Chapter 9

SOCIAL MEDIA AS AN INVESTIGATIVE TOOL

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Most people use some form of social media, and the statistics are staggering. As of July 2013, Facebook alone reported a record 1.15 billion active monthly users.[154] Approximately 25 percent of those users do not use privacy settings at all.[155] Every second, two new users join LinkedIn, and social media is now the number one activity on the web.[156] Demographics are no longer limited to younger users, and the volume of usage will continue to grow.

The way people tend to communicate on social media also greatly differs from formal lines of communication such as work-related email exchanges. Online, people communicate in a much more casual manner and also tend to reveal quite a bit of personal information, either purposely or inadvertently. Even with the existence of privacy settings, much of that information and those communications are available to the general public and can be incredibly useful in gleaning additional information about a subject in an investigation. For example, one can learn about a subject's lifestyle through photos they post. Often, lists of friends or connections are also public. People freely list hobbies, hometown and other biographical information, as well as updates on future plans and social commentary. On business networking sites, people detail information about previous employment and education.

For a forensic accountant, ignoring social media leaves quite a bit of valuable information on the table. However, one thing to always keep in mind is that since information on social media is self-reported, it may require additional verification to determine whether or not something is true.

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154 Josh Ong, "Facebook now has 1.15 billion monthly active users and 699 million daily active users," *The Next Web*, (July 24, 2013), *available at* thenextweb.com/facebook/2013/07/24/facebook-users-q2-2013/#!-suW8v.

155 Belle Beth Cooper, "10 Surprising Social Media Statistics That Might Make You Rethink Your Social Strategy," *Huffington Post*, (Nov. 22, 2013), *available at* www.huffingtonpost.com/belle-beth-cooper/10-surprising-social-medi_b_4325088.html.

156 *Id.*

I. Where to Begin?

A. Paid Public Records Searches

If at all possible, it is very helpful to use paid public records sources to obtain additional identifying information about a subject. LexisNexis Accurint[157] or Thomson Reuters' CLEAR[158] are good places to start. TLO is another resource that is even better, as it utilizes more data points.[159] For example, a comprehensive TLO report will list email addresses possibly associated with a subject. While this information is not always available, it often is and can be invaluable in researching a subject, especially if the subject has a common name.

B. Email Address Searches

The email address search is a great starting place for commencing additional social media-based research. One reason is that many people use unique email handles. A handle includes the letters before the "@" symbol in an email address. Quite often, individuals will use the same handle in more than one place, such as in their email account and in their Facebook, Twitter, Instagram or Pinterest accounts. One easy way to begin a search is to use a search engine such as Google to search for instances of that exact email handle online. Such a search, assuming the handle is not very common or generic (like a subject's initials), may lead directly to links of social networking sites that can be further explored. The full email address may also be searched, but it will yield different results (where the full email appears on a blog or website). Likewise, the handle may be searched directly on a social networking site as well. For example, www.socialnetworkingsitesample.com/handle is a good place to begin.[160]

Another way to begin research with only an email address at hand is to use another paid site, Spokeo.com. While not a foolproof guarantee of results (some searches may result in false name matches), Spokeo has a reverse email search that links the inputted email address to various online sites, including social networking sites, picture and video sites, and auction sites.

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157 LexisNexis, secure.accurint.com.
158 Thompson Reuters CLEAR, clear.thomsonreuters.com/clear_home/index.jsp.
159 TransUnion TLOxp, www.tlo.com.
160 Note that this does not work for Google+.

One should also always search a subject's name or email handle directly on social networking sites. Note that due to privacy settings, web searches and searches directly on social networking sites may yield different results.

C.   Extending the Search to Linked Accounts and Names

Each new piece of information acquired is then used to uncover additional information. For example, it is worth noting that often an individual's accounts are linked. A subject's LinkedIn profile may list an instant messenger handle or Twitter account. A Facebook page may be linked to an Instagram or Pinterest account. It is important to be vigilant and "click through" anywhere possible.

