I.   INTRODUCTION

The World Wide Web protocol for the Internet that we now know and love was invented in 1989. It exploded onto the public scene in 1991 and experienced rapid growth. That is affectionately known as Web 1.0.

We are concerned today with the Web 2.0 phenomenon and in order to grasp the concepts clearly must distinguish between Web. 1.0 and Web 2.0.

> "Web 2.0" refers to a perceived second generation of web development and design, that facilitates communication, secure information sharing, interoperability, and collaboration on the World Wide Web. (Wikipedia, Web 2.0. Accessed April 26, 2009.)

The key difference between Web 1.0 and Web 2.0 is static versus dynamic content. Using the social media and communication applications to investigate clients, experts and opposing counsel adds an entirely new dimension to your law practice. Harnessing the power of these tools to market yourself and provide client service can either improve or harm you, if not used effectively. One of the basic mantras of research is even more important when using these collaborative tools in your work: verify your information. Add privacy-related issues to that verification requirement, and the tangled web can ensnare you quickly. Knowing what these tools are and how they can be used to your benefit requires awareness and care.

Let's begin by building your awareness. Web 2.0 applications include Twitter, Flickr, Facebook, MySpace, LinkedIn and Wikipedia. Those are the "Kleenex" to Kimberly-Clarke names for mini-blogs, social networking and wikis. The main categories of Web 2.0 applications are web logs (blogs or blawgs), social networking, including video and photo sharing sites, wikis, and folksonomies.

Blogs take the personal diary to a new level. Blogs are Internet sites that are updated regularly with news, events and commentary. Many blogs also include videos and photos. Some commercial institutions maintain blogs and in the legal world blogs distinguish themselves by using the term blawg. Michael Stephens, for instance, maintains the Kentucky Law Review blog, a comprehensive blog for Kentucky legal topics.

Twitter takes blogging to a new level of frequency. The primary difference between Twitter and pre-Twitter blogging is that Twitter is limited to 140 characters, thus the reason it is referred to as mini-blogging. There are many

search engines trying to harness the power of Twitter and real-time search is evolving in importance. This is worth keeping an eye on for many reasons.

The audio version of blogging is podcasting.

> A podcast is a series of <u>digital media</u> <u>files</u>, usually <u>digital</u>, <u>audio</u>, or <u>video</u>, that is made available for <u>download</u> via <u>web syndication</u>. (Wikipedia, <u>http://en.wikipedia.org/wiki/ Podcast</u>. Accessed May 24, 2009.)

Social networking sites are perhaps the most powerful tools for investigative research in the Web 2.0. toolbox. The distinguishing feature for each of these sites is the audience. MySpace is geared towards thirteen to twenty-four year olds. Facebook began as an academic networking site and, now that it is available to the broader public, is attracting older adults aged thirty-five and over. LinkedIn is a professional networking site used in recruitment and business connections. Many other specialty networking sites are also cropping up, such as the offering from LexisNexis, <u>Martindale-Hubbell Connected</u>.

Some will succeed and others, such as the ABA <u>Legally Minded</u>, have already faltered. (ABA Social Network Fails to Connect by Robert Ambrogi February 9, 2009, http://www.law.com/jsp/legaltechnology/ pubArticleLT.jsp?id=1202428079 272 Accessed May 24, 2009.) Sometimes the wheel is redesigned with improvements that make the effort of upgrading/changing services worthwhile. Sometimes the redesign is unsuccessful and users simply go back to the reliable source they already know. Ambrogi points out that <u>Legally Minded</u> "takes the social right out of the social networking site."

II.　　WEB 1.0 SOCIAL NETWORKING SITES (A SAMPLING*)*

- Classmates.com
- Sixdegrees.com
- Forums
- Yahoo Groups & Other Groups
- Listservs

III.　　WEB 2.0 SOCIAL NETWORKING SITES (A SAMPLING)

- Facebook
- MySpace
- LinkedIn
- Namyz
- Nexopia
- FriendFeed
- Twitter
- XING
- Friendster

Wikis are collaborative spaces that allow users to share and edit documents online. Corporations and volunteer organizations use these internally because of the ease of sharing documents and the true collaborative nature of the work. The collaborative work-product makes an enterprise wiki an easy to use and adopt technology for shared benefit within a single organization.

