Legal Research Online: Tools, Skills, and Resources

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TABLE OF CONTENTS:

1. Introduction

1.1. Stating the Problem: Why Legal Professionals Need the Internet

The Internet is becoming an integral part of everyday life and it is playing an increasingly important role within the global legal community, as a means of communication, as a powerful research tool and to market and promote firms. Lawyers and researchers in the past have maintained expensive paper libraries or depended on local access to one. Then, since 1980 or so, general use of computers allowed legal publishers to create on-line services to assist in legal research; also, however, a rather expensive necessity.

For a legal practitioner, the pace and volume of change in law may be daunting, even intimidating. Developments come so thick and fast that the subject can take on a frustratingly elusive, will-o'-the-wisp quality. Updating law texts online is both faster and easier than publishing it in paper form.

Tincher **(1998)** stated in his article on the role of Internet in legal research that although the Internet could not as yet replace such conventional tools as Lexis-Nexis and Westlaw (both of which are now online, web-based legal databases employing search engines), legal professionals can use the Internet in three ways: 1)to obtain factual information, 2) to learn from peers and 3) to obtain recent public documents. This report will concentrate on the last item.

Equally important is the use of the Internet as a communication tool. Email is a standard feature everywhere now, and transfer of documents, and for lawyers, electronic filing, is just beginning to be appreciated, subject to security concerns.

Lawson **(2000)** warns against ignoring the Internet as a valuable legal research tool, stating that failure to use the Internet renders the research incomplete as some useful reference material is readily available on the Internet, and nowhere else. Louise-Jacques (2000) gives reasons for using Internet as a research tool:

> The Internet is a cheap alternative to the use of commercial for finding primary legal materials which sometimes are available more quickly on the Internet than on the databases. Sometimes, the Internet is the only place where you will find some primary materials, for instance, legislation and case law from foreign countries, treaties involving other countries, e-mail addresses and other directory information for legal professionals worldwide, and materials in areas of law that have been traditionally underrepresented in print and electronic legal publications (women and the law, human rights, the rights of lesbians, gay men, bisexuals, and transgendered people, law and literature, Roman law, law and popular culture, etc.), and non-legal materials that are important to law work or interdisciplinary research.
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> The Internet can augment an average law library's resources by providing alternate copies of print materials, and information that cannot be found in the law library in print or electronic format. The Internet is strongest for non-legal materials, and for legal materials that are usually not found or will not be available as quickly on commercial databses and print publications in your law library.

1.2. Terminology

In this report, a **browser** is defined as a software program designed to locate and display Web pages. Browsers are designed to read HyperText Markup Language (HTML), which is simply the authoring language that is used to write Web pages.

A **search engine** is defined as "a program that searches documents for specified keywords and returns a list of the documents where the keywords were found. Although *search engine* is really a general class of programs, the term is often used to specifically describe systems like Alta Vista and Excite that enable users to search for documents on the World Wide Web and USENET newsgroups.

Typically, a search engine works by sending out a *spider* to fetch as many documents as possible. Another program, called an *indexer,* then reads these documents and creates an index based on the words contained in each document. Each search engine uses a proprietary algorithm to create its indices such that, ideally, only   meaningful   results   are   returned   for   each   *query*." [http://webopedia.internet.com/TERM/s/search_engine.html]

Meta search engines simultaneously search multiple search engines. They are also referred to as parallel search engines, multithreaded search engines, or mega search engines. There are two types of meta search engines:
1.   One type searches a number of engines and does not collate the results
2.   The other type is more common and returns a single list of results, often with the duplicate hits removed.

A **subject directory** is a service that offers a collection of links to Internet resources submitted by site creators or evaluators and organized into subject categories. Directory services use selection criteria for choosing links to include, though the selectivity varies among services. Most directories offer a search engine mechanism to query the service.

2.   Part One of the Equation: Tools

There are 2 main ways of finding legal material on the Web:

1.   Using an indexed (categorised by subject) directory site. There are many general directory sites like **Yahoo!** and **GOeureka** (an Australian directory site run by Telstra and Alta Vista), and quite a few specifically legal directories.
2.   Using a general "search engine" e.g. **AltaVista** or **Google**, or
3.   a specifically legal search engine like AustLII's **World Law search** facility (powered by its Sino search engine).

2.1.   Subject Directories

Internet directories (also referred to as Internet indexes) are great places to start when you are looking for collections of Internet sites on a particular subject. They offer the attributes of a good print index combined with hypertext links to the sources indexed. Most Internet directories also allow you to search the index and site names by keyword. Below are a few examples, but the list is not comprehensive. Most of these directories are USA based, Australia has ScalePlus and AUSTLII. Although fewer in numbers, they are much better organised in terms of indexing and citations.

- **Findlaw [http://www.findlaw.com/]** is one of the best legal Internet directories (see description below). Other excellent Internet directories are:
- Washburn University School of Law's **WashLaw Web [http://www.washlaw.edu/].** The foreign and international law web is a service of the Washburn University School of Law Library. Their goal is to provide links to primary foreign and international legal resources, research aids, and sites useful in conducting research in these areas of the law. Sites linked from this page are arranged alphabetically by any or all of the following as it seemed necessary or useful: subject; author (i.e., the person, government body, organization or institution responsible for the site or for the information contained in the site); country; and occasionally title.
- **Hieros Gamos [http://www.hg.org/]**. All of these sites offer very good general collections of links covering a wide variety of legal subjects. **Hieros Gamos** was one of the first legal and government sites on the Internet. From the beginning, its object was to be the comprehensive starting point for all law and law related information. It was the first to offer multiple free listings, e-mail notices, audio seminars, etc. Its comprehensive search engine searches 11,000 law and government sites for the information you need.
- A less well-organized site that contains a lot of primary law material is **Cornell Legal Information Institute [http://www.law.cornell.edu/]**. The CLII collection of world legal materials gathers, country by country, continent by continent, the Internet-accessible sources of the constitutions, statutes, judicial opinions, and related legal material from around the globe (excluding the U.S. material held in the LII's other collections). It also holds resources and document collections of International law. Search engines

and ranking systems identify the LII as the most linked to web resource in the field of law (**Myers, 2000**).