Social networking sites also often list additional information that may not be obvious in official public records, like nicknames. Individuals sometimes also list additional blogs or personal websites[161] that are attributable to them that can be further researched. BetterWhoIs[162] may also be used to identify additional information about a registrant of a particular website.

D.   Extending the Search Beyond U.S. Borders

An additional consideration when researching a non-U.S. national or a subject whose first language is not English is to look beyond just U.S.-centric social networking sites. For example, in Japan, Mixi is a popular social networking site.[163] Sina Weibo[164] is the Chinese equivalent of Twitter. Tencent, which owns WeChat,[165] is also set to overtake even Facebook in its growth of user base.[166] For Russian speakers, Odnoklassniki[167] is popular, as well as Vkontakte,[168] which made headlines when background information about Boston Bomber Dzhokhar Tsarnaev came to light.

The website www.searchenginecolossus.com is an international directory of search engines and may assist in locating additional resources in different countries.

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161   Note that personal websites may log IP addresses. As such, using an anonymizer for these searches may be prudent.
162   Betterwhois, www.betterwhois.com.
163   Mixi, mixi.jp.
164   Sina Weibo, us.weibo.com/gb.
165   WeChat, www.wechat.com/en.
166   Steve Tappin, "Who Has 1 Billion Users and Is About to Overtake Facebook?," LinkedIn (Nov. 4, 2013), *available at* www.linkedin.com/today/post/article/20131104184701-13518874-who-has-1bn-users-is-about-to-overtake-facebook?trk=tod-home-art-list-large_0.
167   Odnoklassniki, www.odnoklassniki.ru.
168   Vkontakte, vk.com.

II.   Business vs. Personal Sites

A.   Business Social Networking Sites

Different social networking sites will naturally yield different information. The most popularly used business networking site is LinkedIn;[169] however, there are numerous other specialized sites in existence. Depending in which industry the subject of the investigation works, it may be worthwhile to research blogs or other networking or news sites that pertain specifically to that industry. For example, message boards of cafepharma are often rife with pharmaceutical industry-related gossip.[170] LinkedIn groups, depending on privacy settings, may be useful as well.[171] Upstream Online[172] is a good source for current news in oil and gas, and sites like VentureBeat[173] can be good sources of information about start-ups and Silicon Valley. General information sites like ZoomInfo[174] may also contain useful information. To search industry-specific sites, it is often helpful to search within a site by entering the following information into Google: Site: website.com "subject name." For example, entering the following terms into the Google search box, site: cafepharma.com "joseph jimenez" will yield results for instances of the name Joseph Jimenez being mentioned somewhere on the cafepharma website.

B.   Personal Sites

While this chapter covers the most currently popular social networking sites, it is also important to keep in mind that numerous personal-interest sites also exist in addition to these sites. There are a number various special-interest dating sites, travel sites and the like that can also be explored. Common dating sites include Match.com, Plenty of Fish,[175] OK Cupid[176] and eHarmony.com. In addition to travel sites such as Gogobot,[177] people also post comments and photos on other travel

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169 Note: Ideally, LinkedIn should be searched anonymously, as many people can track who viewed their pages. Anonymous searching can be set up via profile view settings, or one can set up an entirely separate account just for investigative searches.
170 Cafe Pharma, www.cafepharma.com.
171 LinkedIn, www.linkedin.com.
172 Upstream Online, www.upstreamonline.com.
173 VentureBeat, venturebeat.com.
174 ZoomInfo, www.zoominfo.com.
175 Plenty of Fish, www.pof.com.
176 OK Cupid, www.okcupid.com.
177 Gogobot, www.gogobot.com.

review sites such as Trip Advisor.[178] Also important to note is that each social networking site will have different options for privacy settings.

C. How to Search the Sites

If little to no information is yielded from one site, it is not necessarily a dead end or stop to all research. It is important to compare different information found on different sites. Some sites may require a login or account in order to view the profiles of others, while other sites may not.

