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Quick—who won the 1997 Super Bowl, and by how many points? (The Green Bay Packers beat the New England Patriots, 35 to 21.) When will North America see the next total solar eclipse? (Not until August 21, 2017; if you can't wait that long, Europe will have one on March 20, 2015.) Finding answers to factual questions is as easy as pulling out an iPhone and asking Siri. Most of the time, we get what we need, virtually instantly.

There are some situations, though, when the information you want cannot be Googled. If you need to analyze import and export statistics, a search engine will not be much help; a faster route would be to go directly to the US Census Bureau (census.gov) to download a relevant data set. And if you have to identify experts in the field of earthquake engineering, the best approach may be to use a premium search service such as ProQuest Dialog to see who has been published the most in the professional literature.

But how do searchers know when basic is "good enough"—and when finding the right answers demands a professional resource?

CHOOSING THE RIGHT TOOL

There are two keys to effective searches: knowing what kind of information you need, and understanding how to use your information source(s) to the best advantage. Each type of information resource—web search engines, specialized databases, and premium search services—can play a role in research.

Free sources on the web such as search engines, Wikipedia, or government databases are an easy way to get quick, simple answers. However, these are usually not the most effective tools for conducting research when you need in-depth information, expert opinions, or background on a specialized topic.

The following table reviews the pros and cons of both free and fee-based research tools (see next page).



TABLE 1: COMPARISON OF INFORMATION SOURCES

	Advantages	Disadvantages	Best uses
Google, Bing, other search engines	Free, fast results, easy to use	Irrelevant information, too much information, limited search tools	Quick answers to straightforward questions
Wikipedia, Internet Public Library, other reference resources	Free, broad range of topics, (semi-)curated information	No professional or trade publications, limited coverage of complex topics	Initial research, background material
US Census, Science.gov, other gov't data sources	Free, authoritative, in-depth statistical data	Must search each data set separately, limited to simple searches, often not current	Statistics, reliable sources
Google Scholar, HighWire, other scholarly search tools	Free searching, scholarly publications, some full-text articles available	Not all material is free, limited to simple searches, limited number of journals	A few articles on a topic, background material
ProQuest Dialog, other premium search services	Wide range of professional sources, reliable content, consistent format, power search and analysis tools	Fee-based, can take time to learn full capabilities	In-depth research, industry analysis, authoritative articles, patent research

The conclusion: free, public search engines certainly have their benefits. But to find the best, most reliable, most current information, researchers are best served by the broad archive and powerful search tools of a premium search service.

FINDING INFORMATION—OR FINDING ANSWERS?

How you search will depend on what you want to find. If you want some general information on nanocrystalline alloys, a Google search will turn up a few million results, ranging from a newsletter article and a book at Amazon.com to a manufacturer's product specification sheet and a web site that tracks "disruptive technology and science that can majorly impact the future course of civilization." Eventually, you will probably find enough relevant material to glean the information you need.

Say you need something more specific—nanocrystalline alloys being made at 100 degrees Celsius, for example. Reviewing hundreds of links from the results of a Google search could take hours, with no assurance that your research was comprehensive. A search in the Inspec database in ProQuest Dialog, on the other hand, would retrieve relevant materials from high-quality research literature within minutes, freeing your time to analyze the information and put it to use.

Rather than asking "where can I find some information on this topic?" instead ask, "What is the best source of information that would enable me to take the next action or make a decision?" In other words, is your time best spent looking for information, or doing something with that information? The cost of using a premium search service can be offset by the time you gain in getting the information and transforming it into value.

GETTING AUTHORITATIVE RESULTS FROM PREMIUM SEARCH

One of the key benefits of using a premium search service like ProQuest Dialog is being able to get better-quality information faster. In addition to its Basic Search, which features a Google-like search interface for times when you have a straightforward query, ProQuest Dialog has two advanced search options, Advanced and Command Line. Even within a single search session, you can switch among search options to most effectively tap into the level of power and precision you need for each query.

These features allow you to conduct in-depth research, expand your research into related fields, filter your results, and datamine the retrieved material for additional insights. Searchers can also use ProQuest Dialog's collaboration tools to work with others on a research project.