- **Internet Legal Resource Guide**™ [**http://www.ilrg.com/**] is a categorized index of more than 4000 select web sites in 238 nations, islands, and territories, as well as more than 850 locally stored web pages and downloadable files, this site was established to serve as a comprehensive resource of the information available on the Internet concerning law and the legal profession, with an emphasis on the United States of America. Designed for everyone, lay persons and legal scholars alike, it is quality controlled to include only the most substantive legal resources online. The selection criteria are predicated on two principles: the extent to which the resource is unique, as well as the relative value of the information it provides.

- **Catalaw [http://www.catalaw.com/]**is a searchable index of legal information on the Internet with a unique quality: It is an index of other indexes, or a "meta index." In other words, it is a catalog of catalogs of law on the Internet -- hence its name. CataLaw speeds research by arranging all legal and government indexes on the Internet into a single, simple, intuitive meta index. CataLaw is designed to ease the difficulty of finding law on the Internet. Highly focused research is often hindered by information anarchy and overload. Existing general information indexes and search engines on the Internet are of only limited assistance to the specialized information needs of academia and professions. The response in the area of law was the creation of exclusively legal indexes. However, there are currently about 100 such indexes based in many different jurisdictions. Each has unique focuses, biases, strengths, weaknesses, and classification schemes. Information overload has been replaced by index overload. The goal of CataLaw is to solve this new problem by being a single gateway to all legal and government indexes on the Internet. Each page within CataLaw lists hyperlinks to all sub-pages within all other indexes pertinent to a single legal subject ("Usual Suspects"). Also included are links to additional sites that, while not comprehensive, provide links to subject-specific information ("Focused Sites"). Using CataLaw, it is possible to survey the Internet for all available information on any topic of law, law and/or government of a particular region, or law-related subjects -- without wasting time stumbling through irrelevant or tangential web sites.

- **VersusLaw [http://www.versuslaw.com/**] In 1996, Timeline Publishing changed its name to VersusLaw, and launched a new web site watched over by a Bulldog mascot, Rex Judicata, and adopted a humorous, edgy attitude to reflect the new users of the Web. It offers a powerful search engine which permits Boolean searching; permits targeted searches -- selecting one or more libraries from among the many for searching and ranks search results by relevance. VersusLaw also supports natural language search and concept searching. It is a subscription legal research service on the Web covering state and federal appellate court opinions provided by VersusLaw, Inc. V. provides databases for all 50 states and the District of Columbia, the federal courts of appeals for all circuits including the D.C. Circuit and the Federal Circuit, and the United States Supreme Court. The databases cover only court decisions; there is no coverage of statutes, administrative codes, court rules, jury instructions, attorney general opinions, or other material. Among Web legal resources, V. is immediately interesting because: it provides one-stop shopping for multiple jurisdictions, it supports multi-file searching, the archives are much deeper than on any free Web site, the search engine is reasonably capable and the search syntax is fairly obvious for professional searchers, and pricing is extremely attractive, especially for smaller firms (Halverson, 1999:2).

- **Austlii [http://www.austlii.edu.au**] The Australasian Legal Information Institute (AustLII) provides free internet access to Australian legal materials. AustLII's broad public policy agenda is to **improve access to justice** through better access to information. To that end, we have become one of the largest sources of legal materials on the net, with over seven gigabytes of raw text materials and over 1.5 million searchable documents. AustLII publishes **public legal information** -- that is, primary legal materials (legislation, treaties and decisions of courts and tribunals); and secondary legal materials created by public bodies for purposes of public access (law reform and royal commission reports for example). You will find these materials listed under AustLII Databases. In addition to helping public bodies publish their legal information on the web, AustLII also provides a large index of other legal web sites from around the world, which is fully searchable and well organised. The **World Law** index includes a special section containing "Other Australian Law". The size of AustLII's databases can be daunting, especially for those without specialist legal training. For that reason, AustLII is helping to collect Community Legal Information -- a set of "plain English" guides to the law.

- **ScalePlus [http://scaleplus.law.gov.au/**] is the legal information retrieval system owned by the Australian Attorney General's Department. There are two distinct ways of getting information from SCALEplus: *Browsing* works best when you know where you want to go (eg to a section of an Act or a

particular case) and searching. *Searching* can be done from any of the three search windows: **Quick Search** or **Advanced Search.** To do Fast Search enter your search term(s) in the box on the SCALEplus Home Page, and press return. All databases will then be searched, and a hit list of the first 50 documents containing the search terms will be displayed. View a retrieved document by clicking on Show FIRST hit, or Show from Start. Click Back to return to the list. For a Quick Search, Click Quick Search (near top of screen) for an easy-to-use method of searching SCALEplus. Term(s) can be entered in the first and second boxes and an appropriate connector selected (eg. and or near). Searches can be limited to Zones via the pull-down menu at the right of the box .Fields (such as Date) can be built in to the search using the pull-down menu in part 2 of the Quick Search screen. When all required search terms have been entered, click Search. Click Advanced Search if you are familiar with the TOPIC search language (see next page for information on this). Any valid TOPIC syntax can be entered. Simply enter the search term(s) and click Search. Alternatively, click on the Browse Databases option in the list near the top of the screen. Select a database from the displayed list by checking the box next to the database name.

"Webliographies" are similar to specialized search directories, but "webliographies" are often sponsored by an "interested" individual rather than an organization. Webliographies may or may not searchable and are usually very narrowly focused. Links often are annotated.

Webliographies are very helpful if the researcher can find one that is narrowly focused on the researcher's specific research issue. However, they are similar to search directories in the ability to send researchers off into "interesting" areas completely unrelated to the issue being researched.

