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Findability is key to searching for information

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Taming the information scavenger hunt

Findability is the key. Cheryl Landes shares tips for creating a better search experience.

*Findability =
Navigation + Search*

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The information explosion has existed for decades and has multiplied exponentially with advancements in technology. In 1944, Wesleyan University Librarian Fremont Rider estimated that American university libraries doubled in size every sixteen years.[1] As more information moves online, storage capacity expands to keep up, and today, the numbers are mind-boggling. The days of storing information on networks with capacities in megabytes and terabytes are gone. Now IT professionals in many companies maintain networks storing exabytes of information. Market intelligence firm, IDC predicts that from 2012 to 2020, "*the digital universe will double almost every two years.*"[2] In recent documents I have edited for networking technology clients, I have seen references to data storage in zettabytes.

That is lots of information. In our content consumption society, we need to find information quickly and effectively to successfully finish job-related tasks and make wise buying decisions. According to IDC's 2014 report on the costs of finding information, knowledge workers look for information almost 36% of the time but find the information they need only half of the time. This shortfall in retrieval costs companies USD $5.7 million per year in lost productivity, a figure which has doubled since IDC's last report published in 2003.[3]

Content is useless, therefore, when we cannot find it. Even when we are able to find that content, the information must be organised in a logical manner so that it is easy to use and understand. Searching is not enough. Findability is the key.

What is findability?

Many people in our profession who are aware of the field of findability often interchange the term with search. Search is only one component of findability. *Findability* means being able to locate and retrieve content whenever someone needs it. Another way to look at findability is that it is the ability to discover and gather information.

Readers find information with a combination of two methods: navigation and search. Therefore,

Findability = Navigation + Search

Well-designed navigation and search help us find the content we need, and we remember where we found it when we need it again. Poorly designed navigation and search are a hindrance, resulting in wasted time and frustration.

Findability as navigation

Navigation is how we move around in content. To navigate a print book, we browse the table of contents, chapter and section headings, page numbers, and an index. To navigate online, we use buttons, tabs, tables of contents, menus, links, and indexes. Sometimes all of these navigation options are available online; at other times, only some are.

When we are working with navigation in content, here are some questions to consider regarding how navigation affects findability:

- *Are controls intuitive, and do they follow the familiar user interface standards?* Sometimes it is hard to know whether a link is really a link or a button is really a button. In online content, a link displays as underlined text, so instinctively users click on it. I have seen underlined text on some websites where the underlining is used for emphasis. I did not realise this until I tried to click on the underlined text. My impression of the site's reputation diminished after that, especially when I found more unlinked underlined text. I abandoned the website and looked for the information I wanted somewhere else.

  Another example is with the colours in interfaces, which can make information hard to read or navigate. For a few years, the Adobe Digital Editions e-reader had a black background with narrow light lines and small narrow sans serif font. The text was hard to read, and in some cases, the controls were challenging to discern. An example I found difficult, until I realised what it was, was the tab. At first, the tabs looked like icons, but I was not sure what to do with them. The icons were actually on the tabs, and when I clicked on them, I would find a different view of the interface. The tab borders were so thin on the black background, though, that I could not see them. See Figure 1.

  In the latest version, Adobe Digital Editions changed the colours of its interface to grayscale, so the controls in this e-reader are easier to see and use. The tabs are now buttons, each containing an icon. A tool tip displays while hovering the mouse pointer over a button. See Figure 2.

- *Do you know to where the controls will lead?* We have expectations, based on standard user interface conventions, for the outcome of an action. For example, clicking on a link should take us to a page that provides information described in the link. If the link leads us to a different subject or the link is broken, the content loses credibility in our eyes, and we will look for information elsewhere. Another example is when we click a help button or select a menu item, we expect online help to launch from a help system or website. Sometimes, instead, the control leads

us to a product support site where we must dig for information or no information is available, and there is no one to contact quickly, or you can contact someone by email or online form, but no one responds. User assistance must consist of easy navigation and information retrieval and responsive support when we need help but cannot find the answers we need.

