

3-1-2015

Googlestroika: Five Years Later

Karl T. Muth

Follow this and additional works at: <http://scholarship.law.unc.edu/ncjolt>Part of the [Law Commons](#)

Recommended Citation

Karl T. Muth, *Googlestroika: Five Years Later*, 16 N.C. J.L. & TECH. 487 (2015).Available at: <http://scholarship.law.unc.edu/ncjolt/vol16/iss3/5>

This Article is brought to you for free and open access by Carolina Law Scholarship Repository. It has been accepted for inclusion in North Carolina Journal of Law & Technology by an authorized administrator of Carolina Law Scholarship Repository. For more information, please contact law_repository@unc.edu.

GOOGLESTROIKA: FIVE YEARS LATER

Karl T. Muth*

This article re-examines and revises observations made in the author's 2009 article, Googlestroika: Privatizing Privacy.¹ Specifically, it looks to the contractual obligations and practical considerations that define how users interact not only with Google, but also with social network websites and other online service providers. Consideration is given to how an individual leaves a social network, or terminates "membership" and technical matters, such as the implications of so-called private modes in web browsers.

This Article is a review of where the market in privacy stands today and discusses some, but by no means all, changes in law, policy, litigation, regulation, and contract arrangements since the first article's publication in 2009. Its focus, as with Googlestroika, is to reconcile the user experience of Internet services with the terms of use and contractual provisions that govern the interactions between consumer and provider.

* SEI Fellow, The University of Chicago Booth School of Business; Lecturer in Economics, Public Policy, and Statistics, Northwestern University. This Article is a sequel to, and revision of, the comments offered by the same author five years earlier in *Googlestroika: Privatizing Privacy*, 47 DUQ. L. REV. 337 (2009).

The views in this Article belong only to the author and should not be presumed to be held by the institutions, firms, or persons with which he is affiliated. Thanks to Elizabeth M. Schutte, one of my dearest friends; without her thoughts and criticisms years ago, *Googlestroika* would not have been strong enough to support or deserve a sequel. Thanks to employees at certain firms mentioned here who allowed me to interview them. Finally, thanks to Professor Randy Picker of the University of Chicago School of Law; if I had not taken his wonderful course years ago, I doubt I would have noticed or appreciated the complexity and importance of issues in this area of law. Raymond Wang and Amy Taylor offered comments on pertinent issues and earlier drafts.

¹ Karl T. Muth, *Googlestroika: Privatizing Privacy*, 47 DUQ. L. REV. 337 (2009) [hereinafter *Googlestroika I*].

TABLE OF CONTENTS

I.	INTRODUCTION—WORKING BACKWARD FROM	
	<i>WURIE</i>	490
II.	PROVIDER CONTRACTS THEN AND NOW: AN	
	EVOLUTION	495
	A. <i>Google, Gmail, YouTube, Google+, and the</i>	
	<i>Mountain View Approach</i>	496
	B. <i>Bing, Xbox, OneDrive, Azure, and the Redmond</i>	
	<i>Approach</i>	501
	C. <i>Facebook and the Menlo Park Approach</i>	502
	D. <i>Apple, iTunes, and the Cupertino Approach</i>	505
	E. <i>Twitter and the Market Street Approach</i>	507
III.	JOINING THE NETWORK: USER AGREEMENTS &	
	INITIAL ASSENTS	508
	A. <i>Google</i>	508
	B. <i>Bing</i>	509
	C. <i>Facebook</i>	510
	D. <i>Apple</i>	511
	E. <i>Twitter</i>	512
IV.	LEAVE NO TRACE? GOING OFF THE GRID	512
	A. <i>Leaving Google</i>	512
	1. <i>Gmail as a Distinguishable or Separate Service</i> ...	512
	2. <i>YouTube as a Separate Set of Agreements</i>	513
	3. <i>Incognito Browsing Within Chrome: An</i>	
	<i>Exception?</i>	514
	B. <i>Leaving Bing</i>	515
	1. <i>Azure as a Separate Set of Services</i>	516
	2. <i>Skype as a Quasi-Social Service</i>	516
	3. <i>InPrivate Browsing within Internet Explorer:</i>	
	<i>An Exception?</i>	517
	C. <i>Leaving Facebook</i>	519
	1. <i>Facebook's Download Feature and Its Purpose</i> ...	519
	2. <i>Facebook's Two-Week Waiting Period</i>	520
	3. <i>Private Browsing and Facebook: An Exception?</i> ..	521
	D. <i>Leaving Apple</i>	521
	E. <i>Leaving Twitter</i>	522

V. HYPOTHETICAL LITIGATION & OPERATIVE	
ANALOGIES	523
VI. A COMPROMISE? CONSIDERING NEW CONTRACT	
IDEAS FOR SOCIAL NETWORKS	524

I. INTRODUCTION—WORKING BACKWARD FROM *WURIE*

Five years ago, this Article's predecessor, *Googlestroika: Privatizing Privacy*, was published. It discussed Google's business model of gathering information about people and using this information, selling this information to advertisers, and otherwise finding ways to turn this information into money. The article focused on the fact that many users see Facebook, Google, and other services as "free," rather than recognizing that their use of these services is a barter arrangement in which they trade their privacy for services. The opacity of this bargain—and the opaque market in privacy-related transactions in general—leads to a series of problems.²

There is no doubt that terms of service agreements and end user agreements have changed in the past five years. Consumer behaviors have also changed since 2009: more people have so-called smartphones and more people store enormous amounts of information in the cloud, on free services like Gmail,³ or in free social networking repositories like Facebook and Twitter. In addition, consumers are more savvy about bartering their privacy for services, something not discussed five years ago—as CNET put it in a recent article, "[W]eb surfers are used to dealing with the privacy versus profit trade-off"⁴ Finally, the contract terms themselves have changed—not only at Google, but also at Bing, Facebook, Twitter, and elsewhere. The heterogeneity of approaches to contractual questions is worthy of study—who really has what

² See, e.g., Andrew Schwartz, *Consumer Contract Exchanges and the Problem of Adhesion*, 28 YALE J. ON REG. 313, 347 n.200 (2011) (calling the Google Terms of Service a contract of adhesion and citing *Googlestroika I*); Victoria Schwartz, *Disclosing Corporate Disclosure Policies*, 40 FLA. ST. U. L. REV. 487, 502 (2013) (noting market-based privacy dilemmas and citing *Googlestroika I*); see generally Nathan Newman, *The Costs of Lost Privacy: Consumer Harm and Rising Economic Inequality in the Age of Google*, 40 WM. MITCHELL L. REV. 849 (2014) (asserting that consumers are unaware of the "harm from the extractions of personal data" done by companies such as Google).

³ Google has, over the years, alternatively branded its email service "gmail" and "Gmail"—for the sake of consistency, I refer to all vintages of Gmail with a capitalized "G" herein.

⁴ Elinor Mills, *Deleting Your Facebook Account (FAQ)*, CNET, (May 21, 2010, 4:00 AM), <http://www.cnet.com/how-to/deleting-your-facebook-account-faq/>.

type of license to those photos of your son's birthday party that you uploaded to Twitter and Facebook or sent to grandma via Gmail?

The Court's consideration of the mobile phone's role in modern life in *United States v. Wurie*⁵ recognizes a new relationship between our digital lives and our real lives, one that can be both symbiotic and independent.⁶ *Wurie* acknowledges the sweeping changes in American consumer attitudes and behavior from 2009 to 2014.

Five to ten years ago, phones did not contain encyclopedic records of day-to-day life. Today, each phone is a ledger, a reservoir of data containing the most recent epoch of a person's being.⁷ Phones may contain banking records, GPS information, photographs, histories of websites visited, histories of text message interactions, and thousands of other pieces of data.⁸

Chief Justice John G. Roberts, Jr., distinguished cell phones from other things that might be found on a person in the Court's unanimous decision in *Riley v. California*,⁹ stating, "the fact that technology now allows an individual to carry such information in his hand does not make the information any less worthy of the protection for which the Founders fought."¹⁰ Further, Tom Goldstein commented that the *United States v. Wurie* decision was "a sweeping endorsement of digital privacy."¹¹

However, *Wurie*'s Fourth Amendment context means it must stop short of examining the mobile phone, laptop, tablet, or other device in the civil or *ex contractu* privacy context. This Article

⁵ 134 S. Ct. 999 (2014).

⁶ *Id.* at 999.

⁷ See generally Katie Shilton, *Four Billion Little Brothers?*, 7:7 ACM QUEUE 1–8 (2009), available at <http://tinyurl.com/l6ze7oc> (describing the documentary nature of cell phones in today's society).

⁸ See *Riley v. California*, 134 S. Ct. 2473 (2014) (discussing privacy concerns of cell phone searches).

⁹ 134 S. Ct. 2473 (2014).

¹⁰ *Id.* at 2495.

¹¹ *Live Blog of Opinions*, SCOTUSBLOG (June 25, 2014, 9:19 AM), http://live.scotusblog.com/Event/Live_Blog_of_opinions__June_25_2014?Page=1. For case details, documents, and associated blogging by legal experts, see *Case Page: United States v. Wurie*, SCOTUSBLOG, <http://www.scotusblog.com/case-files/cases/united-states-v-wurie/> (last visited July 18, 2014).

focuses on that context, the scenario in which the person enjoying the use of a customer's data is a contractual counterparty (e.g., Google) rather than a party opponent in a criminal proceeding.

Certainly, the contexts are distinguishable. But they are not wholly unrelated. In both cases, the user may be betrayed by the information on the device, the applications on the device, and the degree of surveillance the device allows. In both cases, the user may also suffer intrusions into his or her personal life that would be unimaginable—and technologically impossible—only a few years earlier. Further, issues that have existed since *Googlestroika*'s publication in 2009 (“*Googlestroika I*”) are finally being litigated. U.S. District Court Judge Lucy Koh recently identified and expressed concern¹² about the very issue raised five years ago in *Googlestroika I*.¹³ that a non-Gmail user sending an email to a Gmail account may unknowingly consent to Google or its employees reading the contents of that email.

While relationships between consumers and the police are governed by court decisions, police policy, and individual officer discretion, relationships between consumers and providers are governed by User Agreements (which are often impenetrably dense, legalistic, or esoteric for the average customer to credibly examine) and other fields of law, such as copyright and telecommunications legislation.¹⁴

Perhaps no company better epitomizes the growing reach of companies into our lives, rooms, and bedrooms (to invoke the

¹² See generally *In re Google Inc. Gmail Litig.*, No. 13-MD-02430-LHK, 2013 U.S. Dist. LEXIS 172784 (N.D. Cal. Sept. 26, 2013) (granting, in part, and denying, in part, defendant's motion to dismiss).