Examples of webliographies that may be appropriate for legal-related research include:
- Katsuey Kat's Legal Links (http://www.netsmartinc.com/kat.htm#public) - Partially annotated collection of legal resource links.
- LawGuru Legal Forms Links (http://lawguru.com/lawlinks/Legal_Forms/) - Links to legal forms on the Web.
- Lawlinks [**http://library.ukc.ac.uk/library/lawlinks/default.htm**]

### 2.2.	*General Search Engines*

Tincher **(1998)** bemoaned the fact that most search engines have changed from search tools to media magnates, selling result placements to the highest bidder (which theoretically should produce "Microsoft" as the common denominator in all search results). However, since search engines are free, legal research done on them saves thousands of dollars in subscription money.

Of the general search engines used for doing legal research, I strongly recommend Google and AltaVista, followed by Northern Light. Google has an excellent ranking system combined with sophisrticated text-matching techniques. It also indexes PDF files – something most other search engines do not do. An increasing number of law journals are publishing their back editions on the Web in PDF format. There are several good reasons for this, notably the fact that it allows the journal to retain exactly the same 'look and feel' as the original printed edition, and the fact that it inhibits plagiarism (because Adobe allows cutting and pasting of text to be prevented). However, a downside of this trend is that it makes it more difficult to find journal articles using a general web search engine. Fortunately, there are better options to enable you to find law journal articles.

However, Google does not support the Boolean "or" operator. Unlike most search engines its default condition is "and". Thus, if you perform a search for e.g. <solicitor or barrister>, Google will return only documents containing **both** words. The only way to make sure (using Google) that you have found **all** documents containing **either** 'solicitor' or 'barrister' is perform a separate search for each of the 2 words: very clumsy. Some search engines automatically index all pages in a site, while others only index the home page. Both AltaVista and Google index deeply into sites, and therefore are more likely to find material you are looking for than engines which only index home pages.

Although large search engines like AltaVista and Google each index more than 1 billion web pages, that is still only a fraction of the total number of web pages that exist. No single search engine can ever hope to index anywhere near all web pages, if only because their proprietors are to a large extent dependent on

someone telling them that a page or site exists so that they can direct the search engine there and index the site. Since many website creators don't bother to notify the search engines and directories about their site (and perhaps don't want the general public to know), there are huge numbers of web sites and pages that never appear in either directories or search engine results.

Because any single search engine only indexes **some** of the available web pages, to make sure one has found as many relevant pages as reasonably possible one should perform the same search using 2 or more search engines.

In general, ordinary web search engines like AltaVista and Google are not able to index the content of online databases (such as AustLII case law or legislation). The same goes for bibliographic databases like AGIS and APAIS. Thus one will not retrieve 'hits' for AustLII material using a general search engine. One must go to AustLII itself and use its own Sino search facility. Similarly, general search engines do not index pages or sites that are password-protected. Thus, although major commercial websites like Butterworths Online, LBC, Lexis and WestLaw are among the world's largest and most comprehensive online legal resources (and will certainly contain a wealth of high quality material on almost any legal subject), you won't get any 'hits' for them listed by AltaVista or Google. You have to be a paying subscriber and have a password to get access to these sites, and then use their own 'inhouse' search engines to find material. Most law school libraries subscribe to at least some of either Butterworths Online or LBC facilities.

Search engines only re-index sites occasionally - usually months apart. Accordingly, there could be large amounts of relevant material available on the Web, which does not yet show up in a search using any web search engine. There is no easy way to overcome this drawback. That is why you need to search using the large legal directory sites as well. At least they will direct you to sites which may contain relevant material, so you can browse them yourself.

Steele and Scharbach **(1996)** discuss the fact that although Boolean searching on general search engines is available, but the immense size of the Internet makes searching difficult. "Real time" searching is not practical. A "*real time*" search would require that the search engine site contact each of the hundreds of thousands of "source material" computers during each search. For that reason, all search engines work from compiled indexes. Even the largest search engines do not include all of the millions of files accessible from the Internet. The largest known index claims to have indexed 21 million "pages" of information, but industry analysts estimate that this is roughly 16% of the available data worldwide.

In their now slightly outdated evaluation of the major general search engines as legal research tools, Steele and Scharbach (**1996:2**), highly recommended AltaVista, while finding InfoSeek, Excite and Lycos to be lacking in power. Barmakian (**2000**) recommends Google, Fast and LookSmart.

Internet search tools are not as sophisticated as the online research tools offered by Lexis and Westlaw. Boolean search logic is available, but not as tightly structured as that which lawyers are used to, and basic research tools, such as good citation tools, are missing entirely.

A number of issues related to search engines affects legal researchers. For example, the different ranking systems that various search engine use provide for different result sets for the same query being performed on different search engines. This is something unheard of in the tightly controlled legal databases. The Web is incomprehensibly large and unindexed, a larger and larger part of it becoming "invisible", i.e. unindexed by any search engine (see Sullivan, **2000**; Botluk, **2000**)The material on this 'invisible' part of the web is extremely rich in academic material, databases from universities, libraries, associations, businesses, and government agencies around the world – basically all the stuff that is worth researching. Not only is just a small percentage of the Web indexed, about 10% of it is "dead" but no one seems to have updated the links on the search engines (see Ward, **2000**). Apart from being unable to search databases, most search engines cannot search contents of PDF files (most legal journals are in PDF format), text in frames, and text in graphics. If a site is password protected, most search engines will not index its pages (thus freely available information on the New York Times is not indexed, as access requires logon and password). Although there are attempts at creating software that can actually fathom the invisible side of the Web, it is still in its infancy (see, for example http://brightplanet.com)

An IBM study published online (Broder, et al. **2000**) reveals how loosely woven the Web actually is. Known as the "bow-tie" syndrome, the Web consists of a core 30% of all pages with two diametrically opposed sides to it: 24% linking one way INTO the core, and the second 24% being linked TO from the core, again one way. The remaining 22% is not linked to any of the three parts. However, little of this is reported by the search engines themselves, who rarely prove to be reliable, and are more motivated by profit-making than service provision.