▪ *Can you return to where you were or retrace your steps, if needed?* Navigating print documentation is typically easier than online, because we can see where we came from and how to return. After we read content in a printed book, we can return to the table of contents or flip to the index to look up additional information. Page numbers guide us to the correct location.

In electronic interfaces, it is more challenging to navigate content without buttons, links, and other controls that can clearly guide us. As mentioned earlier, if these controls are not intuitive, we become lost and are likely to abandon the content altogether. Another consideration is that the controls disappear on some mobile devices when the device has been idle for a certain time. We might not know how to reactivate these controls to continue navigating the content. Even if we do know, the extra effort to continue reactivating these controls can become tiresome and result in us switching to another device or interface that allows us to consume content without exerting as much effort.

Indexes versus tables of contents in navigation

Indexes and tables of contents play important roles in navigation, and there are distinct differences between the two. A table of contents is a list of headings and subheadings in the content. These headings and subheadings usually do not contain the terms that we are seeking, and if they do, the information might be more general. In contrast, an index contains specific terms pulled from the discussions in the content that lead us directly to that information. When done correctly, indexes provide alternative points of entry for the same terms in the form of synonyms. Indexes also consolidate important topics in the book so that we can find all of the information organised in one place. This organisation is not always obvious in the table of contents.

Tables of contents, whether in a printed book or online, must consist of descriptive headings and subheadings to aid our navigation. I have seen numerous eBooks with chapter titles similar to this: Chapter 1, Chapter 2, and so forth to the end of the book. When I am reading the table of contents, I do not know what the chapter is about unless I navigate to the chapter and read it. Also, links connecting the headings and subheadings in the table of contents to the relevant content are

essential online so that we can avoid scrolling as much as possible. We also need a way to return to the table of contents easily, when needed.
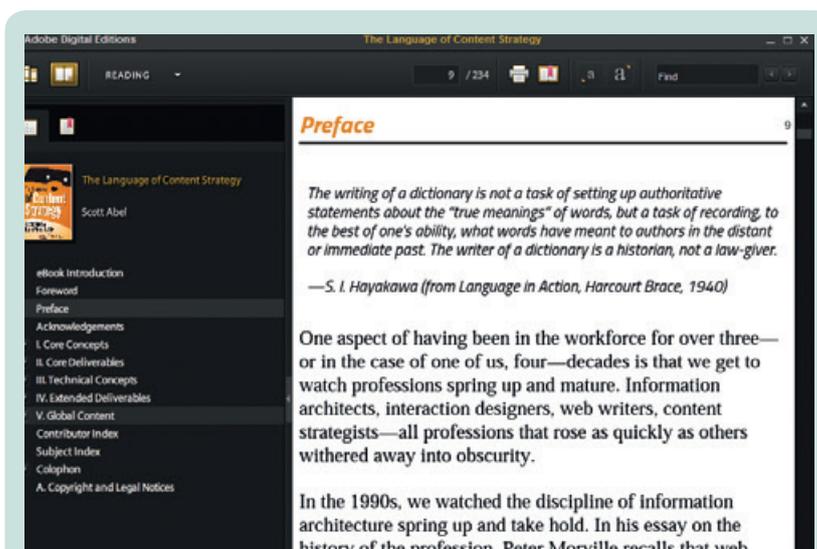