¹³ See *Googlestroika I*, *supra* note 1, at 351–53. Judge Koh chose particularly strong language, noting that finding “implied consent” for Google to read the contents of an email whenever a person emails a Gmail user would, “eviscerate the rule against interception.” *In re Google Inc. Gmail Litig.*, 2013 U.S. Dist. LEXIS 172784, at *56; see also *In re Google Inc., Gmail Litig.*, No. 13-MD-02430-LHK, 2014 U.S. Dist. LEXIS 36957 (N.D. Cal. Mar. 18, 2014) (denying plaintiffs' motion for class certification).

¹⁴ *Clicks Bind Ways Users Agree to Online Terms*, ELEC. FRONTIER FOUND., <https://www EFF.ORG/wp/clicks-bind-ways-users-agree-online-terms-service> (last visited Feb. 5, 2015).

classic Griswoldian *locum secretum*¹⁵) than perennial party plaintiff Malibu Media. Malibu Media is a “copyright troll” that deals in pornography; it knows users will illegally download its content and then sues entire blocks of users for copyright violations.¹⁶ Though the results have been mixed,¹⁷ the recording of Internet Protocol (“IP”) addresses of people while they watch pornography, subsequent Rule 45 subpoenas directed at non-party Internet Service Providers, and lawsuits claiming hundreds of thousands of dollars in damages, illustrate that the kind of privacy a user may think he or she enjoys (and may in fact have enjoyed only a few years ago) no longer exists on the Internet.

What percentage of Internet pornography viewers scrutinize the copyright status of the video about to be viewed and ensure the website from which he or she is going to obtain the video has

¹⁵ See *Griswold v. Connecticut*, 381 U.S. 479 (1965) (holding that married couples enjoy a constitutionally protected right to privacy).

¹⁶ See Gabe Friedman, *The Biggest Filer of Copyright Lawsuits? This Erotica Web Site*, THE NEW YORKER (May 14, 2014), <http://www.newyorker.com/business/currency/the-biggest-filer-of-copyright-lawsuits-this-erotica-web-site>. By some estimates, Malibu Media has brought over 1,000 such copyright enforcement lawsuits. Bill Donahue, *‘Troll’ Patrol: The Inside Story of the Fight Against Prenda*, LAW 360 (Aug. 15, 2014), <http://www.law360.com/articles/567950/troll-patrol-the-inside-story-of-the-fight-against-prenda>.

¹⁷ U.S. District Court Judge Ursula Ungaro noted that an IP address is not a person and hence there was no proof the plaintiff was even in the correct venue (Malibu was attempting to proceed against a John Doe defendant at IP address 174.61.81.171). Order, *Malibu Media, L.L.C. v. John Doe subscriber assigned as IP address 174.61.81.171*, No. 1:14-cv-20213-UU (S.D. Fla. Mar. 19, 2014) (order granting motion to dismiss). U.S. District Court Judge William Conley agreed in a separate matter involving Malibu Media (a case in which Malibu Media’s attorneys were hit with sanctions for a practice of attaching irrelevant exhibits in an attempt to harass defendants). Order, *Malibu Media, L.L.C. V. John Doe subscriber assigned IP address 24.183.51.58*, No. 3:13-cv-00207WMC (W.D. Wis. Sept. 10, 2013) (sanctioning plaintiff’s counsel). For a well-known example where Malibu Media has attempted to claim an IP address is enough to identify a potential defendant, see *K-Beech, Inc. v. John Does 1-37*, CV No. 11-3995, 12-1147, 12-1150, 12-1154 (E.D.N.Y. May 1, 2012) (order, report, and recommendation for defendants K-Beech and Malibu Media); and other matters of same or similar caption filed contemporaneously or immediately subsequent (E.D.N.Y.) (cases several and proper joinder of parties defendant disputed under F.R.C.P. Nos. 19 & 20 and subparts).

properly licensed the video from the rightful owner of its copyright before viewing it? The number is likely similar to the percentage of Google or Facebook users that bother to read the entire User Agreement for those services.¹⁸ But contractual and non-contractual legal considerations are very real on the modern Internet.

Five years ago, any substantial contact—let alone full-blown litigation likely to go to trial—between Internet users and content providers was rare. Most contact consisted of simple advertising, junk email, and other attempts to monetize the (rather modest) amount content providers knew about their users. Today, this has changed dramatically. The amount of information online providers know about their users¹⁹—and the degree to which they are comfortable finding,²⁰ confronting,²¹ suing,²² and intimidating²³

¹⁸ Facebook does not release the number of hits its legal terms pages receive and did not respond to a request for this figure from the author. However, it is safe to assume more people visit and use Facebook than visit the pages displaying the details of the contractual arrangement between user and service provider.

¹⁹ There are, in some cases, statutory limits on what a provider can actually learn about a specific user. For instance, an Internet Service Provider (“ISP”) should generally not be willing to produce individual subscriber or user information without first ensuring requirements laid out in § 631(c) of the Communications Act, 47 U.S.C. § 551(c), have been met. 47 U.S.C. § 551 (2014). Apart from these limitations, however, full-scale surveillance of users by providers is increasingly common.

²⁰ See, e.g., Order, *AF Holdings v. Rogers*, No. 12-cv-01519 (S.D. Cal. Jan. 29, 2013) (granting in part motion to dismiss) (case filed 2012; pertinent documents dated 2012–13).

²¹ See, e.g., *Malibu Media, L.L.C. v. Tashiro*, No. 1:13-cv-205, 2013 U.S. Dist. LEXIS 125897, at *7 (S.D. Ind. Sept. 4, 2013) (owner of online content privately furnished comprehensive list of pornographic videos watched by defendant as intimidation tactic prior to commencing arguably unrelated litigation).

²² See Dana Liebelson, *Why It's Getting Harder to Sue Illegal Movie Downloaders*, MOTHER JONES (Feb. 17, 2014, 6:00 AM) <http://www.motherjones.com/politics/2014/02/bittorrent-illegal-downloads-ip-address-lawsuit> (illustrating the important role of the ISP as a middleman in these battles).

²³ See *Digital Sin, Inc. v. Does 1-176*, No. 12-CV-00126, 2012 WL 263491, at *3 (S.D.N.Y. Jan. 30, 2012) (discussing “coercing unjust settlements from innocent defendants such as individuals who want to avoid the embarrassment of having their names publicly associated with allegations of illegally downloading” (internal quotation marks omitted)). Attorney Mary Schulz, representing Malibu Media, was sanctioned in Wisconsin for filing irrelevant papers with the

users that do not play by their rules—is at an all-time high. Likewise, users are far more likely to stand up for their privacy than they were five years ago,²⁴ and questions about internet privacy are beginning to gain traction in circles of legal scholarship.²⁵

Things are, as they say, “a-changin’” online.

II. PROVIDER CONTRACTS THEN AND NOW: AN EVOLUTION

In 2009, AOL was waning in popularity.²⁶ Oddly, AOL continued to update its Terms of Service in ways contrary to those

court containing a list of pornographic videos viewed by several defendants in an attempt to embarrass or harass users of Malibu Media’s content. Order, Malibu Media, L.L.C. V. John Doe subscriber assigned IP address 24.183.51.58, No. 3:13-cv-00207WMC (W.D. Wis. Sept. 10, 2013) (sanctioning plaintiff’s counsel). Judge Conley noted that even without these extraordinary tactics, “these Internet copyright infringement cases already give off an air of extortion” *Id.* at 9; *see, e.g.*, Malibu Media, L.L.C. v. Reynolds, No. 12-c-6672, 2013 U.S. Dist. LEXIS 31228, at *18–23 (N.D. Ill. Mar. 7, 2013) (discussing content provider attempting to embarrass, intimidate, or harass users by making their consumption of niche pornography public in order to gain upper hand in litigation or in settlement discussions).

²⁴ *In re Google Inc. Gmail Litig.*, No. 13-MD-02430-LHK, 2013 U.S. Dist. LEXIS 172784 (N.D. Cal. Sept. 26, 2013) (existing as part of a broader flurry of litigation accusing Google of violating state and federal anti-wiretapping laws by reading Gmail messages users may have believed to have been private).

According to the Consolidated Complaint, this interception and reading of the email was separate from Google’s other processes, including spam and virus filtering. After [redacted in the original], Plaintiffs alleged that Google continued to intercept, read, and acquire content from emails that were in transit even as Google changed the way it transmits emails. Plaintiffs allege that after [redacted in the original], Google continued to intercept, read, and acquire content from email

Id. at *2 (citations omitted).

²⁵ For instance, a 2009 panel at the University of Chicago raised the issue of whether it is malpractice *per se* for an attorney to use Gmail when communicating with a client. It seems it almost certainly is, as this constitutes an affirmative disclosure of the content of the email to a third-party (Google). Imagine, for instance, that an attorney is representing a company that competes with Google, or is representing a party that is suing Google; the disclosure (to Google) of the contents of the attorney’s conversation with his client could be disastrous.

²⁶ *See Googlestroika I*, *supra* note 1, at 351–53.

of services like Google. Old-Internet businesses, like AOL, still saw themselves as a service and the user as a customer, rather than seeing users as providing a service (sharing data) to their benefit. Consider the following FAQ²⁷ answer from AOL about what happens when a user does not use AOL for 120 days:

If you log in after the 90 days have elapsed, and after the 30-day grace period has elapsed, and find that your username and password still work (which is not guaranteed), your email account will be empty. Any saved data—email, photos, attachments—will be missing, because it will be deleted. For questions like, “Why do I see the welcome message in my AOL Mail account?”, or “Where did my email go?”, or “Why is my email missing?”, this is the answer.²⁸

For new-Internet companies, simply throwing away user data because someone uses the service infrequently is unimaginable. While this data might become “stale” or less indicative of current user behaviors or preferences or purchases, its value is not zero. And in an age where megabytes (or even gigabytes) of disk are essentially free of cost,²⁹ storing tremendous amounts of information is not a problem.