Video and photo sharing sites, such as YouTube and Flickr, offer another means of social networking and are considered Web 2.0 applications. Folksonomies add yet another layer in the social web. Folksonomies allow users to tag content they find on the Internet with their own terms and share those tags with the public. Delicious is the best-known site of this type.

As you can surmise, within each of these categories there are multiple tools in use and emerging tools continue to be released. So how can you gain insight into your caseloads from these tools? What is available to you to mine the rich data available through these applications?

Search is moving beyond Google. Google is still a powerful shovel but much of the social content available is beyond Google's index at this time. So let's talk about what is available and how you can find it as you go through the process of preparing for litigation and to grow and retain your client base.

The obvious first step is to do a public search using the tools available within each site. When you go beyond the public search you must be aware of the governing terms of use. Facebook's Terms of Use and Privacy statements clearly remove themselves from the "responsible" loop by providing security options for users and placing the responsibility for those settings in the user's lap.

The privacy and security settings are the user's tools on social networking sites to limit access to their data. No security settings are foolproof, however, because of the very nature of social networking. What you share with your friends can be shared with their friends, and you, as a user, then have no control over that shared information.

So, let's take a subject and discuss the types of information you can find through each of the following Web 2.0 products:

- Facebook
- Twitter
- LinkedIn
- Flickr
- YouTube (Note: I am not a registered user for this service.)
- Blogs

The subject I've chosen to discuss the search features and data available on these tools is "gun control". Except as otherwise noted, the material I'm discussing is discovered based upon my own registered account usage. (CA)

A.   Facebook

Search used: gun control

I did not use any Boolean connectors or anything structured because I just wanted a snapshot of the data located. If you wish to have precision in your results, consult any tips or help guides available on each site to narrow your results.

Results are delivered with tabbed results for: All, people, pages, groups, events, applications and web. Since our goal is to use the power of the social web for our research, you will benefit from concentrating your review of results in the groups, events and people portions.

Let's take a closer look at the people results. My results can be filtered for my "network" which is Louisville, Kentucky. A Facebook user's network is set when they register for the site. Other filters available are also based upon a user's profile information including, sex, relationship status, age, interests and political views.

If you persevere to the bottom portion of the results you then get further search functions: "Search by Company or School" or "Search by E-Mail". These search within search results features are complimented by the ability to search by co-worker or classmate.

Most of the information available for searching on Facebook is based upon data provided by the user through their profile and by groups they join as part of their online networking experience.

Keeping in mind that searching an individual is ruled by your relationship to the user and their own settings, you may be able to expand the amount of data you find to a very personal degree. Status updates, links shared, photos, videos and their own comments can all be powerful investigative fodder, if you can ethically and legally retrieve that information.

B.   Twitter

The micro-blog is popular because 140 characters is enough to applaud or demean, link to useful content or ensnare in a marketing ploy. The biographical information is limited too; many users will provide a link to their own site so that interested parties have a method of finding out more. You can sign up as a public Twitter user or a semi-private user. Semi-private users control who follows them. Public users have no control over their followers. There is an option to block users available for public Twitter users who do not wish a fellow Twitterer to follow them. Below is a setting option on Twitter that distinguishes users as public or semi-private.

Protect my updates: Only let people whom I approve follow my updates. If this is checked, you WILL NOT be on the public timeline. Updates posted

previously may still be publicly visible in some places. (http://twitter.com/account/settings)

Twittersearch (http://search.twitter.com/) is the Twitter search access site, it offers filtering and advanced search features. A list of the advanced search features is available at: http://search. twitter.com/operators. This provides access to the people tweeting and the topics being tweeted.