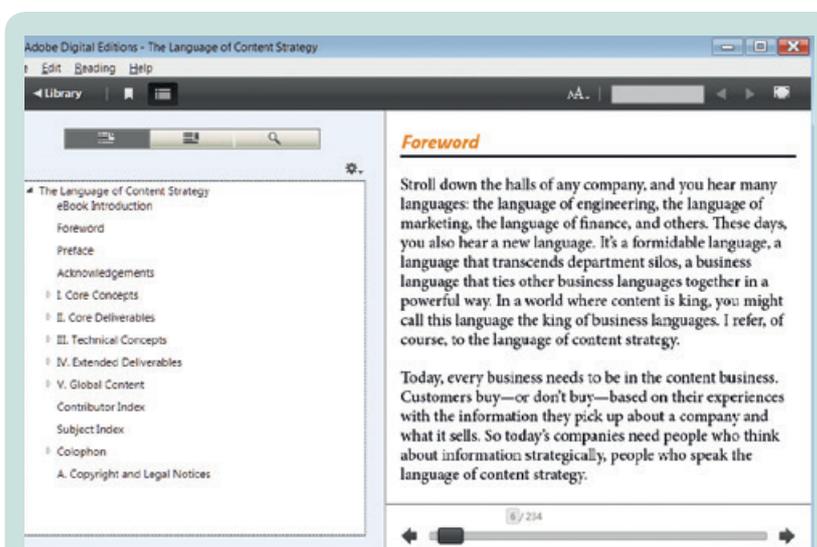**Figure 1. Interface for Adobe Digital Editions version 1.7.2.**

Figure 2. Interface for the latest edition of Adobe Digital Editions, version 4.0.2.

On some mobile devices, especially e-readers, indexes can be challenging to navigate. Some indexes are not live, meaning that links do not connect entries and subentries with the screen where the information is available. When indexes are live, some e-reader formats do not indent subentries, so the topics in the index appear in a randomly ordered list instead of alphabetically. In other indexes, entries and subentries merge into long paragraphs. In these situations, it takes extra work for us to navigate the index to find the subjects we are seeking.

While interfaces have various navigational limitations, we can still ease our readers' burdens of finding content by creating helpful guides that describe controls and how to navigate or where information is located, by writing content in smaller chunks, and providing links to additional references. Also working closely with

developers to streamline interfaces, helps improve findability. Development changes may take time to implement, but active involvement from technical communicators in advocating for our users will make a difference.

Findability as search

Search is the act of looking for specific content by entering a query in a search engine field. Queries consist of keywords, or search terms, that display the information the search engine finds. The search engine displays the results of the query, from the most to the least relevant. Relevancy is determined from defined criteria in the search engine's algorithm.

Search is the most common method we use to find information online. According to Search Engine Land, Google handles more than three billion searches a day, which exceeds more than one trillion a year.[4] Google holds the largest market share of the search engines at 75%[5], so the total number of searches is much higher.

Although search engines have improved over the years, there are still challenges:

- *Is the search engine interface intuitive?* Users might not know where to search for information, because the search field may not be labelled clearly. Sometimes the search field is a plain box with no help text, search icon, or other identifying information to alert us to the correct location.

- *Do we really know where we are searching?* Sometimes the search field we use might return results for only a section of the website, only the website, or perhaps the entire Internet. Help text in a search box or in a tooltip would clarify this.

- *Can we get useful, relevant results when we enter a search term?* Search engines are designed for simple queries, but even then, the results may not be what we expect when our requests are not complex. Content developers can enhance searching by optimising content for findability. To achieve this, add index entries as subject keywords in the metadata so that relevant content ranks higher in the search results. Create meaningful content titles, headings, and subheadings to improve search results and findability. Also, include synonyms in the content, when appropriate, to enhance search results when readers enter alternative terms.

Putting it all together

Taming the information scavenger hunt is possible by understanding how users find information and anticipating their needs. Here is a list of questions to ask to ensure that content is findable:
- Who is the audience?
- What are the audience's needs?

- Which devices are audience members using?
- What are the interface limitations?
- What types of content do audience members want to find?
- How many terms can we include to help readers find the same content? Consider the vocabulary level of readers, along with cultural differences, when answering this question.

Taking the time to research and thoroughly answer these questions and effectively implementing the answers in your content strategy enrich users' experiences and reduce frustration. Happy users find information, not search for it. That is what findability is all about. **C**

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Cheryl Landes is an STC Fellow; the owner of Tabby Cat Communications in Camas, Washington, USA; and the author of five books. She is also the author of the "Findability" chapter in *The Language of Content Strategy*, published by XML Press. Her specialties are technical documentation, marketing communications, findability, and instructional design. E: clandes407@aol.com
W: www.tabbycatco.com
Tw: @landesc

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