A. *Google, Gmail, YouTube, Google+, and the Mountain View Approach*

The Mountain View Approach is one of contractual convergence: for Google users, on any service, to be operating under very similar terms of service. One interesting aspect of Google’s model is the unified identifier, which Google used for years before Microsoft introduced its Microsoft Live ID, now simply called a Microsoft Account ID. It should be noted that a

²⁷ *Help*, AOL, <https://help.aol.com/articles/Does-my-AOL-Mail-account-get-deactivated-if-I-don-t-use-it-for-90-days> (last visited Jan. 23, 2015).

²⁸ *Id.*

²⁹ As of this writing, Google offers gigabytes of free storage with its Gmail service accounts while Microsoft offers unlimited storage on its OneDrive service to users of its Office software and Apple has expanded the amount of free storage offered by its iCloud service roughly annually since its introduction. Similarly, physical disk drives have come down in cost; whereas a two-gigabyte disk drive was exotic technology for a home PC ten years ago, a 500-gigabyte disk drive is commonplace today and costs less than forty dollars. Matthew Komoroski, *A History of Storage Cost*, <http://www.mkomo.com/cost-per-gigabyte-update> (last updated Mar. 9, 2014).

unified identifier is not the same as a person, and that in some cases (for instance, if account information lapses, or multiple people use a single set of login credentials) it may be difficult or impossible to associate a unified identifier with an individual person.

Because the unified identifier is a per-account (rather than per-person) registration of users, it is possible that a person using a unified identifier is not fully aware of previous assents or agreements to terms of service.

Imagine, for instance, a social club called the Newark Social Club of Chess Players (“NSCCP”). This hypothetical social club uses an email address at “nsccp@gmail.com,” and members of the club are aware the password for this account is “WeEnjoyChess.” Members are encouraged to use the account for club-related email, keeping of the club’s calendar, and so forth. One day, someone logs in using the club’s unified identifier and downloads a song subject to copyright. It may be difficult to locate or identify that person from the unique identifier and IP address logged by Google.

In these cases, providers and content owners have brought lawsuits to match online identities to real-world identities, something that has proven more difficult than one might think. In cases where Google knows or may be able to know the real-world identity of a unique identifier, Google has generally tried to prevent that identity from being disclosed to opposing parties or potential plaintiffs.³⁰ For instance, in *In re John Doe a/k/a “Trooper,” Realtor*,³¹ Google had previously refused to identify a blogger using its services who allegedly posted confidential and defamatory information on a blog hosted by Google.³² Though the trial court ordered Google to disclose the blogger’s real-world identity, Doe a/k/a “Trooper” appealed that order³³ and prevailed in

³⁰ See, e.g., *In re John Doe a/k/a “Trooper,” Realtor*, 444 S.W.3d 603 (Tex. 2014).

³¹ 444 S.W.3d 603 (Tex. 2014).

³² *Id.* at 605.

³³ *Id.* As a matter of procedure, though Google often actively opposes such disclosures, it did not oppose Reynolds’ petition in this particular case. *Id.*

the Texas Supreme Court, where a 5–4 majority held that Google did not have to disclose the blogger’s real-world identity.³⁴

Perhaps most interestingly, in *In re John Doe “Trooper”* in Texas and similar litigation, the First Amendment right to anonymity is explicitly discussed, something the unified identifier system essentially asks the user to entrust to Google.³⁵ In other words, the user is not generally fully anonymous to Google, but is anonymous to third-parties he or she interacts with through Google’s services; the user’s anonymity is—depending upon which of several competing legal theories is invoked—entrusted to, created by, or protected through Google.

Google relies on this “trust in Google” approach in other areas, like Google Maps. In the product Google Maps, the user is asked to accept Google’s User Agreement in exchange for additional services, like remembering recent searches or providing suggestions.³⁶ Google has become so insistent the user accept the User Agreement that the user is asked every time, upon starting Google Maps, to accept the User Agreement.³⁷

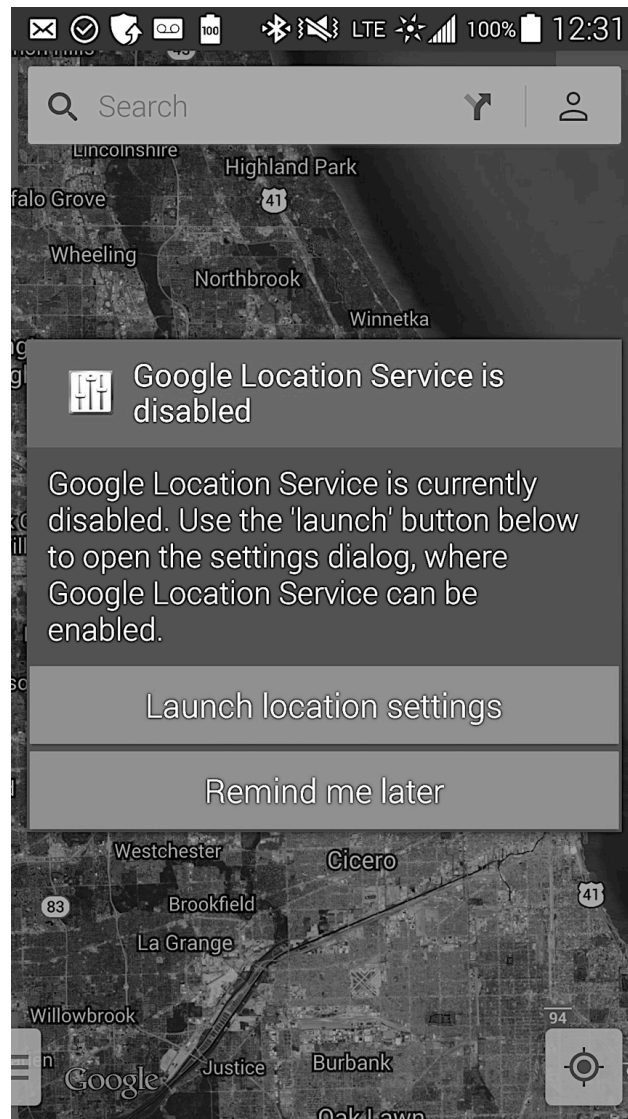
To demonstrate this, I obtained a brand new phone for which there were no “accepts” or “agrees” as to Google’s User Agreement. I opened Google Maps and attempted to use the navigation feature. I received an error that Google Location Service was disabled, which is the default setting when the user has not agreed to the User Agreement.

³⁴ *Id.* Texas recognizes and strictly construes the federal prohibition against a “cable operator” (which includes Internet Service Providers and operators like Google in Texas) revealing a subscriber’s personal information without consent unless such a revelation is “ordered by a court with notice to the subscriber.” *Id.* (quoting *In re John Does 1 and 2*, 337 S.W.3d 862, 864 (Tex. 2011)). There is a substantial lineage of similar cases suggesting a broadening of this federal protection’s interpretation in Texas beginning in the late 1990’s, if not earlier.

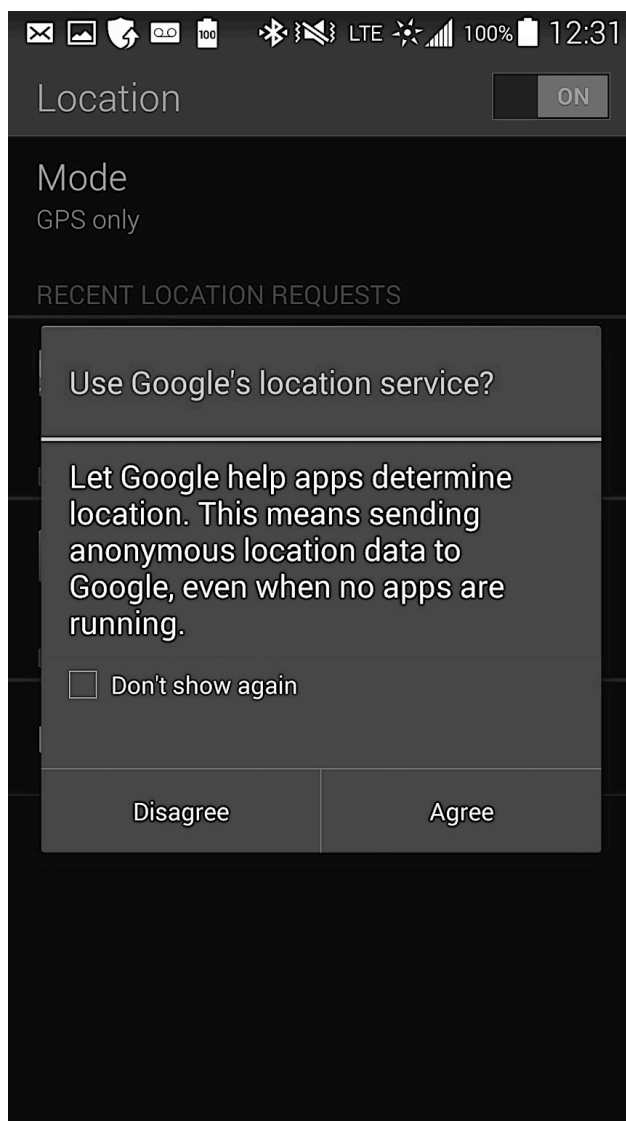
³⁵ *In re John Doe “Trooper,”* 444 S.W.3d at 609.

³⁶ *Google Maps/Earth Additional Terms of Service*, GOOGLE, https://www.google.com/help/terms_maps.html (last visited Feb. 12, 2015). As of February 12, 2015, these additional terms of service were last modified March 1, 2012. *Id.*

³⁷ *Id.*



I then turned on GPS but did not turn on Google Location Service and took care to make sure I did not agree to the Terms of Use. After this, Google prompted me to agree to the Terms of Use and to use the Google Location Service.



Interestingly, the “Don’t show again” checkbox is only available if one presses “Agree.” If one selects the “Don’t show again” checkbox, “Disagree” is disallowed.

This is one of dozens of situations in which Google makes it increasingly difficult to use the features of Android phones, Chrome browsers, and other products without accepting the

company's Terms of Service or User Agreements.³⁸ However, as of this writing, I have managed to (carefully) continue using my Android phone without accepting any of Google's additional User Agreements.

B. *Bing, Xbox, OneDrive, Azure, and the Redmond Approach*

The Redmond Approach is one of terms-for-each-service.³⁹ Even though each product is sold and maintained by Microsoft, the terms of use for Azure are very different from those for Xbox. Azure⁴⁰ and Xbox⁴¹ each have terms of use⁴² very different from those for Skype⁴³ or the terms of service⁴⁴ presented by Nokia⁴⁵ telephones—even though all four are products sold and maintained by Microsoft.