2.3.   Specialised Search Engines

Legal-oriented search engines focus on a wide variety of information. Some find primary sources like federal and state codes, and some provide stock answers to legal questions.

FindLaw (**http://findlaw.com/**) was launched in January 1996, with a mission to "make legal information easy to find." To do this, FindLaw focuses on: primary sources, such as codes, case law, and regulations; secondary sources like law journals and commentary; and tertiary sources like mailing and USENET discussion lists. One can also find directory information on lawyers, agencies, and organizations, and up-to-date legal news.

There are three ways to search FindLaw. To browse, simply choose an appropriate topic from the directory on the main page, or choose "For Lawyers," "For Students," "For the Public," or "For Business" to narrow your browse search to a specific target group.

To search the FindLaw directory, enter a search using the search box at the top of the page. Entering more than one word defaults to a phrase search. Other options, such as AND, OR, NOT, NEAR, and wildcard searching, are also available. Records found by browsing or searching FindLaw's directory display the title, URL, a short summary, and a clickable See Also subject listing.

The third way to search FindLaw is by using **LawCrawler** (**http://lawcrawler.findlaw.com/**). This robot combines intelligent agents, the AltaVista search engine, and other legal code and case law databases to create an extremely powerful legal Web search.

To search LawCrawler, enter a word or phrase in the search box. LawCrawler allows AND, OR, NOT, and NEAR Boolean operators. One can also limit to specific databases using LawCrawler. "World Wide Sites with Legal Information" is the default database, which searches using AltaVista and FindLaw's intelligent operators. Other databases include: Legal News, Legal Dictionary, Law Reviews, Mailing List Archives, U.S. Constitution, U.S. Code, Supreme Court Opinions, and All Federal Circuits. Results found using LawCrawler include a title, a brief summary, the site's URL, document size (in bytes), and a revision date.

LawGuru (**http://www.lawguru.com/**) is maintained by the law offices of Eslamboly and Barlavi, located in Los Angeles, California. LawGuru features many unique ways to search for legal information. You can use the Legal Search Engines page, which allows searching of over 435 search engines, including others listed in this article. One can also search using the new Multiple Resource Research Tool. This tool focuses on state and national codes and state and federal court opinions, and allows simultaneous searching in more than one database. LawGuru's FAQ Collection features several hundred pre-written legal questions and answers in dozens of categories. You can also search the LawGuru BBS, which currently has over 13,000 questions and answers. Attorneys who have joined LawGuru's attorney network generate the answers.

The Internet Legal Research Guide (ILRG, at **http://www.ilrg.com/**), like the other legal search engines, strives to be a comprehensive resource of Internet-based legal information, and was created in 1995. There are four ways to search ILRG. The first is to search using ILRG's main categorized index of over 4,000 national and international law-related Web sites. Enter a word or phrase into the search box-- which allows you to search the whole site--or narrow to academia, professional, or government sites.

The second way to search ILRG is to use the enhanced search feature. This feature adds an assisted AND/OR feature, and allows URL searching and keyword exclusion. The third way to search ILRG is to browse the directory. The directory, called the Annotated Index of Features, is available on ILRG's main page. Records found using the first three search methods include a link to the site and, in some instances, a brief summary.

The fourth way to search ILRG is to use **LawRunner**: (**http://www.lawrunner.com/**). This database is similar to FindLaw's LawCrawler, in that it uses a series of advanced query templates to connect and search the AltaVista search engine. LawRunner is set up to find international and U.S. legal information using AltaVista's advanced-search Boolean features.

2.4.   *Meta-Search Engines*

Unlike the individual search engines and directories, meta-search engines do not have their own databases; they do not collect web pages; they do not accept URL additions; and they do not classify or review web sites. Instead, they allow the user to type in a search, then submit that search to several Web engines at once. This may appear to be a perfect solution, but it is not as every search tool interprets queries differently. None of the meta-search sites linked to multiple search tools circumvents all of these differences. The user is almost invariably much better off searching each tool separately. The exception would be Copernic, which is a freely downloadable software using a very powerful Intelligent Agent, and providing excellent results to user queries. They simply pass one's search terms along, and if the query contains more than one or two words or very complex logic, most of that will be lost. It will only make sense to the few search engines that support such logic.

Although meta-search engines were welcomed enthusiastically by the IT community, even favourable reviews pointed out that they were far from being able to solve users problems (Dreilinger & Howe, **1997**). Meta-Search engines are useful if one is looking for a unique term or phrase (enclose phrases in quotes ""); or if one simply wants to test run a couple of keywords to see if they get what one wants (Liu, **1998**). Most meta-search engines only spend a short time in each database and often retrieve only 10% of any of the results in any of the databases queried. Their development lags behind the technical improvements of individual engines, and a number of search engines do not even allow a meta-searcher anywhere near its databases (an example is NorthernLight). Regardless to warnings by professional searchers, ezines such as *Online* actually promote meta-search engines as an antidote to "*the time-consuming practice of sequential search engine searches*" (Garman, **2000**).

2.5.   *Commercial Databases*

The commercial databases such as Westlaw, Lexis-Nexis and Quicklaw are the search engines "rich relatives". Although they can now be accessed via web interface, these are pay-for-service and subscription businesses, used mostly by larger legal firms.

