Target Editor

Search Engine
Type: Elasticsearch

Search Results
- Results per page: 10
- Fragments per result: 1
- Fragment character limit: 300
- Include stop-words in search: unchecked
- Partial word searching: unchecked
- Minimum word size: 3
- Advanced Search Options: checked

Auto-complete Results
- Enabled: checked
ELASTICSEARCH – THE GOOD NEWS

Welcome to MadCap Flare’s Online...
ELASTICSEARCH – THE GOOD NEWS

Your search for "breadcrubm" returned 0 result(s).

*Did you mean* breadcrumbs?
ELASTICSEARCH – THE NOT SO GOOD NEWS 😞

Fuzzy matching does not work for spaces
REASONS TO USE ELASTICSEARCH

• Auto-complete based on:
  – Matching topics
  – Matching keywords that you and others have previously search on

• Fuzzy matching (Did you mean …?)

• Free

• Content does not have to be on public Web
REASONS TO USE ELASTICSEARCH

• Scales well

• Can search non-html files

• Look-and-feel is customizable using skin

• Can be tested locally
POTENTIAL DRAWBACKS OF ELASTICSEARCH

• Configuration on web server required

• Not available with Pulse

• Not available (yet) for output hosted on MadCap Central

• Not available with Tripane HTML5 output

• Does not support search filters
POTENTIAL DRAWBACKS OF ELASTICSEARCH

• Does not search for index keywords
• Does not support synonyms
• Does not show Glossary Term as first search result
• Does not appear to support search phrases within quotation marks
SUMMARY

• Search is critical for your users’ success

• MadCap Search works automatically

  But…

  …it’s worth investing time to fine-tune it

• Elasticsearch is an exciting new option
Questions?

Matthew Ellison
matthew@uaeurope.com