Overall, the Microsoft approach seems to remain product-specific (if one considers Office a single product, for instance). This allows greater specificity such as exactly what data is being gathered and exactly what services are being offered; however, it does not allow for the wholesale inter-product data harvesting that Google seems to engage in.

Microsoft also uses a unified identifier, though the connections between various identifiers may be less obvious to the user than in

³⁸ *Google Terms of Service*, GOOGLE (Apr. 14, 2015) <https://www.google.com/intl/en-GB/policies/terms/> (“By using our Services, you are agreeing to these terms.”).

³⁹ See, e.g., *Microsoft Azure Legal Information*, MICROSOFT, INC., <http://azure.microsoft.com/en-us/support/legal/> (last updated Nov. 2014); *Xbox Live Terms of Service*, MICROSOFT, INC., <http://www.xbox.com/en-US/Legal/LiveTOU> (last modified July 2014).

⁴⁰ Azure is Microsoft's cloud computing platform. *Azure*, MICROSOFT, INC., <http://azure.microsoft.com/en-us/> (last visited Jan. 23, 2015).

⁴¹ Xbox is Microsoft's videogame system. XBOX, <http://www.xbox.com> (last visited Jan. 23, 2015).

⁴² *Azure*, *supra* note 40; *XBOX*, *supra* note 41.

⁴³ Skype is Microsoft's video-calling and video conferencing system. See *Terms of Use*, SKYPE, <http://www.skype.com/en/legal/tou/> (last visited Jan. 23, 2015).

⁴⁴ *Mobile Devices: Terms of Service*, MICROSOFT, INC., <http://www.microsoft.com/en/mobile/privacy/privacy/service-terms/service-terms/> (last visited Jan. 23, 2015).

⁴⁵ Nokia is Microsoft's handheld telephone company. *Lumia and Nokia Phones*, NOKIA, <http://www.nokia.com> (last visited Jan. 23, 2015).

the Google ecosystem. For instance, a user's Microsoft account used to log into a Windows machine or to use OneDrive cloud storage may differ from that user's Skype username or Xbox Live gamertag. However, because they are all linked to a Microsoft account, which historically has been an @live.com email address, but today can take several forms, it is not important which handle is used on a specific Microsoft service.

Unlike Google, Microsoft does not appear to process or read the contents of emails⁴⁶ sent to Microsoft's free email services and does not give periodic messages that might lead users to believe they must assent to additional terms of use to continue to enjoy the services offered.⁴⁷

C. *Facebook and the Menlo Park Approach*

The Menlo Park Approach focuses on future expansion options for compromising a user's privacy and retaining any otherwise-private information already compromised, even if the user terminates his or her use of the service or services. Already, it is impossible for a user to destroy information stored with Facebook

⁴⁶ Unlike Google's Gmail service, Microsoft's email services do not require that the user assent to the reading of the contents of the user's email by Microsoft, though the contents of email may be released pursuant to a court order or other compelling document. Microsoft launched an ad campaign called Scroogled (a combination of "screwed" and "Googled") showing the consequences of Google's ability to search through users' email accounts. Around the same time, it revised its Hotmail terms to be narrower, only allowing three reasons for the release of a customer's email contents: legal demand, danger to property, or danger to personal safety of Microsoft employees. *Microsoft Personal Computing Hardware Devices Privacy Statement*, MICROSOFT CORPORATION (Feb. 2012), <http://www.microsoft.com/hardware/en-ae/downloads/hardware-privacy-statement>. In 2013, this language was later folded into Microsoft's broader services agreement, where it now resides. See *Microsoft Services Agreement*, MICROSOFT CORPORATION (June 11, 2014), <http://windows.microsoft.com/en-us/windows/microsoft-services-agreement>.

⁴⁷ Instead, Microsoft prompts the user for acceptance when he or she logs in to a new Microsoft account. To confirm this, I obtained a new Nokia telephone and opened basic apps like email, Bing Maps, and so forth. None of these apps requested that additional terms of use be assented to in order to use the service.

on less than two weeks' notice and Facebook has commented that artifacts of user information may persist for far longer.⁴⁸

Facebook's approach to privacy is similar to other technology companies that have one core thrust to their business—for instance eBay's User Agreement⁴⁹—making sure any content contributed by the users of that core product immediately becomes company property (as this stream of business is often the only substantial source of user-provided content).

Compare, for instance, the rules for content provided to eBay:

When providing us with content or causing content to be posted using our Services, you grant us a non-exclusive, worldwide, perpetual, irrevocable, royalty-free, sublicensable (through multiple tiers) right to exercise any and all copyright, publicity, trademarks, database rights and other intellectual property rights you have in the content, in any media known now or developed in the future. Further, to the fullest extent permitted under applicable law, you waive your moral rights and promise not to assert such rights or any other intellectual property or publicity rights against us, our sublicensees, or our assignees.

You represent and warrant that none of the following infringe any rights mentioned in the preceding paragraph: your provision of content to us, your causing content to be posted using the Services, and use of any such content (including of works derived from it) by us, our users, or others in contract with us that is done in connection with the Services and in compliance with this User Agreement.

We may offer catalogs including stock images, descriptions and product specifications that are provided by third-parties (including users). You may use catalog content solely in connection with your eBay listings. That permission is subject to modification or revocation at any time at eBay's sole discretion.

While we try to offer reliable data, we cannot promise that the catalogs will always be accurate and up-to-date, and you agree that you

⁴⁸ Facebook insists it will delete content in a timely manner when a user deletes it or deletes his or her account “unless your content has been shared with others, and they have not deleted it,” which is a substantial caveat. In other words, anything shared or re-blogged or “liked” (in some cases) will stay on Facebook. In addition, Facebook keeps backup copies of content even after the user deletes the content from view. See *Statement of Rights and Responsibilities*, FACEBOOK, INC., <https://www.facebook.com/legal/terms> (last visited Jan. 23, 2015) [hereinafter *Facebook Terms*].

⁴⁹ *eBay User Agreement*, EBAY (Aug. 12, 2014), <http://pages.ebay.com/help/policies/user-agreement.html>.

will not hold our catalog providers or us responsible for inaccuracies in the catalogs. The catalog may include copyrighted, trademarked or other proprietary materials. You agree not to remove any copyright, proprietary or identification markings included within the catalogs or create any derivative works based on catalog content (other than by including them in your listings).

—with the rules for content provided to Facebook (in part)⁵⁰—

For content that is covered by intellectual property rights, like photos and videos (IP content), you specifically give us the following permission, subject to your privacy and application settings: you grant us a non-exclusive, transferable, sub-licensable, royalty-free, worldwide license to use any IP content that you post on or in connection with Facebook (IP License). This IP License ends when you delete your IP content or your account unless your content has been shared with others, and they have not deleted it.

When you delete IP content, it is deleted in a manner similar to emptying the recycle bin on a computer. However, you understand that removed content may persist in backup copies for a reasonable period of time (but will not be available to others).⁵¹

—and reflect on the latter’s crux. Transferable multi-layer licenses are at the heart of what Facebook actually acquires when someone uses its service. This might be the right to use a person’s likeness in creating clickbait⁵² for that person’s friends or to use a person’s location and preferences in tailoring targeted advertising.

The downside of this focus on Facebook’s core business (collecting each user’s locations, photographs, preferences, and links) is a user agreement that makes it difficult to branch out into

⁵⁰ *Facebook Terms*, *supra* note 48.

⁵¹ *Id.*

⁵² See generally, James Hamblin, *It’s Everywhere, The Clickbait*, THE ATLANTIC (Nov. 11, 2014), <http://www.theatlantic.com/entertainment/archive/2014/11/clickbait-what-is/382545/>; *You Won’t Believe What These People Say About ‘Click Bait,’* N.Y. TIMES (Nov. 24, 2014), <http://www.nytimes.com/roomfordebate/2014/11/24/you-wont-believe-what-these-people-say-about-click-bait>. “Clickbait” is an industry term used in technology and advertising where a banner or window is constructed with a particularly curious, provocative, or unusual format where the user is likely to click in order to further investigate the item presented to him or her. This might be a photo of a known person or a bizarre claim (e.g. “pharmaceutical companies don’t want you to know that cucumbers are the secret to weight loss”) or a combination of text, photos, and/or video in a montage that invites further investigation.

other areas. When, in 2011, Facebook became interested in how manipulating the contents of a user's newsfeed affected his or her emotional response, an experiment⁵³ was designed that altered Facebook's newsfeed item-sourcing algorithm for over half a million users⁵⁴—but no users were given the informed consent or participatory warnings common (and expected) when social science research is carried out in a hospital or university setting. In fact, when Facebook conducted a psychological study of its users in 2012, its user agreement did not allow for social research.⁵⁵ Facebook amended its user agreement four months after the manipulation occurred, offering little comfort to users whose newsfeeds had already been manipulated as part of the research.⁵⁶ National and international media attention highlighted Facebook's blunder.⁵⁷

D. *Apple, iTunes, and the Cupertino Approach*

In the wake of the 2014 celebrity hacking scandal,⁵⁸ media interest focused on iCloud and other Apple services. Apple had

⁵³ Michelle N. Meyer, *Everything You Need to Know About Facebook's Controversial Emotion Experiment*, WIRED MAGAZINE (June 30, 2014, 3:22 PM), <http://www.wired.com/2014/06/everything-you-need-to-know-about-facebooks-manipulative-experiment/>.

⁵⁴ Michelle Meyer noted that “[f]or one week in 2012, Facebook altered the algorithms it uses to determine which status updates appeared in the News Feed of 689,003 randomly selected users (about 1 of every 2,500 Facebook users). The results of this study were just published in the Proceedings of the National Academy of Sciences (PNAS).” *Id.*

⁵⁵ Kashmir Hill, *Facebook Added ‘Research’ To User Agreement 4 Months After Emotion Manipulation Study*, FORBES (June 30, 2014, 8:16 PM), <http://www.forbes.com/sites/kashmirhill/2014/06/30/facebook-only-got-permission-to-do-research-on-users-after-emotion-manipulation-study/>.

⁵⁶ As of this Article's publication, no users have filed suit against Facebook citing a cause of action related to their unwitting participation in the study.