Westlaw [http://web2.westlaw.com/signon/default.wl] is a premier online research tool for the legal community. Introduced in 1975, Westlaw enables legal professionals to retrieve cases, statutes, and other documents from West's vast library of legal and business materials in a matter of seconds. Today, the best just keeps getting better as Westlaw content and search options continue to multiply, as do features that ensure manageable and relevant results, and Westlaw access grows from Web to wireless and beyond. At the root of the success of Westlaw is its content-cases and statutes, administrative materials, law reviews and treatises, attorney profiles, news and business information, and forms. With nearly 15,000 databases, more than 1 billion public records, more than 6,800 news and business publications from Dow Jones Interactive, and more than 700 law reviews, Westlaw is one of the most trustworthy and convenient online resources for legal professionals in the world. Moreover, cases, statutes, and other legal documents published on Westlaw are editorially enhanced by West Group editors for more productive searching and research leads. These enhancements include such West Group exclusives as West topic and key numbers, headnotes, and notes of decisions (EAR, **1999**; Worley, **2000**).

Lexis-Nexis [**http://www.lexis-nexis.com/lncc/**] The LexisNexis Group provides information to legal, corporate, government and academic markets, and publishes legal, tax and regulatory information, via online, hardcopy print and CD-ROM formats. It is the global legal and information division of Reed Elsevier PLC. LexisNexis Group unites strong brands, pioneering technologies and premium information for customers in the legal, corporate, government and academic markets. More than two-thirds of its revenue is generated in the North American marketplace. At the same time the Group is the market leader in the

United Kingdom and the British Commonwealth and major publisher in the legal, tax and regulatory markets in Continental Europe and Latin America. The Group's products are available via the World Wide Web, dial-up online, CD-ROM and hardcopy print. The thousands of titles available via LexisNexis Group products offer access to some of the most recognized and authoritative sources in the world today. The Lexis® service, the first commercial, full-text legal information service, began in 1973 to help legal practitioners research the law more efficiently. The companion Nexis® news and business information service launched in 1979 to richen research with recent and archival news and financial information. Since that time, the service has grown to become the largest news and business online information service, including comprehensive company, country, financial, demographic, market research and industry reports. Providing access to thousands of worldwide newspapers, magazines, trade journals, industry newsletters, tax and accounting information, financial data, public records, legislative records, data on companies and their executives makes the LexisNexis™ service an indispensable tool for gathering information and providing accurate answers (Skalbeck, 2001) .

QuickLaw [http://www.qlsys.ca/en/home.html] has provided lawyers and legal researchers across Canada and around the world for 27 years with an efficient, comprehensive, reliable, and cost effective online research service. Quicklaw offers access to over 2,300 databases including: caselaw from courts, boards, and tribunals in Canada, the United States, the United Kingdom, and the Commonwealth; legislation, secondary legal materials and *NetLetters*™ with legal commentary and analysis. At launch, the service offered U.S. Supreme Court, federal circuit court, and state court decisions, the United States Code, the Code of Federal Regulations, selected state statutes, selected state regulations, and international materials. In February the service added databases of federal and state court rules. By March 30, 2000, it announced that "The most current United States Code from any source is provided by Quicklaw America Inc." At launch, Quicklaw America was accessible by its proprietary QUICKLINK PRO software. The software is available for free downloading from Quicklaw America's website. On August 30, 2000, the company announced its internet browser-based search interface. Since a body of literature describing or reviewing Quicklaw as accessed via QUICKLINK PRO (before the introduction of Quicklaw America) already exists, this review will be limited to the browser interface (Halvorson, **2000**).

LOIS (Law Office Information Systems) [http://www.loislaw.com/] More than 10 million documents of official law are now available on Loislaw. Loislaw publishes case law, statutory law, constitutions, administrative law, court rules, and other authority for all 50 states(*) and D.C. plus the 18 most important Federal law libraries. This is a new database, which started up in 1999, trying to compete with Westlaw and Lexis. Although cheaper than the traditional big two, it also has much less depth. It gives desk-top access to some 1,800 databases, including court opinions, statutes, and regulations for all 50 states and Washington, D.C.; official decisions for the U.S. Supreme Court and all 13 Federal Circuit Courts of Appeal; Supreme Court Rules, the U.S. Code, Code of Federal Regulations, and the Federal Register (Halverson, **1999:1**).

3. Part Two of the Equation: Skills

3.1. *Fuzzy Logic*

Lawyers are by nature pedants and perfectionists (any one less than a perfectionist doesn't make it far in the profession). It is easy to imagine their horror when they discover that the results produced by their search query are not only less certain than what "level of evidence" they are used to requires, but also that different search engines produce different (often irrelevant) results (Kennedy, **1998**)

According to Cornaby **(1996, 1997)** running a search on the Internet is not nearly as clean and neat as searching a database because the Internet is not a single database, the "search engines" are actually search servers, searching an index created by that server, not the sites themselves and any updates or changes to that site will not be reflected or picked up by searching the search server until the "spider" visits the site again to update the information. Also different search engines perform their searches differently: the types of data searched for and the kinds of searches they do can be very different. Cornaby (1996, 1997) then suggests that a search engine may not be a best first choice in doing legal research on the Internet and should be used instead to check if one has not been able to find what you need in any other way.

Internet resources are not centrally located, uniformly structured or comprehensively indexed. Instead, information is scattered piecemeal across hundreds of thousands of computers independently maintained by

government agencies, colleges and universities, companies and non-profit organizations. As a result, Internet legal resources are *incomplete, unindexed and difficult to search.* Because the Internet is not structured like commercial services, researching the Internet requires *different strategies* than traditional online legal research. The Internet can be bane or boon, depending on the nature of the search and the researcher's Internet skills (Steele & Scharbach, **1996**).

3.2. *The Secrets of a Successful Search*

Tyburski **(2000)** states that conducting successful legal research depends on several factors:
1. availability of information relevant to your topic in a format and environment that makes it possible to find.
2. the source of the information.
3. depth of coverage (e.g., Generally, the Web is a good source of current and historically significant data. But a huge gap exists between the two. The success of your research may depend on information published in another format.)
4. the researcher's understanding of the topic or the legal system. Legal research is a special kind of research. Generally, it requires an understanding of the legal system within a particular jurisdiction and familiarity with the major resources.