I want to handle our gun control search more precisely than I did in Facebook. I want to search as a phrase because in this real-time search I don't want to be overwhelmed. I want a glimpse of the people and topics. Then, to harness the power of that information, I need another type of twitter search tool.

What sites are "searching" Twitter?

- Hashtags: http://hashtags.org/ (Searches trend tweets.)
- TwitterGroups: http://twittgroups.com/index.php (Searches Groups and provides directories.)
- Twitseek: http://beta.twitseek.com/ (Searches URLs and associated keywords.)
- Tweetscan: http://tweetscan.com/index.php (Searches keywords and provides automatic refreshes and email alerts for trends.)
- Twellow: http://www.twellow.com/ (A yellow-page style director of Twitter.)
- Other tools from a 4/22/2009 Mashable.com article (http://mashable.com/2009/04/22/twitter-search-services/) include Flaptor, Twazzup, Tweetzi and Tweefind.

The tools for searching Twitter content continue to evolve. As users expand the purpose of their own tweets, developers will create applications to harness the information for their own benefit. Real-time search is the next big thing.

C. LinkedIn

LinkedIn offers several "filters" for searching including groups, people and companies as well as jobs and answers. The potential for finding out what individuals are self-publishing is good here, keeping in mind that this site has a smaller number of users. As a long-time LinkedIn user myself, I have noticed that users are publishing more items such as "status updates" in the form of an answer to LinkedIn's question: "What are you doing now?"

Some of the applications built for LinkedIn also offer more data about the users including the Amazon Reading List, Blog lists and TripIt. Truly the applications developed for the social networking sites hold great potential for revealing rich data in any investigation into a person's credentials, interests, activities, current activities, and even location.

Taking our term gun control to LinkedIn you can expect fewer results with a more professional focus on the results. *Answers* and *Events* are the sections on LinkedIn that may provide leads into unexpected areas of rich content. This can get into professionals demonstrating their expertise, policy issues and political views.

When searching people for a key word I would recommend using quotation marks to bind the phrase and retrieve more accurate results. The results: Ninety versus 1,200-plus for gun control. In searching "gun control" in the *Answers* section I retrieved fifty-two results on May 24, 2009. The search for "gun control" within groups retrieved one item. There are filtering tools available to help narrow results including group type and language.

Narrowing your search to *People* provides an opportunity for precision search by adding in options for location, job title, company affiliation, education, network, groups, language and interests. This precision can be extremely useful when searching for a John or Jane Doe type of name. In addition to finding the right person, you can use the Reference Search tool related to an individual's resume to locate people within your own network to confirm resume data.

D.   Flickr

A picture is worth a thousand words and beyond the photos you can locate within the social networking sites such as MySpace and Facebook are social sites dedicated to photos. Flickr, is the best known of these sites: it is dedicated to providing users the ability to organize and share photos and video.

Searching the content is as simple as typing the keyword on the front page and beginning your exploration. You can also search for people, groups and locations. A search of "gun control" for all content returns 742 results.

You can use the *Advanced Feature* to search for content based tags and content as well as content and media type. You can also search for content ruled by *Creative Common Licenses* and limit results by dates.

A search for people within Flickr provides you the option of searching for individual names or email addresses or for people who are "interested in" a topic. (It was not clear within the Flickr FAQs or profile settings how the "interests" were acquired within the system at the time of this writing.) One interesting search feature is the ability to search by camera type.

E.   YouTube

The first sentence from the *About Us* page on YouTube truly defines the service and its content.

Founded in February 2005, YouTube is the leader in online video, and the premier destination to watch and share original videos worldwide through a Web experience. (http://www.youtube.com/t/about --accessed May 24, 2009)

Searching the content on this site is as simple as typing in a word or phrase or can be as complex as the *Advanced Options* demonstrate. There are keyword-searching options that allow for the combination of words and phrases as well as the exclusion of words and the limitation by location and dates. Results can be filtered for "inappropriate for children" exclusions and well as relevancy and uploaded dates. There are language options and length of video selection tools included in the *Advanced Options* search page on You Tube.