⁵⁷ See Hill, *supra* note 55; see also Robinson Meyer, *Everything We Know About Facebook's Secret Mood Manipulation Experiment*, THE ATLANTIC (June 28, 2014, 2:51 PM), <http://www.theatlantic.com/technology/archive/2014/06/everything-we-know-about-facebooks-secret-mood-manipulation-experiment/373648/>.

⁵⁸ See *Apple Media Advisory*, APPLE INC., <http://www.apple.com/pr/library/2014/09/02Apple-Media-Advisory.html> (last visited Feb. 16, 2015). The scandal, variously referred to as “The Fappening” and “Celebgate” and often

attempted, for nearly fifteen years, to centralize its approach to privacy management through a single point of contact: iTunes.⁵⁹ iTunes is a piece of media licensing software aimed at consumers that allows individual users to gain a license to enjoy media content.⁶⁰ This content may exist physically on the user's computer or iPod or telephone or in iCloud (where the file is either used remotely over the Internet or downloaded temporarily for use and later deleted).⁶¹

This centralization approach has, from a legal standpoint, advantages and disadvantages. The advantage is that each time a user updates iTunes or attempts to download new content using iTunes, Apple has an opportunity to deny a service if the user does not accept new terms and conditions.⁶² This removes the segmentation-of-contract problem from which Google suffers, where the terms of using the search engine or maps may not be updated when a user watches a video on YouTube (which is owned by Google); in essence, it guarantees that iTunes will provide a robust conduit by which to transmit new terms to the customer and/or to modify contracts already in place. However, it requires users to utilize certain content on certain devices using certain software, meaning unlike a fully-browser-based platform like

improperly referred to as hacking, did not involve hacking. Instead, it involved third parties resetting celebrities' iCloud accounts and exploiting users' weak passwords and predictable security question answers for password reset. It is worth noting that celebrities that turned on multi-factor authentication were not successfully attacked. As a result of this activity, nude photos of some celebrities were obtained and uploaded to the popular website Reddit. *See, e.g.,* Martin Landi, *Stars' nude photo attack may have been down to password codes*, THE INDEPENDENT (January 9, 2014) <http://www.independent.ie/business/technology/news/stars-nude-photo-attack-may-have-been-down-to-password-codes-30552629.html>; Caitlin Dewey, *Meet the unashamed 33-year-old who brought the stolen celebrity nudes to the masses*, THE WASHINGTON POST (September 5, 2014) <http://www.washingtonpost.com/news/the-intersect/wp/2014/09/05/meet-the-unashamed-33-year-old-who-brought-the-stolen-celebrity-nudes-to-the-masses/>.

⁵⁹ *iTunes: Terms and Conditions*, APPLE INC., <http://www.apple.com/legal/internet-services/itunes/us/terms.html> (last visited Jan. 23, 2015).

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

Facebook or Google or Twitter, Apple cannot as quickly acquire assenting customers.

Since 2011, Apple has used a new piece of software on PCs to allow intermediate updates of Apple software even if the user only opens iTunes occasionally.⁶³ This gives an opportunity to affirmatively offer new contract terms even if the user rarely ever uses Apple's iTunes software. To test this, I installed iTunes on a computer in early 2014 and only used it once. About three months later (89 days, to be precise), Apple alerted me that this software needed to be updated and that I would need to accept new terms of use before gaining access to the update. This seems to suggest Apple's strategy may be moving away from iTunes and toward an installer or handler piece of software that serves the user new contract terms on an ongoing basis separate from the user's frequency of iTunes use.⁶⁴

E. *Twitter and the Market Street Approach*

Twitter's Terms of Service are simpler than those of other services discussed here.⁶⁵ It should be noted that Twitter maintains a privacy policy separate from its Terms of Service,⁶⁶ yet another set of rules regarding its use of a user's physical location, in various articles and supplemental documents.⁶⁷

There are two fundamental routes by which people access Twitter, which utilize a blend of Apple's iTunes model and the Google model. Some people access Twitter using the Twitter app⁶⁸

⁶³ Software Update is an Apple product that sits on PCs and prompts the user to perform updates to iTunes, QuickTime, and other Apple products even if the user has not opened or used any of those products lately.

⁶⁴ This is similar to Adobe's Creative Cloud, which periodically offers new terms regardless of how frequently the user uses Adobe Acrobat or Adobe Photoshop.

⁶⁵ *Terms of Service*, TWITTER, INC., <https://twitter.com/tos> (last visited Nov. 21, 2014).

⁶⁶ *Privacy Policy*, TWITTER, INC., <https://twitter.com/privacy> (last visited Nov. 21, 2014).

⁶⁷ The most pertinent document is *FAQs About the Tweet Location Feature*. *FAQs About Tweet Location Feature*, TWITTER, INC., <https://support.twitter.com/articles/78525> (last visited Nov. 21, 2014).

⁶⁸ "App" is an abbreviated form used for "application."

on a mobile phone, while others access Twitter using a web browser. As of November 2015, the two users are presented with slightly different terms of use.

Twitter's default settings in both the app and the web application are more privacy-friendly than Google's, as a general matter. For instance, the default setting for location is set so that Twitter may collect but not make known your location. Meanwhile, on Google's homepage, Google attempts immediately to harvest the user's location information and display it at the foot of the page. Twitter has recently updated its location database to allow more user-friendly identification of a place (a neighborhood rather than a set of coordinates, for instance).⁶⁹

Because Twitter is a relatively new service, Twitter's contract does not need to account for long-term legacy users (unlike Yahoo! or AOL). Therefore, it is not surprising that Twitter's Terms of Service lack discussion of changes in service, changes in subscription schemes, and so on. Also, Twitter almost immediately implemented a data destruction policy, which is a positive thing from the perspective of privacy advocates.⁷⁰

III. JOINING THE NETWORK: USER AGREEMENTS & INITIAL ASSENTS

What follows are very quick summaries of the methods by which people assent to the initial (but not necessarily ultimate) terms of service or similar agreements in the various online ecosystems.

A. Google

The moment a person uses any Google service—including simply typing a word into the box at www.google.com—a person

⁶⁹ From Twitter's FAQ on the topic, "Once you've enabled location services, you will be able to attach a location (such as a city or neighbourhood) of your choice to your tweet. When you are using Twitter for Android or Twitter for iOS your Tweet will also include your precise location (latitude and longitude)." *FAQs About the Tweet Location Feature*, *supra* note 67.

⁷⁰ TWITTER, INC., *supra* note 66. Twitter deletes IP address logs and other identifiable information after eighteen months. *Id.*

agrees to Google's User Agreement.⁷¹ Using Maps and other Google apps will trigger a prompt by which a user may (not must) agree to additional terms.⁷²

B. *Bing*

Like Google, Bing asserts that any use of its services (which include search, but also include maps and other services) indicates the user's assent.⁷³ Other Microsoft services that are account-based like Skype, Xbox Live, and Lync⁷⁴ have separate End User License Agreements and Terms of Service.⁷⁵

In the Microsoft ecosystem, there are multiple routes by which a person could enter into the End User License Agreement—the central terms of service agreement at Microsoft (abbreviated internally and in some external literature as “EULA”). Three routes by which an individual could enter an EULA are explored in the following paragraphs.

The first is that a person could own an earlier version of a piece of Microsoft software. When that person upgrades the software, he or she would receive a fresh copy of the EULA and be prompted to agree. Historically, the generation of the EULA would match the generation of the software being installed and would reside on the physical floppy disk, CD, or DVD from which the software is installed. Today, the newest EULA is typically fetched over the Internet, so all users are synchronized—to the greatest degree possible—as to what terms they have agreed to.

⁷¹ See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1452 (7th Cir. 1996); *Googlestroika 1*, *supra* note 1, at 341; U.C.C. §§ 2-204(1), 2-602(1), 2-606(1) (2003).

⁷² See *Googlestroika 1*, *supra* note 1, Part II (a), at 6.

⁷³ *Microsoft Services Agreement*, *supra* note 47.

⁷⁴ Microsoft has announced Lync will be re-branded Skype for Enterprise or similar, but as of this Article's writing the final branding has not yet been released. Hence, it appears here as Lync. See Gurdeep Pall, *Introducing Skype for Business*, SKYPE (Nov. 11, 2014), <http://blogs.skype.com/2014/11/11/introducing-skype-for-business/>. While Bing is account-based, it can also be used without an account like Google's search engine.

⁷⁵ See, e.g., *Azure*, *supra* note 40.

The second is that a person could download new software from either the Store (a feature of Windows 8 and higher) or a Microsoft website (such as office.com) and be prompted to accept new terms before being allowed to continue.

The third is that a person could buy a Microsoft device like a Surface tablet or a Windows Phone and be prompted to accept terms of service before using the device.

C. *Facebook*

By creating a Facebook account linked to an email address, the user creating the Facebook account accepts Facebook's Terms of Service and makes a series of guarantees to Facebook, including:

1. You will not post unauthorized commercial communications (such as spam) on Facebook.
2. You will not collect users' content or information, or otherwise access Facebook, using automated means (such as harvesting bots, robots, spiders, or scrapers) without our prior permission.
3. You will not engage in unlawful multi-level marketing, such as a pyramid scheme, on Facebook.
4. You will not upload viruses or other malicious code.
5. You will not solicit login information or access an account belonging to someone else.
6. You will not bully, intimidate, or harass any user.
7. You will not post content that: is hate speech, threatening, or pornographic; incites violence; or contains nudity or graphic or gratuitous violence.
8. You will not develop or operate a third-party application containing alcohol-related, dating or other mature content (including advertisements) without appropriate age-based restrictions.
9. You will not use Facebook to do anything unlawful, misleading, malicious, or discriminatory.
10. You will not do anything that could disable, overburden, or impair the proper working or appearance of Facebook, such as a denial of service attack or interference with page rendering or other Facebook functionality.
11. You will not facilitate or encourage any violations of this Statement or our policies.⁷⁶

⁷⁶ *Facebook Terms*, *supra* note 49.

