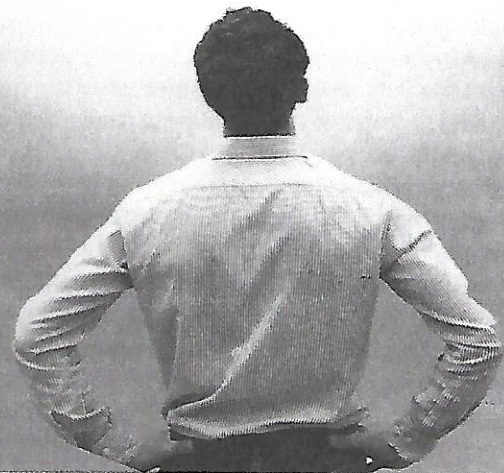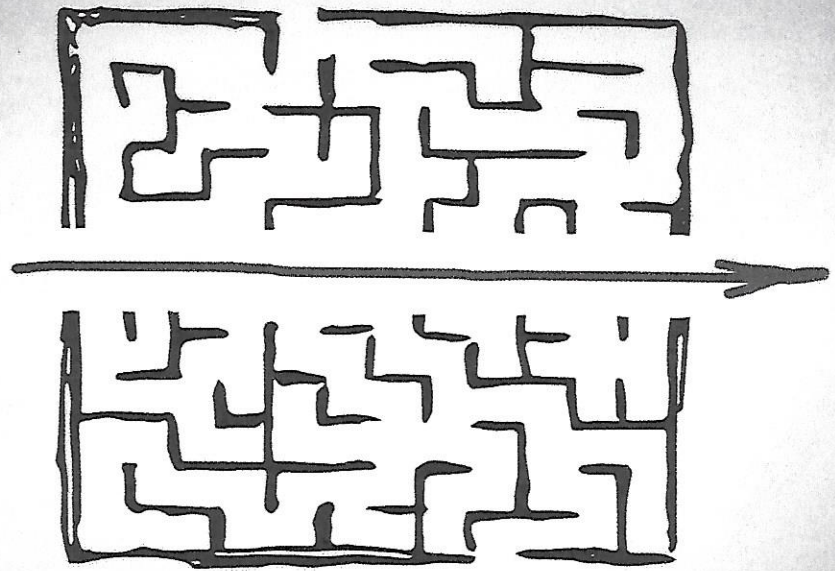# Time *to* Rethink How Our Users Handle Content *and* Search

By Roger Magnus

Online content is not always simple or intuitive to find. This is particularly true for some information-rich websites and subscription databases. Sophisticated search techniques—such as Boolean and proximity operators, document section restrictions, and date ranges—are required to maximize retrieval of relevant content. While most information professionals were trained and are comfortable using various search mechanisms, library customers are neither trained nor comfortable with advanced search techniques. We are frequently fighting a long-standing—and ultimately losing—battle to train our users in the details of searching. We essentially speak a different language, one they do not wish to learn.

We need to accept that, in 2019, many library users think they are expert searchers and everything they need is on a web search engine. As such, why should they invest their limited time in learning what information-rich websites and library online databases offer, much less the complexities of searching them?

I propose that information professionals need to talk about search much less frequently—only when the context is right and our users are listening. Fortunately, there are several techniques besides search that we can use to demonstrate how valuable the content is from these resources and make sure in particular that fee-based library databases are used to their full potential.

EFFECTS OF BIG DATA AND APIS

Two newer examples include Big Data and APIs that can summarize and make connections between the information in these databases. There is also an older manual technique that we can do even more robustly. Specifically, we need to own this content by digging deeper, examining more thoroughly, and making apparent in new and innovative ways the prized

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information contained in our paid subscription resources. Although there are many examples of this already being done that go beyond basic content description or summary, the discussion in our classes and websites too often still emphasizes search strategies. This is a core part of our training and experience but does not resonate with non-information professionals.

I do not think that search is unimportant, but I do think that it is not always effective or efficient. Because it is not easy to do well, search sometimes misses "nuggets" of important content, particularly within reports and other specialized information. Many times, search can be more powerful and accurate if we have a more precise idea of what is being searched, i.e., the name of title or section. I am not suggesting that we do the research for our patrons when it is not warranted—this depends on the type of library in which you work—but that we pave the way for them to find, evaluate, and use this information in a better way. If we do not, we risk losing their interest and attention. Worse, they will be getting much less than optimal search results. If that continues to happen, they may consult with us less and less. They are more likely to blame poor results on the database or on us, since we're the ones who advised them to search it, than they are to recognize their own search skill deficiencies.

There are several reasons why search mechanisms may not always work well to reveal this specific content. This can happen either because the search interface is simple, the search algorithm works poorly, or the information being searched is buried deeply or arranged in a complex manner.

Here are some examples from free websites and subscription databases.