In addition to those specific search option results can be selected by *Channel* or *Playlist* and sorted by relevance, uploaded and type selections. The relevance selection allows you to choose between oldest, newest, view count, rating and relevance. The uploaded selection allows you to choose by results for today, this week, this month or anytime. Type includes: HD, closed captions, partner videos and annotations.

F.   Blogs

An area of Web 2.0 content that has tremendous potential for impacting search is blogs. Fortunately there are search engines dedicated to blog content. Technorati (http://www.technorati.com) and Google Blog Search (http://blogsearch.google.com/ ?tab=yb) are two of the oldest and most used blog search engines.

Google Blog Search offers advanced search functions that allow for the combination of words and phrases as well as the exclusion of selected words. Limits based upon URLs, Language, Date and Author are also included in the search function for this tool. Thus, using our "gun control" sample we could build upon information gathered from our other sites to limit to specific persons or do a broad search. The broad search will of course return a large body of results: nearly 300,000 results on May 24, 2009.

However if you add additional terms or look for a specific author you can begin tracking the information published by specific individuals. Add the power of comments posted on blogs and the rich data grows exponentially.

G.   Evolving Tools

Real-time search tools will continue to evolve and companies will try to harness the power of the social web for their own competitive edge, while providing a value-added service to you. Westlaw is working on this already.

Westlaw & its partner Courtroom Connect have invested resources into capturing video of hearings and trials from across the United States. (*See* http://www.judges.org/news/news031609.html). The preparation advantage provided by being able to see counsel and judges in action has huge potential. The application of what is learned by these videos is dependent upon the user.

IV.   SOCIAL SEARCH APPLICATION & ADVANTAGES

The functionality of search within each type of Web 2.0 tool is diverse. The potential for rich content is inestimable. Thus, if you are investigating someone who is supposed to be involved with a particular activity you can use the power of the social web to see if they've posted content, become a fan, joined a group, tagged a photo, or uploaded/shared a video related to the issue at hand.

Investigating clients or potential litigants holds incredible potential in the Web 2.0 environment. There are many ways for litigants or those close to the parties to reveal information. Comments on public sites, blogs, social networking links and comments are all potential sources of useful information. Your due diligence is not limited to seeking Web 2.0 content available about the litigants.

You can use these same tools to investigate judges and opposing counsel. It adds a whole new dimension to your preparatory research. Just as you would investigate expert witness transcripts and judicial opinions, adding these same individuals to your social search task list is an important step in preparation.

In fact, the search potential is only limited by your time and energy. Just as performing a case law search can take you down multiple paths to find an answer to fit either side of the argument, researching individuals through social networking sites and Web 2.0 tools can lead you down many paths. Exploring Delicious http://delicious.com/ for their saved sites and using their tags can provide insight into the tags they may use on other sites. Seeing that the person in question belongs to one type of group on MySpace or Facebook can focus your search on appropriate groups and terms in other areas online spaces.

Keeping up with the influx of information can be overwhelming. Using RSS feeds to track blogs and using other available tools to stay informed is the only way to manage these potential information overload sources. One such tool is FriendFeed (http://friendfeed.com/). It is a tool that allows you to keep track of your friends and their social networking site updates in a single place. You may not be a "friend" but as long as you stay within the "terms of use" for each site and the information is published publicly you can see it. This aggregated data can be quite powerful in organizing the information in the Web 2.0 environment.

In addition to sites such as FriendFeed, many of the sites you use to begin your research also offer the option for RSS feeds. Often, locating the information and staying up-to-date on new data is as easy as clicking the follow button or subscribing to the RSS feed.

This can be useful when preparing for an upcoming hearing or trial and you want to know more about the opposing counsel or parties or even what is being said

about the ongoing trial. Monitoring in real-time the commentary and activities of those interested or involved in the legal issue is a powerful research edge.