Facebook clearly states “By using or accessing Facebook, you agree to th[e] Statement [of Rights and Responsibilities.]” at several locations on its website.⁷⁷

D. *Apple*

Apple has changed its legal theory regarding when the contract between Apple and its users takes effect. As of this Article, this interpretation appears untested in the courts. Originally, these terms took effect when the user began to use iTunes and the terms were enforced using an end user license agreement type of scheme, as one would enforce anti-piracy measures in a software package’s user agreement.⁷⁸ Today, Apple appears to contend that the terms of service take effect even before a user uses any of Apple’s software, by the mere “possession” of certain files meant for use with Apple’s software. For instance, possession of a file formatted to be read by iTunes—even if the possessor does not have any Apple software with which to read the file—appears to, under Apple’s theory of contract, subject the user to certain restrictions and rules beyond those ordinarily provided by copyright law in the United States.⁷⁹

⁷⁷ *Id.*

⁷⁸ Drew Hasselback, *What’s in the small print? Why clicking ‘I Accept’ is the same as signing your name on a paper contract*, FINANCIAL POST (Sept. 6, 2014, 7:30 AM) <http://business.financialpost.com/2014/09/06/whats-in-the-small-print-why-clicking-i-accept-is-the-same-as-signing-your-name-on-a-paper-contract/>.

⁷⁹ While this is not provided in the iTunes Terms of Use (which governs the iTunes software, but not the iTunes service), it is alluded to in the Terms and Conditions of the iTunes store (which governs the use of the iTunes online service and store, but not the software on the user’s computer), where much iTunes music is obtained. The interpretation hinges on the interpretation of the word “records” and whether this means files formatted for use with iTunes in the somewhat controversial clause with the heading “electronic contracting” in the iTunes Store Terms and Conditions under §A. APPLE INC., *supra* note 60.

E. *Twitter*

The Twitter terms apply to the user as soon as the user creates an account, while the terms regarding location services and privacy apply as soon as the user tweets for the first time.⁸⁰

IV. LEAVE NO TRACE? GOING OFF THE GRID

The nature of social networks, real and virtual, is that people come and go. The question of how a person leaves a social network is perhaps more legally-interesting than the procedure by which a person joins that network. This section explores the nuances of the user departure mechanisms for each of the services.

A. *Leaving Google*

Whether for privacy concerns or other reasons, a person might want to leave Google and destroy data that has been maintained during the user's contractual relationship with Google. This is more difficult than it might first appear, as Google is a series of not wholly separate, but legally and functionally distinguishable services.

1. *Gmail as a Distinguishable or Separate Service*

Some have raised the question of whether Gmail is a separate service from Google.⁸¹ The Gmail service is bound by separate terms of use in some regards. However, the Gmail address is the central identifier of users in the universe of Google services, making it difficult to separate Gmail from other Google services.⁸² This can be thought of as similar to Microsoft's use of a live.com email address as a central identifier.

⁸⁰ TWITTER, INC., *supra* note 65. ("By accessing or using the Services you agree to be bound by these Terms.").

⁸¹ See *In re Google Inc. Gmail Litig.*, No. 13-MD-02430-LHK, 2013 U.S. Dist. LEXIS 172784 (N.D. Cal. Sept. 26, 2013).

⁸² Paul Tassi, *Google Plus Creates Uproar Over Forced YouTube Integration*, FORBES (Nov. 9, 2013, 10:24 AM), <http://www.forbes.com/sites/insertcoin/2013/11/09/google-plus-creates-uproar-over-forced-youtube-integration/>. Until recently, this was not true of YouTube, which maintained that separate usernames for people hosting content on YouTube. *Id.* However, in 2013 Google began to require YouTube users to associate their identities with a Gmail address. *Id.*

In both cases, a person can use a separate identifier.⁸³ However, the question of whether Gmail is a distinguishable service is less about the substance of Gmail, which is the ability to send and receive electronic mail, and more about the extent to which Gmail is entangled with other Google services.

2. *YouTube as a Separate Set of Agreements*

YouTube existed—and flourished—prior to Google's acquisition of the video-sharing service in 2006.⁸⁴ However, YouTube's legal structure was substantially different prior to Google's acquisition.⁸⁵ Immediately upon login during November 2006, YouTube users were prompted to re-assent to YouTube's user agreement, plus a rider that included Google terms of use. By early 2007, YouTube's terms of use had become very similar to Google's. In late 2013, Google merged the Gmail username regime with YouTube's user list, making it essentially impossible to use YouTube as a standalone service separate from a Google account.⁸⁶ Because YouTube uses a different content type than most Google services—high-bandwidth-demand video content that must be available on a near-instantaneous stream-and-buffer basis—its user bases and usage patterns are different.⁸⁷

⁸³ For instance, karl.muth@lawreview.edu could be associated with a Google account or a Microsoft account, even though this might not be an address resident on Google's or Microsoft's servers.

⁸⁴ See Paul R. La Monica, *Google To Buy YouTube for \$1.65 Billion*, CNN, (Oct. 9, 2006, 5:43 PM), http://money.cnn.com/2006/10/09/technology/googleyoutube_deal/index.htm.

⁸⁵ Most notably, Google quickly added what is now § 1.4 of the Terms of Service, binding anyone using the service. Prior to the Google acquisition, only those uploading content were bound by the Terms of Service, not those merely viewing content. *Terms of Service*, YOUTUBE, <https://www.youtube.com/static?gl=GB&template=terms> (last visited Feb. 6, 2015).

⁸⁶ See *Using your Google Account for YouTube*, YOUTUBE, <http://support.google.com/youtube/answer/69961> (last visited Feb. 16, 2015); see also Paul Tassi, *Google Plus Creates Uproar Over Forced YouTube Integration*, FORBES (Nov. 9, 2013, 10:24 AM), <http://www.forbes.com/sites/insertcoin/2013/11/09/google-plus-creates-uproar-over-forced-youtube-integration/>.

⁸⁷ See *Demographics*, THINKWITHGOOGLE, <https://www.thinkwithgoogle.com/products/youtube-demographics.html> (last visited Feb. 16, 2015).

3. *Incognito Browsing within Chrome: An Exception?*

It is possible to use Incognito mode in Google's Chrome browser and still be logged in to Google, Gmail, YouTube, and other Google services. In this scenario, the person browsing is clearly identifiable. Even without being logged in, the IP address of the person is unique and can be associated with a small group of Google's users at a given location or a particular user at a given location.

A key question is whether the user is worried primarily about inadvertently broadcasting information to websites (for instance, to advertisers or potential advertisers) or worried mostly about traces of his or her browsing activity that may remain on the local computer.

Though Incognito browsing does not accept cookies,⁸⁸ it does allow access to cookies that Google has already placed on the computer to identify the user. These include the standard Google tracking cookies that nearly all users have within their browsers, for instance `_utma`,⁸⁹ `_utmb`,⁹⁰ and `_utmz`.⁹¹ Because cookies are not fully partitioned from the Incognito browsing experience, Chrome

⁸⁸ *Browse in private (incognito mode)*, GOOGLE, <https://support.google.com/chrome/answer/95464?hl=en> (last visited Feb. 16, 2015). Cookies are tiny bits of software code that can be queried or examined by websites to detect return visitors, provide targeted advertising, keep a user's online "shopping carts" in order, etc. See Anne Flaherty, *Retailers Are Watching You With Technology That Reveals What Kind of Shopper You Are*, BUSINESS INSIDER (Nov. 28, 2013, 8:02 AM), <http://www.businessinsider.com/retailers-are-watching-you-with-technology-that-reveals-what-kind-of-shopper-you-are-2013-11>.

⁸⁹ *Google Analytics Cookie Usage on Websites*, GOOGLE, <https://developers.google.com/analytics/devguides/collection/analyticsjs/cookie-usage> (last visited Dec. 30, 2014). This is the unique visitors cookie; it has many functions, but its primary function is to ensure that when a given user visits a website a given number of times the user is not mistaken for a new visitor each time. *Id.*

⁹⁰ *Id.* This is Google's favored session tracking cookie, which attempts to monitor and store as much information as possible, within a cookie's size constraints, about the user's session or visit. *Id.*

⁹¹ *Id.* This is Google's traffic sources cookie; it lets advertisers tell whether the user arrived on their sites through an ad, through a Google search, or through some other path. *Id.* Its core purpose is to help advertisers estimate routing of user traffic from outside websites to their websites' internal pages, particularly product pages. *Id.*

may still access cookies that had been planted by advertisers in the past during an Incognito session. This creates the possibility of targeting a user with advertising or, more likely, updating user activity information (particularly for shopping) despite Incognito being turned on. It would be difficult for Google to entirely forego the monitoring of Incognito users, especially since one of the primary advertised uses of Incognito mode is online banking (and secure online shopping)—exactly the types of transactional activities that Google is presumably interested in monitoring and influencing.⁹²

From a consumer protection standpoint, the upside of the Incognito browsing feature is that none of the standard files valued by advertisers or others are actually written to the local hard drive during Incognito browsing. However, substantial traces of web activity—which may be accessed by advertisers or other parties who are particularly aggressive or who are using an exploit or who have local access—remain in memory and Chrome continues to update pagefile.sys and hiberfil.sys even when it is set to Incognito mode.⁹³ This means these files, if accessed, can help an advertiser or other party identify, target, and communicate to users.

B. *Leaving Bing*

Users do not “leave Bing” in the same sense they leave Google, as the central piece of the Microsoft ecosystem is the user ID, rather than a specific set of services (in the case of Google, this set of services is centered on search, Gmail, Google+, and YouTube).

⁹² Google explicitly notes that “Neither Incognito mode nor Guest mode makes you invisible on the web. Websites you visit, your employer, or your service provider can still see your browsing activity.” *Browse In Private (Google Chrome)*, GOOGLE, INC., <https://support.google.com/chrome/answer/95464?hl=en> (last visited Feb. 7, 2015). Among other activities, Google encourages using Incognito mode for online banking—many online banking sites encourage this. See, e.g., *Browser Settings for Online Banking*, DIGITAL CREDIT UNION, <https://www.dcu.org/online-banking/browser-settings.html> (last visited Feb. 7, 2015).

⁹³ See *Google Chrome Privacy Notice*, GOOGLE (Nov. 12, 2014), <https://www.google.com/chrome/browser/privacy/>. To Google’s credit, dates and times are “scrubbed” by Chrome after a browsing session when all windows and tabs are closed. *Id.* However, local files do record sites that were visited. *Id.*

In other words, it is not the use of Microsoft's search engine that usually initiates the contractual relationship with Microsoft, unlike in the case of Google.

1. *Azure as a Separate Set of Services*

Unlike Google, which has attempted to unite all its services under terms of service that are cousins, if not siblings, to each other, Microsoft has used a very different approach. Microsoft's EULA and terms of use vary substantially between products, and perhaps in no instance more than with Azure.