Before attempting research online, legal practitioners are encouraged to learn to use their browsers (Australia mostly uses Microsoft Internet Explorer in various versions, the difference between versions being a common topic of complaints as one receives files with no graphics, or folders full of gifs and jpegs that one doesn't know what to do with).

Such tools as Favorites (Bookmarks), ability to create files and organise links into them, manipulation of web-page interface, copying, cutting and pasting, turning off graphics to save downloading time, ability to save, etc. are as important as correct searching skills. The Find feature, being a text-searching tool built into the browser, allows speedy location of particular words or phrases in the document.

Lawson **(1999)** states the pitfalls of Internet research, mentioning among other things that it is hard to find what you want among the masses of data; the available information varies widely in quality but is mostly is poor; the depth of information is frequently shallow and there is seldom anything approaching the volume of historical cases that you have in a law library, and coverage of state law cases in general is very spotty. There's little uniformity in organization and presentation and usually limited technical support and there are so many interesting side trails on the Internet that it can be difficult for all but the most disciplined researcher to avoid wasting time.

Hodges and Karisch **(1999)** provide basic steps to be followed when using the Internet for a legal research project:

1. Identify the key facts and search terms and likely legal analysis. Test those terms in some of the more popular search engines to see if they will produce any reliable results.
2. Choose the "finding" tools you want to use, those being either general (search engines) or key legal research starting points. Chose the right search engine; none of the search engines have indexed the entire Internet. As a result, researchers need to run multiple searches using different engines. And a "negative search" (determining that the information is not available) is not possible. Depending on your needs, you may want to use a "*metasearch*" service, a "general search" engine or a "specialized search" engine.
3. Plan your search strategy so you can minimize your on-line time.
4. Find your information. Use all the available Internet resources, including starting points, legal-specific search tools and e-mail discussion groups. Start with a directory: Law schools, legal organizations, legal service providers and governmental organizations maintain excellent directories of Internet legal resources. A few larger law firms have developed custom directories Instead, most lawyers and law firms should leverage the expertise of professional Internet researchers, maintaining links to a few of the major legal directories, letting law schools and trade organizations bear the cost of keeping current.
5. Evaluate the relative merits and reliability of the results you obtained.

6. If need be, follow up with on-line verification of the proper citations and the current status of all cases and rulings you found using either the Lexis-Nexis or the Westlaw databases, both of which are now accessible via the Web for less than it costs to do that with their own proprietary software.

Steele and Scharbach (**1996**) add the following points to the above list:

7. Don't look for what isn't there: there is no point in searching the Internet if the material is not online. Keep up to date with the major legal indexes online with an eye to knowing what is, and what is not, accessible online.
8. Don't waste time if the resource is available on commercial services*:* use the most efficient research tool available. For most legal research, online commercial services like Lexis and Westlaw are better research tools than the Internet. Use the Internet for research which goes beyond traditional legal research - when the materials are not readily available from the commercial online services - and as an additional source for information from outside the legal world.
9. Use E-mail to keep current : The simplest way to stay current with changes in the law is to subscribe to an Internet E-mail list, using an Internet gateway or an E-mail service with Internet Subscribers get daily updates of current material in most cases.

4. What's Missing From the Equation: Tools, Resources or Skills?

4.1. The "cyber-illiterate" profession

It is unfortunate that the majority of legal professionals are technophobes to the nth degree. When in 1998 the Supreme Court of Indiana (Shepard **et al. 1998**) decided to install its own web server, they promoted it as an electronic clearing house which will "*allow judges to ask each other questions about problems they confront, and supply ideas and dialogue, post notices about meetings. A stronger judiciary has to be able to communicate with itself in the way that people do in the modern world,* " something the rest of the business world had known for quite some time.

Most of the current managerial guard in law firms are those who grew up in the television age, and feel highly uncomfortable with the new information revolution and its tools. Although the younger generation of legal practitioners specialise in such fields as Internet Law, and sport laptops and WAP phones, they seldom make decisions at a managerial level. From my own experience I can say that when time came to move our service's paper library onto the Intranet and CD-ROM storgae, the Management Committee (all of them 40-50 years of age) refused the permission to dispose of the brittle, yellowing archives (mostly outdated Acts and case law already available online) on the grounds that "it is easier to search".

However, the opposite trend should be taken cautiously: some lawyers have begun to pressure law librarians to drop their paper collections and expensive commercial services and rely only on the Internet. This makes no more sense than the earlier reluctance to use the Internet at all. The Internet is not "better" than Westlaw and Lexis. It is just different. An Internet connection will open up new research avenues (particularly for factual research) and it may reduce the pay for service databases' expenses, but the Internet is not yet close to being a complete replacement for the commercial services in the field of legal research.

My personal experience is echoed by a Walter Perry Johnson Professor of Law and Law Librarian (see Berring, (2000)). In his article he defines and discusses the future of legal information, and talks about the "generation gap" that has occurred in the legal profession:

> The comfortable structure of cognitive authority that had been so central to legal information has fallen, and it can't get up. Old tools are slipping from their pedestals while new ones are fighting for attention. Where once there was a settled landscape, there is now a battlefield. The change is not an organic growth of legal information, nor is it being guided by learned hands (…) This change is being driven by the consumers of the information and by publishers as they battle in the information marketplace. Many senior lawyers who would normally function as the gatekeepers of change are unaware that the earth is shifting under their feet, but it is. Law students and young lawyers do not see current events as revolutionary; they see them as the way things are. To them it is odd that anyone ever used a printed volume of Shepard's or a digest volume. This creates a messy generation gap in legal information. Like all good generation gaps, there is pretty much total misunderstanding

on both sides. It takes no special skill to predict that the side of youth and technology will win, but those folks still face some trying years. Nor will the older side of the gap assist the younger with making the decisions on new cognitive authorities. Very few legal scholars have even thought about these issues, and if they do, they find it almost impossible to escape the constraints of their own experience. The way one learns to perform research becomes so second nature that it can be put into perspective only with the greatest difficulty. With the older generation doing nothing but causing trouble, the new one will be mostly on their own.