HOOVERS

The free version of D&B Hoovers (hoovers.com) only allows a search on a Company or Industry name (a Contacts search brings up a company profile when clicking on See Details) and does not highlight the search term in the results.

When conducting a Company search on a publicly traded company such as International Business Machines (IBM), it is a good idea to search by both name and ticker symbol, as each brings up different results for subsidiary names. Clicking on See Details to the right of the company entry displays a profile with the following information. (Note: None of these fields are searchable.)

- Contact Information
- Description and Current Direction
- Financials (basic statistics going back 3 years)
- Competitor Profiles
- Basic Statistics
- Corporate Family (requires a subscription)
- Contacts (requires a subscription)
- Industry(ies) Information

For an Industry search, a profile is displayed with the following fields, most of which are short paragraphs:
- Basic information (industry codes, related industries)

- Sidebar (with additional information types that a subscription provides such as Analyst Reports, Influencers, Market Research, etc.)
- Description
- Competitor Landscape
- Products, Operations, and Technology
- Geographic Segmentation (a subscription provides fuller information)

There are other websites and databases with similarly basic search capabilities on a name or a few keywords that yield detailed company, industry, person, and other reports in which the fields are not searchable and remain unseen until the search results are returned. Informing our users about what fields they cannot search on ahead of time is not only important with these resources but also for others with more sophisticated and sometimes multiple search interfaces that our users may not have explored fully.

SECURITIES AND EXCHANGE COMMISSION

The U.S. Securities and Exchange Commission (SEC) website (sec.gov) is free and thus attractive to our users. However, searching by keyword for full text on the SEC site can be extremely difficult and often leads to numerous, imprecise, and, in some cases, inaccurate results. It is therefore no surprise that there are several alternatives to searching for SEC information—both subscription and free—including Edgar Online, Mergent, Sentieo, Intelligize, and Rank and Filed (free). However, with some knowledge about how the SEC site is organized and what types of public company information fall under particular form filings, the SEC site can be far easier to navigate.

Suppose the search involves finding compensation for IBM's CEO, Virginia Rometty.

On the main SEC page, a general search on her name and compensation or salary (a primary component) will not come close to finding what is needed.

If you turn to EDGAR Full Text Search (Last 4 Years) (search-www.sec.gov/EDGARFSClient/jsp/EDGAR_MainAccess.jsp),

Using EDGAR Full-Text Search to find Virginia Rometty's salary at IBM yields more than 8,000 results.

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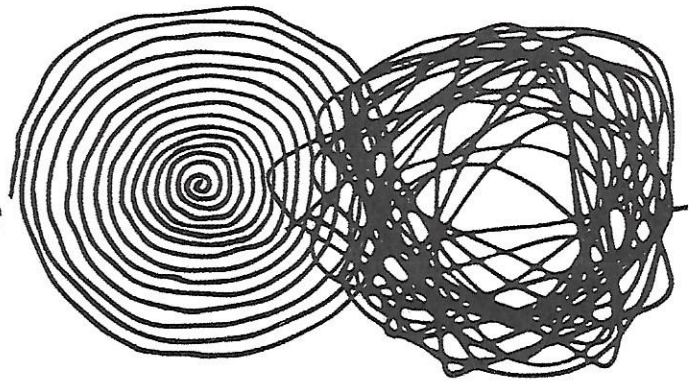
you can search for `salary` and her name. Even using the AND operator between them yields more than 8,000 results, and the first hit is not even closely related. In fact, none of the hits on the first page listed are even for IBM. This may be because the SEC site uses "conceptual" search instead of just strictly searching by keywords.

However, after clicking on the Advanced Search Page, our results are somewhat better. We can specify International Business Machines, as there is a Company Name field.

The first site listed, while Salary is not mentioned per se, does cover Non Derivative Securities and their amounts from Form 4 and comes much closer. Even going back to earlier documents and adding `International Business Machines` or `IBM` in the Company Name to the Basic Search does not improve either the precision or the number of hits.

So, what will help find her salary? If you search the Forms List (sec.gov/forms) for salary or compensation, a corresponding form is strangely not there. By contrast, a search on Executive Compensation on the main SEC page brings up Fast Answers – Executive Compensation (sec.gov/fast-answers/answers-ex ecomphtm.html), and there is a link to the Proxy Statements: How to Find (www.sec.gov/fast-answers/answersproxyhtfhtm. html). Ultimately, what is needed is the DEF 14-A or the proxy statement for the most complete compensation information. This form is also not listed under the previously mentioned Forms List. If you look at an actual form DEF 14-A, you can find pay-related data listed under Executive Compensation.

Now, if you go back to the Advanced Full-Text Search and select this form under In Form Type, the search results are perfect for the last 4 years. For the 2017 DEF 14a form released in March 2018, the Summary Compensation Table is available on page 48 and can be found in the Table of Contents or using a Ctrl + F command for "compensation."