V.   LEGAL BUSINESS APPLICATIONS

Beyond the research potential of Web 2.0 applications attorneys and law firms can benefit from careful application of these technologies for marketing purposes. As Carolyn Elefant points out in a quote from MarketingSherpa: "word-of-mouth is the oldest and most powerful marketing." (http://legalblogwatch.typepad.com/legal_blog_watch/2009/05/is-social-media-worthwhile-for-lawyers.html Accessed May 24, 2009). She testifies that she has reaped personal rewards based upon her early adoption of blogging (2002) and Twitter (2008).

In addition, using these tools to search for trends that could indicate a potential class-action suit or a defamation claim is an application for growing your practice. Understanding the potential of the trends revealed can provide a competitive edge in attracting new clients. Once the trends are identified, you can become an expert voice in the wilderness and provide applicable and practical advice.

Knowing what your clients are doing and what is being said about them in the Web 2.0 world is a great way to provide value-added service. In addition, monitoring those sites can alert you to potential problems and allow you and your client to be pre-emptive and pro-active.

In addition to being used to monitor your clients, you can apply those same tools to self-monitoring. It's always useful to know what is being said about you and your services. The very nature of social media means that word-of-mouth can be powerful in benefiting or damaging your own business practice.

Using the power of Web 2.0 to serve your clients and expand your business is a simple and useful application of powerful technology.

VI.   TALES OF CAUTION

Social media is a double-edged sword. The same tool that can be used to cut through the competition can also be fallen upon and cause great harm to the wielder. Violation of the Terms of Use has its own contractual consequences. Beyond that is the ethical violation potential as noted by the Philadelphia Bar Association ruling that a third party Facebook Friend being used as a witness was a violation of Pennsylvania Rules of Professional Conduct. (http://fastcase.blogspot.com/2009/05/some-facebook-discovery-is-illegal.html)

Privacy is a big concern for users of social media. Users want to share information with their contacts but they don't want third parties to have access. That is why Facebook takes care to note that they are a TrustE Privacy Program licensee. Violating the privacy policies and terms of use for social media sites is fraught with potential trouble for the violators.

Unfortunately for users concerned with their privacy, researchers still have the potential to discover "private" information despite precautions taken by the

providers. According to a study discussed in <u>Technology Review</u> on May 6, 2009: "Unmasking Social-Network Users: Researchers find a way to identify individuals in supposedly anonymous social-network data*"* by Erica Naone, one-third of anonymized users could be identified by searching two sites for patterns of data (http://www.technology review.com/web/22593/ Accessed May 24, 2009.)

Concerns about privacy and policy violations are not the only reason that social media searching should be approached methodically and carefully. All researchers should verify any information located through the public Internet. Social media findings require even more caution. Profiles can be created with aliases and satire among connections will read differently than statements read by an outsider.

Verify that links posted by users are valid, review personal information through reliable public records resources. Details provided in status updates and comments must be viewed with a magnifying glass and you should use other available tools such as depositions and other published information to check the details.

VII.   WHERE ARE WE GOING? WEB 3.0

When Dale Dougherty invented the term Web 2.0 and put together the first Web 2.0 conference on this in 1995, there was no real definition of what Web 2.0 meant. In 2009, there is still debate on what Web 1.0 and 2.0 mean, but this has not stopped the push toward Web 3.0.

Several views of Web 3.0 interpret it as meaning professional content producing tools will be "free" to everyone, so everyone produces professional content. This individually produced content (*i.e.* everything becomes part of the global omnipresent database) essentially takes on its own life (<u>Terminator VII*,* Revenge of the Database</u>) and moves around a <u>Matrix</u>-like intelligent database, which will become more intelligent with use, and become more personal to each user through use. In turn, it will understand the context of what you really want to know when you ask it something, and will filter out everything but that which it knows you really need to know.