Azure hosts an enormous volume of data and data processing. However, this data is vulnerable to intrusion by government entities under the USA PATRIOT Act,⁹⁴ and Microsoft amended its Azure terms of service after the National Security Administration domestic spying revelations of 2013. It is unclear whether the matter must be one of "national security" or what "national security" means in this context—for instance, does storage of corporate spreadsheets in the cloud justify an invasion to investigate these spreadsheets, perform forensic accounting on them, and hand over pertinent documents to the Internal Revenue Service in an instance where underpayment of taxes is suspected? What about in the case of a company that is a defense contractor where fraud or collusion in pricing is alleged?

Like Google, Microsoft establishes that events outside its control—including USA PATRIOT Act investigative activity—may prevent Microsoft from allowing the level of security and privacy that it would otherwise desire to provide. These contractual carve-outs are seemingly substantially larger in Azure (and OneDrive) than in the case of other Microsoft EULAs (e.g. Hotmail).⁹⁵

2. *Skype as a Quasi-Social Service*

Skype is not a social network. However, it is a communication platform that is similar in some aspects to social media. Ever since the earliest days of Ethernet, the question of messages privacy has been meaningful during both stored written and real-time

⁹⁴ USA PATRIOT Act of 2001, Pub. L. 107-56, 115 Stat. 272.

⁹⁵ See, e.g., *Azure*, *supra* note 40.

communications. Skype provides good security against third-parties by encrypting Skype traffic, meaning an advertiser who might be curious which neighborhood you and your partner are discussing to sell you real estate or which car you test-drove today to sell you a competing model are unlikely to be able to gain access to your Skype calls. However, Skype's purchase by Microsoft in 2011 for \$8.5 billion⁹⁶ made people skeptical of Skype's privacy settings—would Microsoft really give up access to valuable advertising data for the sake of user privacy?

Thus far, it appears that Microsoft has chosen to favor user privacy over the mining of advertising data. Microsoft also likely recognizes that a substantial portion of Skype's paying customers are businesses who use the service to talk to clients or to have business meetings and that many of these companies—especially those in the technology sector—would not want Microsoft eavesdropping on their communications.

3. *InPrivate Browsing within Internet Explorer: An Exception?*

Microsoft calls its private browsing feature "InPrivate." The InPrivate feature within Internet Explorer is incrementally more private than Google's Chrome Incognito mode, but it still leaves traces of the online session and still contaminates the local page file with information about the user's online activities.⁹⁷ Again, the question is whether the user is primarily concerned with not broadcasting information about him- or herself inadvertently to websites or more concerned about not leaving local traces of his or her browsing sessions. The InPrivate feature does a relatively good job at the former and a worse job at the latter.

Notably, the InPrivate browsing mode still writes a .dat file every time a new tab is opened, and this file is surprisingly descriptive.

⁹⁶ Peter Bright, *Microsoft Buys Skype for \$8.5 Billion. Why, Exactly?*, WIRED (May 10, 2011), <http://www.wired.com/2011/05/microsoft-buys-skype-2/>.

⁹⁷ Lance Mueller, *How Private is Internet Explorer's InPrivate Browsing?* . . . First define "private," Magnet Forensics (July 23, 2013), <http://www.magnetforensics.com/how-private-is-internet-explorers-inprivate-browsing-first-define-private/>.

The .dat files are then sorted into various folders. To see this mechanism in action, a user might simply open the path above adding the \Active\ subdirectory and open a tab in Internet Explorer using the InPrivate browsing feature. That user would see a .dat file created almost immediately, as the creation time of this file indicates when the tab was opened. The file itself is very informative.⁹⁸ The file also may contain login information that would allow an aggressive advertiser or an analytics bot to exploit the file to learn more about the user than would be known in the file's absence. The .dat file also contains the title of the tab,⁹⁹ the last three pages visited in the tab, and other information.

The concept of InPrivate browsing may be misleading in the colloquial sense in that users may presume that during InPrivate browsing no data is being written to the local hard drive indicating the user's wanderings on the Internet. This presumption is untrue. However, a nuanced perception is not communicated by Microsoft in any of the legal documents or user agreements that accompany Windows 8.1 or Internet Explorer as of this writing. The newest Microsoft Software Supplemental License Terms¹⁰⁰ also make no mention of InPrivate browsing and, from a legal perspective, the services provided by Microsoft during an InPrivate browsing session are not represented to be different from those provided during a normal browsing session in Internet Explorer.

⁹⁸ For more on the creation and maintenance of the index.dat file and its contents, see EricLaw, *A Primer on Temporary Internet Files*, IEINTERNALS (Mar. 19, 2011, 8:34 AM), <http://blogs.msdn.com/b/ieinternals/archive/2011/03/19/wininet-temporary-internet-files-cache-and-explorer-folder-view.aspx>.

⁹⁹ The title of the tab may be very interesting to advertisers. For example, suppose someone is considering purchasing a Honda Civic automobile.

¹⁰⁰ See *Software Supplemental Licensing Terms*, MICROSOFT, INC., <http://windows.microsoft.com/en-us/internet-explorer/products/ie-9/end-user-license-agreement> (last visited Dec. 30, 2014). These terms are updated with such frequency that any terms provided here will almost undoubtedly be obsolete by the time of this Article's publication. However, these updated terms are normally available at an address that looks like this: [windows.microsoft.com/en-US/\(product\)/products/\(productversion\)/end-user-license-agreement](http://windows.microsoft.com/en-US/(product)/products/(productversion)/end-user-license-agreement). To use the example of Internet Explorer Version X, the path would look like this: [windows.microsoft.com/en-US/\(product\)/products/\(productversion\)/end-user-license-agreement](http://windows.microsoft.com/en-US/(product)/products/(productversion)/end-user-license-agreement).

From a privacy standpoint, Internet Explorer's creation of files during InPrivate browsing that indicate user activity is concerning because advertisers and other interested parties may be able to glean consumer information that could not be obtained otherwise. As an example, suppose an advertiser is attempting to learn whether the same consumer in the earlier example has already purchased a Honda Civic or whether the person is continuing to be interested. If that customer visits a website, even if the user is using InPrivate browsing mode, and logs in to learn about pricing or availability of new or used cars, that log-in information—including usernames and passwords—will be stored in the .dat file. This means an advertiser or other party who gains access to the .dat file can re-create the user's visit to that website and potentially capture information about the user's activities on the site, for what the user searched, and so forth.

C. *Leaving Facebook*

This is the correspondence a departing user receives from Facebook via the registered email address within a few minutes of deleting an account:

30 June 2014

03:46 Eastern Daylight Time

Hi [Username],

We have received a request to permanently delete your account. Your account has been deactivated from the site and will be permanently deleted within 14 days.

If you did not request to permanently delete your account, please login to Facebook to cancel this request:

<https://www.facebook.com/login.php>

Thanks,

The Facebook Team¹⁰¹

1. *Facebook's Download Feature and Its Purpose*

When a user departs from Facebook, he or she is presented with the option of downloading a file containing the account information from his or her Facebook account. This information is incomplete, particularly as to photos, which are provided in far

¹⁰¹ I started and then deleted a Facebook account as an experiment.

lower resolution than their upload resolution. It does indicate posts and applications used and various other activity on the user's virtual Facebook "wall." The decision to provide low-quality photos may be a measure to attempt to retain users who use Facebook as a photo album service, who may have deleted photos from their original source after they are uploaded.

2. *Facebook's Two-Week Waiting Period*

Facebook claims that all personal data will be deleted from Facebook two weeks after a member's account is deleted.¹⁰² This, however, does not appear to be true.¹⁰³ To test this, I terminated two Facebook accounts. I took the direct link to a JPEG file (a photo of me and my friend Lisa on Account A) and saved the address of this link, which any person visiting my Facebook page could have done. Interestingly, this was a photo that had not been included in my download .zip archive file for Account A. I also took the direct link to a JPEG file (a photo of me and my friend Liz on Account B) and saved the address of this link, which any person visiting my Facebook page could have done. This was a photo that appeared in the download .zip archive file for Account B.

On July 14, 2014—the fourteenth day—the test photo from Account A was still available.¹⁰⁴ By the sixteenth day, the test photo was no longer available. On the fourteenth day, the test photo for Account B was not available, so there appears to be some heterogeneity in delete times.

¹⁰² *How Do I Delete My Account*, FACEBOOK INC., <https://www.facebook.com/help/224562897555674> (last visited Feb. 6, 2015); *see also Deactivating, Deleting, and Memorializing Accounts*, FACEBOOK INC., <https://www.facebook.com/help/359046244166395/> (last visited Feb. 6, 2015).

¹⁰³ *See Deactivating*, *supra* note 102 ("It may take up to 90 days to delete all of the things you've posted, like your photos, status updates or other data stored in backup systems.").

¹⁰⁴ The direct link to this photo is: https://fbcdn-sphotos-b-a.akamaihd.net/hphotos-ak-prn1/t31.0-8/10339311_501455529983130_5146602591680529608_o.jpg (last accessed July 14–15, 2014; unable to access on July 16, 2014 onward; not accessed despite attempts between and on July 24, 2014 and December 24, 2014).

3. *Private Browsing and Facebook: An Exception?*

Facebook logs a particularly invasive assortment of information about users.¹⁰⁵ This includes information about the user's type of computer (or handheld device), geographical location (determined either by IP address block or by GPS), browser type, operating system, and so on.¹⁰⁶ It appears to be able to access and log this type of information even when some browsers' private browsing modes are enabled, perhaps providing users a false sense of security. Of course, when a user is not logged in to Facebook, the information logged may not be as easily attributed to an individual, but it is still "less anonymous" than it might be in other contexts.

D. *Leaving Apple*

The primary barrier to leaving Apple's ecosystem of products is quickly eroding. Because iTunes was the central hub of most users' interactions with Apple, the strength of Apple's grip on those users is greatly diminished in an era of rented music.¹⁰⁷ Ten years ago, it was common for users to purchase songs or albums and for those songs and albums to physically reside in an iPod or desktop computer.

Today, many people listen to free internet radio, listen to terrestrial radio stations over the internet (so-called radio streaming or radio-over-IP), or subscribe to services like Pandora and Spotify where they enjoy the fleeting possession of a song (often only "possessing" the thirty or sixty seconds of a song the app or

¹⁰⁵ See *Downloading Your Info*, FACEBOOK, INC., <https://www.facebook.com/help/131112897028467/> (Feb. 6, 2015). This information will be different for different users, but is available for each user to download and review. *Id.*

¹⁰⁶ The unique characteristics such as one's IP address, screen resolution, operating system and browser version, are also recorded by the social networking site. Byron Acohido, *Facebook tracking is under scrutiny*, USA TODAY (Nov. 16, 2011), <http://usatoday30.usatoday.com/tech/news/story/2011-11-15/facebook-privacy-tracking-data/51225112/1>.