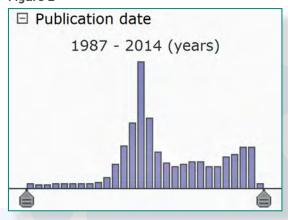
Following are examples of leveraging ProQuest Dialog's search and post-processing tools for insight.

Figure 1

Include	Exclud	e Subject	Count *
-	-	pasificas, general	2/2010
		technical	178440
•	0	software industry	170348
•		computer simulation	168595
	•	agriculture, biology and environmental sciences	164348
		management	163908
		physical, chemical and earth sciences	163891
		company news	157226

Do you want to focus your search when you find too much information on a topic? Click the Subject filter on the side panel of the search results, and you can review the most frequently occurring subjects on that topic. Include or exclude subject term(s) in your search to narrow your results. See Figure 1 for an example of focusing a search with subject terms.

Figure 2



Do you need to identify when the professional community became aware of a problem or track trends? The search results include a bar chart and slider bar, indicating the number of items published each year on the topic. See Figure 2 for an example of a spike of concern between 1999 and 2001.

Will you be managing the literature citations in a management tool? You can smoothly export your search results from ProQuest Dialog directly into your RefWorks account or project site. Hyperlinks are embedded in each downloaded item to the ProQuest Dialog record, for easy access to a more complete version of the article.

INFORMATION PROFESSIONALS AND SEARCH SPECIALISTS...CAN OFTEN TEASE OUT THE ANSWER BY TAKING A DIFFERENT APPROACH OR USING A MORE TARGETED SET OF DATABASES.

KNOWING WHEN TO BRING IN A PRO

As flexible as the search options may be with a premium search service, there are times when you need more help. Sometimes, you simply cannot find what you need, you are overwhelmed with too many irrelevant results, or you have a hunch that there must be more information out there. Sometimes, there may be a simple way to tweak your search—limiting a search to a specific database, using subject terms in your search, combining your search sets in a different way, and so on. And in those cases, your best bet is to contact an information professional who has expertise in using the premium search services.

If you can't find what you want within 15 or 30 minutes, pause and reevaluate your search strategy. The following five steps will help you get the most value for your research time.

1. Consider using a different search interface, if available. In ProQuest Dialog, for example, you can change from Basic Search to Advanced or Command Line from one search to the next (See Figure 3). If Basic Search does not give you the results you want, try building an Advanced search.

Figure 3



- 2. Look through the supporting documentation about each database you use. Make sure it covers the subject area you are researching and that it includes the kind of material you were looking for—newsletters, medical journals, dissertations, conference proceedings, etc. See if there are fields you can use to focus your research, such as classification or country of publication. (You can view in-depth documentation for the ProQuest Dialog databases at dialog.com/prosheets.)
- 3. Look within the search page for links to online help. (These often are in the upper right corner of the screen, or elsewhere along the perimeter.) Your library or information center may have inserted a live chat widget or other help tools specific to your organization. If time allows, send an email to customer support, spelling out what approaches you have already taken and inviting suggestions for fine-tuning your search.

- **4.** See if the search service offers tutorials or other learning tools to help you familiarize yourself with its more advanced features. ProQuest Dialog, for example, offers a global customer support portal at support.dialog.com/training/proquestdialog/, with links to quick reference guides and overviews, a "How Do I...?" series for common tasks, self-guided training modules, live webinars, and other support for searchers.
- **5.** Contact your information professional, or the person responsible for your access to the premium search service. Information professionals have an in-depth understanding of how to get the most value from online research. They know which databases are most appropriate for each project, and they are familiar with the synonyms, acronyms, and alternate spellings for topics of interest to your organization. An info pro can take your existing research and find new ways to approach the question and find the answer.

Info pros are also great partners at the beginning of your research projects. They can suggest relevant and reliable web resources, offer tips for searching Google more effectively, and even point you to useful internal resources. They can work with your group to set up RSS feeds to monitor new developments relevant to your project, and can better anticipate your information needs.

INFORMATION OVERLOAD, WORKING FOR YOU

More online information exists than ever before. That's good news for researchers—it increases the chance of finding an answer! But it can also be overwhelming, and makes the research process more complicated and time-consuming.

By learning how to do the smartest search using the most effective tools, you can find the information you need much more quickly. As a result, you can spend your time using that information to solve a problem, make a decision, or move forward on a project—instead of wading through pages of search results.