By the mid-1990s popular acceptance of the use of personal computers was widespread, especially among educated groups like law students and lawyers. It was no longer necessary to train students in how to use a keyboard or operate a mouse. Most students arrived at law school with an understanding of Boolean searching and the use of search engines. Their understanding of how to use these things may or may not have been more informed than their predecessors understanding of the internal dynamics of the Digest System, but use of personal computers was part of their operating arsenal of skills. This made for a huge change. The user base was now not only accustomed to using online systems, they often preferred them.

In the last few years the World Wide Web has become a destination for legal research, just like Lexis and Westlaw have always been. Internet access has expanded from the law library to the lawyer's desktop, and lawyers are increasingly surfing the Web for themselves. But they are finding it's a wild and wide Web out there, and many don't have the surf experience that their law librarians have (often painfully) gained. So training is an important and integral part of giving attorneys Web access from their computer. A few companies are putting their hands together to train lawyers how to use the Internet (see Johnson, **1998**). A number of recent publications in Australia have been addressing the problem of online legal research, as well as the general use of IT by lawyers (see Dayal, **2000;** Kerr, Hoyle & Gilchrist, **2000;** Nemes & Coss, **2001**). Each of these books has chapters on the use of search engines, browsers and other internet resources. Seminars and workshops are offered on such basics as getting connected to the Internet, and what is an ISP (see, for example, Hodges and Karisch, **1999**)

Legal professionals need to be able to confidently use and benefit from the wealth of resources available on the Internet. Specialised search engines, as well as general ones, are good tools for legal research. However, they are valueless if not actively supported by searching skills; something that has until very recently been limited to law librarians and researchers.

Legal professionals need to maintain their searching skills with the following goals in mind:

- To understand what the Web is, and isn't
- To evaluate information sources available on the Web
- To learn to use Microsoft Internet Explorer effectively
- To use search engines and directories effectively

4.2. *Quality of Material*

The public documents available on the Internet do not always possess the same degree of reliability as their traditional counterparts. Many of the courts and agencies that release these documents do not have the resources to match the quality control of services such as Lexis and Westlaw. In addition, collections of public documents on the Internet are often limited to the "Information Age" — 1993 or so to the present (one notable exception being Supreme Court opinions). By contrast, the collections of case law and statutes on Lexis and Westlaw stretch back for more than 100 years in some instances. Suffice it to say that only a masochist, willing to lay their license to practice law on the line, would rely exclusively on Internet research.

According to Johnson **(1999)** it is impossible to conduct in-depth case law research on the Internet unless one subscribes to the legal databases such as Lexis-Nexis or Westlaw. Johnson **(1999)** is discussing USA case-law, but the fact that case-law collections are far from comprehensive (although they are still impressive) is also a fact fo Australia, where the placement of cases in public domain is highly regulated by law. Steele and Scharbach **(1996)** agree that because there is no overall structure to the Internet or the resources it hosts, the Internet is not a dependable tool for comprehensive legal research. Legal resources on the Internet are, at best, piecemeal. Compounding the problem of limited resources, Internet resource sites are *not reliably maintained*. Sites appear and disappear with dazzling frequency, and information available one week might

not be available the next, or may have been moved to another location without warning. Although the larger sites are updated on a regular basis, many organizations update resource sites infrequently and sporadically, and sites may or may not have current information. Indexes exist but are not comprehensive or current because of the high rollover of Internet resource sites. The best indexes for legal resources are maintained by law schools at major universities, legal organizations, commercial legal Internet providers and government organizations. But even the best do not purport to be comprehensive or completely updated.

However, contrasting opinions exist. Elefant (**2000**) tells how in her opinion the Internet specialised search engines have matured to a stage where she could perform her legal research without recourse to fee-for-service databases.

4.3. Best Tools of the Trade

In an excellent study, Barmakian **(2000)** compares 15 search engines (13 general ones and 2 specialized) in respect to legal research. The study initially also included legal directories, but the author found that they were very ineffective for her evaluation purposes. The study is based on the presumption that when legal researchers use the Internet, they are usually looking for a known item, but that they often avoid searching for that precise item for fear of landing too many hits. Using a know item and the simplest of Boolean searches, Barmakian concluded that specialised legal search engines performed better that such general tools as Yahoo! , HotBot and GoTo.com. based on these results, Barmakian reached the conclusion that regardless to the fact that a recent study (Lawrance & Giles**, 1999**) has shown only 16 percent of the web to be indexable, her study had indicated that she had a 100% success in retrieving known items (50 different items were used for the study). However, Barmakian was careful to state that the major drawback in using general search engines for topical research was their inefficiency.

The study concluded that legal search engines deliver more relevant results than general search engines for legal topic queries; there is significant overlap of results between the two legal search engines so time-pressed legal researchers should use just one or the other; there is overlap in results from engines that use Inktomi, so legal researchers should use just one from this group (Snap, HotBot, and GoTo.com); Google and Fast deliver "unique" results with little overlap of results from other search engines; and relevance of search engine results, even from legal search engines, is low, indicating that search engines are not yet viable alternatives to commercial legal resources for topical legal research.

An Australian study done by the legal research team which created AUSTLII (Greenleaf, et al. **1998**) has provided a number of points as to why online legal research is difficult. The issues affecting the quality of research were, in the opinion of the paper, mainly related to search engine technology. Among others, the paper mentions the fact that intellectual indexes are hard to maintain, good ones for law are hard to find and none are even remotely comprehensive, and robot indexes are not comprehensive, contain too much, and are difficult to search for particular countries. Many significant law sites can't be searched and using different search engines can be confusing. So the problems of finding legal materials world-wide are that it is both difficult to find which useful sites exist for a particular country or subject, and also difficult to find what is on such sites as are known. These research problems are very substantial even for the most expert `internet savvy' lawyers and law librarians. They are much worse for inexperienced users.