Consider creating a "dummy" account to conduct a search. On some sites such as Facebook, it is not possible for the individual being viewed to know who is looking at their profile. However, other sites such as LinkedIn do have such tracking, depending on the individual's privacy settings (including the settings of both the searcher and the person being searched). Be sure to adjust settings so that the searcher remains anonymous. If discretion is very important in the investigative process, it may be fruitful to consider using an anonymizer such as Anonymouse[179] or Spotflux[180] to conduct social media searches.

III. Navigating Facebook

Facebook is one of the more interesting social networking sites to search because of the breadth of information potentially available. One good way to begin searching for an individual, particularly a subject with a common name, is to use the search box on top of the page, click on the magnifying glass on the right of the search box, and scroll down to "Find all people named ___." At that point, to the right of the screen there are a several drop down options by which to narrow the search such as employer, current city or hometown. Once found, a page will list a person's "likes" or interests, list of friends, biographical information, photos and more, depending on privacy settings on how much that individual is willing to share.

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178   Trip Advisor, www.tripadvisor.com.
179   Anonymouse, anonymouse.org.
180   Spotflux, spotflux.en.softonic.com.

Facebook is not limited to pictures of children and pets. Information found there can be invaluable in an investigation. For example, when researching a subject's lifestyle and possible sources of wealth, it is often beneficial to look also at the pages of that person's children or spouse for pictures and additional information, including information about individuals with private Facebook accounts or individuals who do not have accounts at all.

When attempting to find information about a business, look toward the friends' list to search for possible associates. Even when friend lists are not public, look for comments on photos if available, or likes on photos posted. Clicking on likes will list who liked that photo even if not otherwise public.

IV.   Navigating Google+

Google+ is not as popular as Facebook, but is structured similarly. To find a page, enter the words "Google," in addition to the subject's name in quotes, into a search engine to find a page. Google+ lists biographical information in the "About" section, and individuals can post links, videos and photos and add friends to their "circles." These lists of circles are often public, so it is a useful way to look for associates or family members.

V.   Twitter

Twitter is an incredibly popular micro-blogging site that allows users to type short status updates, as well as post links and pictures.[181] Twitter can also be incredibly helpful in an investigation to monitor or pinpoint the activities of a subject.

Twitter can be searched by an individual's name in the people search, but often this is difficult, particularly with individuals with common names. If possible, it is helpful and important to attempt to find the individual's username for Twitter (@username) prior to searching.[182] At an average aggregate 58 million tweets per

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181   Twitter, twitter.com.
182   Note: If an individual's tweets are protected (set to private), it is not possible to search those tweets or to find retweets. However, mentions of the individual's user name by other users is searchable.

day,[183] Twitter can be a bit difficult to manage. The Twitter advanced search option may be helpful; however, certain tools can also be utilized for those purposes. Tweetdeck, for example, can be used to monitor a feed.[184] Another great tool is Twilert.[185] Twilert allows a user to set up alerts for a particular user (@username) or topic (#topic) and will send email alerts when there is new information. Topsy can be used to search historical tweets and can also search by links or photos.[186]

VI.   Aggregators

There are a number of websites that also can assist in searching across more than one social networking platform at once. However, these should be constantly monitored as they frequently change or become obsolete. Some currently available searches include (1) Social Searcher,[187] which is also good for searching across Facebook, Twitter and Google+; and (2) Meltwater Icerocket,[188] which searches Twitter, Facebook and blogs. Disqus[189] is a website that aggregates comments across various websites. Bing.com/social will search across all public Twitter and Facebook accounts. Socialmention.com also allows a user to search by keyword across public tweets, blogs, Photobucket accounts, YouTube, Flickr, Facebook and other public postings.[190]

VII.   Photo and Video Sites

While the aforementioned sites are the best places to begin to learn as much as possible about a subject, Instagram,[191] Pinterest,[192] Picasa,[193] Flickr[194] and YouTube[195] are just a few others that can also provide valuable information. Instagram