EBSCO BUSINESS SOURCE PREMIER

Obtaining a current company report or profile for IBM is relatively straightforward in this database. Also, searching on a known report title or section name works well and yields about the same results as the Basic and Advanced Search mechanisms below.

However, if a user is trying to trace the history of IBM and to obtain a complete set of reports and profiles covering a number of years, the database needs to be searched and browsed in multiple ways. All of these individual tools are good and bring up most of the content but need to be used together.

For a company report on IBM, the following works well in Basic Search:

> `("International Business Machines" OR IBM) AND company report` and then Limit to Full Text and Arrange by Relevance

I retrieve 36 hits of varying dates. Among the first 18 hits, 17 are for reports for IBM from various years (including from 2014–2018) that identify report titles from MarketLine SWOT Analysis and MarketLine Company Profile as well as Datamonitor for older reports.

Re-doing the search in Advanced Search requires a slightly different approach.

> `"International Business Machines" OR IBM` and then Limit your results—Full Text and then Document Type – Company Report—and Arrange by relevance.

This time I retrieve 29 hits; all are reports. The first 12 are all IBM reports and profiles from various dates, including some older material.

There are two other, less obvious, ways to seek out this content:
- At the top of the page, browse for Company Profiles under International Business Machines and find a current MarketLine report for the company. This report is more than 70 pages and includes a SWOT Analysis.

Also at the top of the page, browse for Publications for the following searches:
- `Company International Business Machines` and Match Any Words

These retrieve almost 2,100 hits. The first two entries show links to a SWOT Analysis from 2017 to the present and a Company Profile from 2014 to the present.
- Swap in `IBM` and get 15 hits and SWOT Analysis for the years 2008–2015

While the Publication browse misses some earlier content, it actually organizes these two types of reports and their historical versions a little better, in particular for more

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recent profiles than Basic or Advanced Search. Also, a nifty trick here is to click on the Add button for an individual publication name, such as a SWOT Analysis. Searching on it will bring up all of the individual reports in reverse-chronological order.

ENHANCING RESOURCE DESCRIPTIONS

Information professionals may already be implementing some of these suggestions to enhance resource descriptions, but if not, these will help bridge the search gap between us and our users.

- Delve deeper into the web resources or online databases by going beyond what is mentioned in various search screens, Help menus, and vendor database descriptions. Look at publication types and names and do sample browsing or searching to find the precious "nuggets" of each.
- Do more than just summarize an individual database's content but bring it to the forefront by identifying and naming content types, titles, date ranges, section headings, special information and data offered, etc. Create Tips sheets to highlight these distinctive features, but keep these guides as brief as possible; include graphics such as illustrations, tables, charts, graphs, etc., if appropriate.
- Compare and contrast similar types of content across multiple databases in tables, charts, graphs, and other image-based search aids.
- Link content guides together in as many places as possible to make it easier for our users to learn about these precious "nuggets."

MOVING BEYOND WEB SEARCH

Information professionals know that our users are missing a lot of useful and valuable information by just using web search engines. For example, there are many publications that offer just a small glimpse of their content (often only the most current issue or two) on the free web, with much of it behind a firewall or available on an online database. Depending on the nature of the search, particularly one that is more complex, they also may be taking more time to find the information needed when it could be found more easily in an online database.

However, our users' problem of missing important information goes even deeper and directly affects us and our future. The profession has now reached the point at which many libraries and information centers are seeing their reference usage go down across a number of years; in fact, the total number of reference questions dropped by almost 60% from 2005 through 2014 according to one study [5]. Consequently, quite a few libraries have either done away with the "traditional" reference desk or now have it staffed by students or others instead of professional librarians in an attempt to get ahead of this trend by providing enhanced services in other areas such as virtual

reference, community involvement and programming, copyright, data analysis, etc.

But why is this happening and is there anything the profession can do about it?

While declining reference use started with print sources moving online, it did not end there. Search engines such as Google now are backed by sophisticated customized algorithms and artificial intelligence with the effect that many users can find more than ever before with basic one- or two-word searching techniques. Consequently, they have come to believe they are already expert searchers and that everything they need is on the web. As a result, they may feel they do not need libraries the same way as they once did. From a review of the literature, I think there is a deeper reason that has always been present and which the search engine technology has now exacerbated. Users' help with "finding things" [1] is merely an end to a means of "doing things" [1], "making connections" [1], or solving problems. At this point, the free web bridges this gap more easily and effectively in many cases than library reference and its "pricey" online databases.

SUCCESS BREEDS SUCCESS

We need to prove the value of our online databases more fundamentally and to a higher level in our users' minds than we have been doing. If we help our users more with attaining information from these resources and they feel successful in applying it for their research needs, they will start to understand this value which will, in turn, increase their motivation to learn searching techniques. Expecting them to just "do the research" is setting them up for failure, and ultimately, our own. Their success will not only be our success but our endurance and longevity as well.

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