5. REFERENCES

Banks, C. & Douglas, H. 2000. Law on the Internet. Federation Press: Sydney.

Barmakian, D. 2000. *Best Search Engines for Law*. **Law Library Journal** 92(4) pp. 399-438

Berring, R. C. 2000. *Legal Information and the Search for Cognitive Authority*. **California Law Review**: 88, pp. 1673-1708

Botluk, D. 2000. Mining Deeper Into the Invisible Web. [Online] Available WWW: http://www.llrx.com/features/mining.htm

Broder, et al. 2000. Graph Structure of the Web. [Online] Available WWW: http://www.almaden.ibm.com/cs/k53/www9.final/

Cornaby, M. 1996 [rev. 1997]. Understanding and Using the Best Search Services to Perform Legal Research. [Online]. Available WWW: http://www.aallnet.org/products/crab/search.htm

Dayal, S . 2000. E-law research: your guide to electronic legal research. Butterworths: Sydney

Dreilinger, D. & Howe, A. E. 1997. *Experiences with Selecting Search Engines Using Metasearch*. **ACM Transactions on Information Systems:** 15(3) pp. 195–222.

Electronic Access to Information Resources Committee (EAR). 1999. EAR Committee Review Of the West Group's 'Westlaw.com'. [Online] Available WWW: http://seir.calstate.edu/EAR.rev.Westlaw.html

Elefant, C. 2000. Legal Research: Saved by the Web. [Online]. Available WWW: http://www5.law.com/dc-shl/display.cfm?id=3860

Garman, N. 2000. Meta Search Engines. [Online]. Available WWW: http://www.onlineinc.com/onlinemag/OL1999/garman5.html

Greenleaf, G. et al. 1998. AustLII - Changing the nature of public access to law. [Online] Available WWW: http://austlii.edu.au/~graham/NZLLG/AustLII_NZLLG.html

Halvorson, T. R. 1999. The LOIS Law Library: A View through the Southern California Online Users Group Rating Scale Lenses. [Online]. Available WWW: http://www.llrx.com/features/lois2.htm

Halvorson, T. R. 1999. VersusLaw's V.: A View through the Southern California Online Users Group Rating Scale Lenses. [Online]. Available WWW: http://www.llrx.com/features/v.htm

Halvorson, T. R. 2000. Quicklaw America: A View through the Southern California Online Users Group Rating Scale Lenses. [Online]. Available WWW: http://www.llrx.com/features/quicklaw.htm

Hodges, J. G. & Karisch, G. M. 1999. Legal Research On the Internet. [Online] Available WWW: http://www.texasprobate.com/articles/actec99.htm

Johnson, H. 1999. Internet Reality Check. [Online] Available WWW: http://www.llrx.com/eature/abatech99.htm

Johnson, K. E. 1998. Teaching Charlie, Esq. to Surf. [Online] Available WWW: http://www.llrx.com/features/teaching.htm

Kennedy, D. 1998. Ten Reasons To Be Wary Of Search Engines. [Online] Available WWW: http://12.25.233.148/issue3.htm

Kerr, P., Hoyle, A. & Gilchrist J. 2000. An introduction to legal resources on the internet (3rd ed). Crucial Briefs Legal Research Services: Normanhurst, N.S.W.

Lawrence S. & Giles, C. L. 1998. *Accessibility of information on the web.* **Nature**: 400(6740) p. 107

Lawson, J. 1999. The Complete Internet Handbook for Lawyers. American Bar Association: Washington

Lawson, J. 2000. Getting Started With Net Research. [Online] Availabel WWW: http://www.netlawtools.com/research/res_gettingstarted.html

Liu, J. 1998. *Guide to Meta-Search Engines*. **BF Bulletin (Special Libraries Association. Business and Finance Division)**.107:17-20.

Louise-Jacques, L. 2000. Legal Research Using the Internet. [Online]. Available WWW: http://www.lib.uchicago.edu/~llou/mpoctalk.html

Myers, L. 2000. CU Law institute web site has latest legal information, from Miranda to Elian. [Online] Available WWW: http://www.news.cornell.edu/Chronicles/4.27.00/Legal_Info_Inst.html

Nemes, I. & Coss, G. 2001. Effective legal research. (2nd ed.) Butterworths, Sydney

Shepard, R. T., et al. 1998. Indiana Judicial Report. Division of State Court Administration, Indianopolis.

Skalbeck, R. 2001.Review of Lexis-Nexis Citations Tools 2001: LexLink v. 8.2, CheckCite v. 8.2. [Online]. Available WWW: http://www.llrx.com/features/lexnex.htm

Steele, E. H. & Scharbach, T. 1996. Working the Web: Legal Research Strategies. [Online] Available WWW: http://www.ssa-lawtech.com/wp/wp1-6.htm

Steele, E. H. & Scharbach, T. 1996. Legal Research – What Works?. [Online] Available WWW: http://www.ssa-lawtech.com/wp/wp1-7.htm

Sullivan, D. 2000. Invisible Web Gets Deeper. [Online] Available WWW: http://searchenginewatch.com/sereport/00/08-deepweb.html

Tincher, D. H. 1998. Unconventional Wisdom on Internet Legal Research. [Online] Available WWW: http://www.consultwebs.com/pdf/tincher_researchMP.pdf

Tyburski, G. 2000. Legal and factual Research on the Internet. [Online] Available WWW: http://www.virtualchase.com/legalresearcher/finding.html

Ward, M. 2000. Web Links that Stick. [Online]. Available WWW: http://www.linkguard.com/news/articles/q22000/14062000.shtml

Watt, R. 2001. Concise Legal Research (4th ed.). Federation Press: Sydney pp. 251-256

Worley, L. 2000. *WestLaw UK*. **Internet Newsletter for Lawyers**. [Online] Available WWW: http://www.venables.co.uk/n0005lia.htm#section4