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183   Twitter Statistics, *Statistic Brain*, July 11, 2014, www.statisticbrain.com/twitter-statistics.
184   Twitter Tweetdeck, about.twitter.com/products/tweetdeck.
185   Twilert, www.twilert.com.
186   Topsy, www.topsy.com.
187   Social Searcher, www.social-searcher.com.
188   Meltwater Icerocket, www.icerocket.com.
189   Disqus, disqus.com.
190   Accounts set to private will not be captured in these searches, however.
191   Instagram, instagram.com.
192   Pinterest, www.pinterest.com
193   Picasa, picasa.google.com.
194   Flickr, www.flickr.com
195   YouTube, www.youtube.com.

and Picasa are personal photo sharing sites (with varying possible degrees of privacy settings). Pinterest is more of a digital bulletin board where individuals "pin" pictures of things that interest them. There are also websites and apps where information disappears after viewed, such as Ephemeralnet,[196] or apps and sites with "temporary" messaging and postings such as Snapchat.[197] Important to note is that deleted "ephemeral" images and other deleted information (such as instant messages or emails) can still be recovered from an individual's mobile device via mobile device forensic tools.

According to a recent statistic published in the *Huffington Post*, YouTube reaches more adults aged 18-34 than any cable network.[198] Individuals with a YouTube account[199] can comment on videos posted by others, add videos to "favorites" lists, and post videos themselves.

VIII.   eBay, Amazon and Other Public Information

Depending on the type of case, public information on sites such as Amazon and eBay can also be quite powerful in painting a picture of an individual and that person's interests. What a person buys and sells on eBay can be very pertinent in theft or supply-chain investigations. For example, in investigating missing inventory from a company, it may be worth it to look at the eBay transactions of suspect employees to look for equipment sales. A pattern of high-dollar purchases may also be a circumstantial indication of living outside of one's means.

IX.   Use in Evidence

All of this social media research is useful in many stages of an investigation, from getting to know a subject's background, to preparing information, to prepar-

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196 Sarah Perez, "The Rise of the Ephemeralnet," *TechCrunch*, (June 30, 2013), *available at* techcrunch.com/2013/06/30/the-ephemeralnet.
197 Snapchat, www.snapchat.com.
198 Belle Beth Cooper, "10 Surprising Social Media Statistics That Might Make You Rethink Your Social Strategy," *Huffington Post*, (Nov. 22, 2013), *available at* www.huffingtonpost.com/belle-beth-cooper/10-surprising-social-medi_b_4325088.html.
199 Now often linked to one's Google account (Google owns YouTube and Picasa and is moving toward aggregating many of these accounts. Likewise, Facebook owns Instagram).

ing for an interview, to potentially impeaching a witness on the stand with inconsistencies found on their social media profiles.

Removing data from social networking sites during the course of litigation can amount to spoliation. As such, there is a duty to preserve. Preserving evidence gathered in social media investigations can be achieved in a number of ways, the simplest being to download, print or save a current snapshot of the page where the information was found. One way to do this is to utilize SnagIt[200] to grab the page without missing any information or corruption during saving or printing. In more complex or voluminous cases, it may be useful to contact a vendor to assist with search, preservation and authentication of social media information.

X.   Conclusion

In today's world, an investigation is not complete or good unless social media has been thoroughly researched. And that means much more than just "Googling" a name. The untrained individual may simply conduct a Google search and generally not go beyond the first three or four pages. A trained investigator, however, should be able to use all the sites described in this chapter and more. Social media often provides much more insight into a subject's mind and lifestyle than public records. It is also a valuable "prep" tool for interviewing a subject and for "connecting" the dots among subjects and discovering relationships that otherwise might remain unknowable absent extensive and costly surveillance for weeks or months. At a very basic level, social media is the best way to get a photograph of subjects who otherwise would be faceless names to the investigator. An investigator who can plumb the depths of social media is likely to learn what his subject looks like and also get a good understanding of what makes his subject tick. Social media is an invaluable tool to help solve the ever-present riddle that the investigator sets out to tackle: who did what, when, where, why and how.

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200   SnagIt, www.techsmith.com/snagit.html.