If you thought Google was frightening, this has the makings of both <u>Shangri-La</u> and <u>Matrix IV</u> (*i.e.* Machines Win). The issue of how one protects one's privacy when essentially everything one does immediately (and we do mean real time) becomes part of the omnipresent global database, remains to be seen.

One of the "good" things about Web 3.0 is that it will supposedly let folks make money off a new and improved version of what they've been trying to do with Web 2.0, but have largely failed to benefit from, financially. If for that reason alone, it may come to pass sooner rather than later. Some companies are already making great strides enabling parts of the next grand scheme.

VIII.	SUMMARY

Web 2.0 is powerful and dangerous. Following the rules in place, including ethical rules, policy and governance documents, will provide you the protection you need to avoid future legal issues of your own.

The data that can be found in a public search method is yours to use. If you have to "work around" the tools to get to the data, then you must be prepared to justify your means and method.

The tools used to harness the power of Web 2.0 are constantly evolving. Stay informed by finding a resource you trust to keep you current on the changes. The short history is that people are people. They talk and you can learn what they talk about if you listen in the right place and pay attention. Web 2.0 just moves the talk online from the grocery store aisle and the PTA meeting. Web 3.0 is emerging and it may find you before you find it. Knowing what is available is half the battle because technology changes quickly and you must adjust your research practices to accommodate those changes.

IX.	RESOURCES

"Entertainment Litigation: The Social Networking Craze," March 25, 2009. by Melvin N.A. Avanzad. The Entertainment Litigation Blog: http://www.entertainmentlitigationblog.com/2009/03/entertainment_litigation_the_ s_1.html

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"100+ Useful Niche Search Engines You've Never Heard of by 'Social Guy'". Sociable Blog, September 1, 2008. http://www.sociable blog.com/2008/ 09/01/100-useful-niche-search-engines/

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"Top Twitter Tools to Check Out in 2009 by 'Social Guy'". <u>Sociable Blog</u>, December 29, 2008. http://www.sociableblog.com/2008/12/29/top-twitter-tools-2009/

"100 Tips and Tools to Research the Social Web by 'Social Guy'". <u>Sociable Blog</u>, April 29, 2009. http://www.sociableblog.com/ 2009/04/29/100-tips-and-tools-to-research-the-social-web/

"50 Ideas on Using Twitter for Business" by Chris Brogan. <u>Chris Brogan Blog</u>, August 20, 2008. http://www.chrisbrogan.com/50-ideas-on-using-twitter-for-business/

A.   Web 2.0 Sites

Facebook: http://www.facebook.com
FriendFeed: http://friendfeed.com/
Linked-In: http://www.linkedin.com/
Twitter: http://twitter.com
Google Blog Search: http://blogsearch.google.com/?hl=en&tab=wb
Technorati: http://technorati.com/
Flickr: http://www.flickr.com/
YouTube: http://www.youtube.com/

B.   Web 3.0 Articles

"Web 2.0 Is So Over. Welcome to Web 3.0" by Jessi Hempel. <u>Fortune Magazine</u>, January 8, 2009. <u>http://money.cnn.com/ 2009/01/07/ technology/hempel_threepointo.fortune/index.htm</u>

"How Web 3.0 Will Work" by Jonathan Strickland, <u>howstuffworks.com</u>. http://computer.howstuffworks.com/web-30.htm

"Web 3.0" by Cade Metz, March 14, 2007 <u>PCMag.com</u>. http://www.pcmag.com/print_article2/0,1217,a%253D202870,00.asp

C.   Useful Blogs

Answer Maven: http://answermaven.com
BeSpacific: http://www.bespacific.com/index.html
Beyond Search: http://arnoldit.com/wordpress/
BizLaw Blog: http://bizlawblog.wordpress.com/
Google Blog Search: http://blogsearch.google.com/
Kentucky Law Review: http://www.kentuckylawblog.com/
Legal Blog Watch: http://legalblogwatch.typepad.com/
Technorati: http://technorati.com/