¹⁰⁷ See Hannah Karp, *Apple iTunes Sees Big Drop in Music Sales*, WALL ST. J., (Oct. 24, 2014), <http://www.wsj.com/articles/itunes-music-sales-down-more-than-13-this-year-1414166672>

browser caches) rather than an entire song file as was true in the days of the MP3.¹⁰⁸

As fewer people depend upon iTunes as a repository for audio and video content, it becomes easier for users to migrate away from Apple. From a privacy perspective (if a user does not want records kept of what type of music the user enjoyed, how often and so on, then these are the current best steps to take), a user should delete his or her entire iTunes library and then de-authorize every computer currently authorized under iTunes. However, the user must then announce his or her departure from the Apple product ecosystem and demand Apple destroy his or her user ID data.¹⁰⁹

E. *Leaving Twitter*

Most users who leave Twitter don't take any affirmative action. Rather, they simply stop using their Twitter accounts. However, under the current Terms of Use, Twitter does not delete Twitter accounts simply because they are used infrequently.

This type of "user atrophy" can lead to users unintentionally abandoning accounts or forgetting about information they've uploaded in the past. Less problematic, perhaps, in the case of Twitter, as it is meant for contemporaneous commentary or content and there is a widespread understanding that posts on Twitter ("tweets") are quickly obsolete. However, in the case of links posted to resumes, biographical information, or other documents users may neglect to update, this can be problematic.

A better practice would be to remind or alert users to accounts that have sat unused. This could save space for providers while allowing users to delete accounts that are no longer used, desired, or up-to-date.

¹⁰⁸ See Tracy V. Wilson, *How Streaming Video and Audio Work*, HOW STUFF WORKS (Feb. 6, 2015), <http://computer.howstuffworks.com/internet/basics/streaming-video-and-audio.htm>. To understand why a user need not "possess" a complete music file in order to listen to a portion of it, this article is helpful. *Id.*

¹⁰⁹ See Lou Hattersley, *How to Remove Your Apple ID Completely*, MACWORLD (Oct. 18, 2013), <http://www.macworld.co.uk/how-to/mac/how-remove-your-apple-id-completely-shut-down-your-itunes-store-icloud-other-accounts-3474388/> (explaining the technical aspects of how to shut down an Apple iTunes or iCloud account).

V. HYPOTHETICAL LITIGATION & OPERATIVE ANALOGIES

No service seems to invite litigation as loudly as Gmail. Because Google not only possesses, but also reads,¹¹⁰ every Gmail message, Gmail creates many opportunities for litigation. Here, I give two hypothetical examples.

A Google Non-Employee uses Gmail to contact a Google Employee. Each uses a Gmail account. The Google Employee is delighted to receive the email from the Google Non-Employee, which congratulates her on the news that she is pregnant. The next day, the Google Employee is fired from Google. She asserts that the reason for her termination is Google's interception and reading of an email from the Google Non-Employee regarding her pregnancy since Google monitors the contents of all Gmail traffic.

Inventor X retains Attorney Y to litigate against Google, which Inventor X alleges is unlawfully using the subject of his patent without a licensing arrangement. Attorney Y uses his law firm's email address to email Inventor X at i-invent-things@gmail.com¹¹¹ regarding litigation strategy and acceptable settlement amounts, which Attorney Y estimates will be between \$200,000 and \$500,000. Minutes later, Google's algorithms process the email. Inventor X brings an action against Attorney Y for professional negligence asserting that sending pertinent information to a Gmail address was akin to sending a copy of privileged correspondence to a party opponent as Google monitors the contents of all Gmail traffic.

¹¹⁰ See Alexei Oreskovic, *Google Explains Exactly How it Reads All Your Email*, HUFFINGTON POST (Apr. 14, 2014, 5:41 PM), http://www.huffingtonpost.com/2014/04/15/gmail-ads_n_5149032.html; Parses might be a more accurate term than reads, but Google has access to the content of mail messages sent via Gmail and uses that content to better target users with advertising and other services. *Id.*; see, e.g., Alistair Barr, *Google Can Read Your Emailed Bills and Remind You to Pay Up*, WALL ST. J. (Oct. 7, 2014, 6:25 PM), <http://blogs.wsj.com/digits/category/news-makers/google/page/4/>; Samuel Gibbs, *Gmail Does Scan All Emails, New Google Terms Clarify*, THE GUARDIAN (Apr. 15, 2014, 8:24 PM), <http://blogs.wsj.com/digits/2014/10/07/google-can-read-your-emailed-bills-and-remind-you-to-pay-up/>.

¹¹¹ This is a fictitious Gmail address used merely for purposes of illustration.

VI. A COMPROMISE? CONSIDERING NEW CONTRACT IDEAS FOR SOCIAL NETWORKS

At one extreme is Google, which focuses primarily and tirelessly on discovering and archiving user information, with ever-expanding contract terms to support its activities. At the other end of the spectrum are startups like Duck Duck Go and other search engines that do not store any search information or information about users.¹¹²

Services must endeavor to do a better job in communicating the security and privacy realities of the services they offer to users.¹¹³ In this regard, Microsoft and Google have continuously improved their practices, while Apple and Facebook have lagged behind.

Anyone interested in sites that collect and share content should examine the terms of service of the photo-hosting site Imgur, which seem both interesting and fair.¹¹⁴

The entire terms of use statement¹¹⁵ for Imgur—including supplementary language and linked pages—is less than 1,000 words in length, contains a minimal amount of legal or technical jargon,¹¹⁶ and does not include hyperlinks to lengthy supplemental

¹¹² See *We Don't Collect or Share Personal Information*, DUCK DUCK GO, <https://duckduckgo.com/privacy> (last visited Feb. 6, 2015). Duck Duck Go is a startup search engine provider that distinguishes itself from competitors by not saving searches or search results. Duck Duck Go does not require users create an account. See also *About Us*, DUCK DUCK GO, <https://duckduckgo.com/about> (last visited Feb. 6, 2015).

¹¹³ Progress will only come from consumer literacy around privacy issues, which will force service providers to compete with one another on the basis of the degree of privacy provided. While the Federal Trade Commission and other entities have taken an interest in deceptive acts and unlawful practices (and applied this to murky terms of service in select cases), consumers cannot rely upon an overloaded and under-resourced government entity to police every contract they enter into. FTC enforcement in this area dates back to the Dingell hearings of the Reagan era, but enforcement in the context of new companies like Facebook and Google has been slow. See FTC Statement on Deception, 103 F.T.C. 110, 174 (1984).

¹¹⁴ The site's name is pronounced like "imager."

¹¹⁵ See *Terms of Service*, IMGUR, <http://imgur.com/tos> (last visited Dec. 14, 2014).

¹¹⁶ The most jargon-ridden portion is entitled "The Details," the current version of which is Version 3.2 updated October 22, 2014. *Id.*

policy statements¹¹⁷ or disclaimers or exceptions that users are unlikely to read. The user's anonymity is preserved unless the user creates an account, but an account is not needed for most site functionality to be available. Imgur also has other policies that contribute to the privacy of its users, such as automatically eliminating EXIF data from all photos (which can be used to determine the date, time, and camera associated with a photo) immediately upon upload and destroying photos that have not been viewed for six months (preventing scenarios where a long-forgotten photo is dug up and used in a meme or for some unintended purpose).

The user information Imgur does collect is not auctioned to third-party advertisers, though cookies and other identifiers may be used to serve advertisers to users. Advertisers are not permitted to license photos for use in banner ads or other settings, and most information collected is destroyed within a reasonable amount of time.¹¹⁸ While Imgur does not offer users the option to download a copy of their Imgur-maintained user data, it is likely this data is so sparse that it would reveal little about the user—Imgur does offer an API by which the user can query Imgur and see data Imgur has stored about him or her during activities on the site.¹¹⁹ Unlike Facebook, no automatically-curated package of user information is available to the less-sophisticated user for viewing.

As an example, a photo uploaded to 4chan or Google's Picasa service may contain embedded EXIF or GPS data that might let a person locate where the photo was taken—particularly troubling if the photo is taken in, for instance, a teenager's bedroom. Imgur's policy of automatically scrubbing such potentially-dangerous metadata transmitted by unwitting amateur photographers is welcome and an important step in partitioning data as it is shared.

¹¹⁷ See *Privacy Policy*, IMGUR, www.imgur.com/privacy (last visited Dec. 13, 2014). Imgur does offer one relevant supplemental statement as to privacy. *Id.*

¹¹⁸ *Id.* For information on this type of contemporary destruction of user data, see Christopher "Moot" Poole, *The Case for Anonymity Online*, TED (Feb. 2010), https://www.ted.com/talks/christopher_m00t_poole_the_case_for_anonymity_online (discussing a site with essentially zero user data retention).

¹¹⁹ See *API Endpoints: Account*, IMGUR, <https://api.imgur.com/endpoints/account> (last visited Dec. 3, 2014) (providing information on how to use this API).

Imgur is not perfect. However, some blend of Imgur's emphasis on privacy in deleting some user information instantly, not retaining user or payments information longer than is needed, destroying photos that have not been viewed for a while, removing unnecessary information that might identify a user, and a more privacy-friendly list of default settings is important.¹²⁰ This would do much to increase user comfort with online services and would prevent scenarios where the operation of systems unreasonably—and sometimes unexpectedly—tramples upon the privacy expectations of users. The recent celebrity photo leaks, which resulted from the normal operation of Apple's iCloud service,¹²¹ highlight the importance of having consumer expectations synchronized with the default settings and normal operation of sharing services.

While much has changed in the past five years, user concern about and scrutiny of user agreements and terms of service is growing. Policies will not change until customers both expect and demand more privacy. The ideal systems will safeguard the privacy that already exists by building analogous privacy in the virtual world for privacy enjoyed in the real world. Further, the ideal systems will create new types and levels of privacy that users can enjoy while, at the same time, enjoying the search engines and social networks on which they rely.

¹²⁰ See NUDGES, <https://nudges.wordpress.com> (last visited Dec. 14, 2014). For more on the importance and relevance of default rules or default settings, see *Posts Tagged 'Default Rules,'* NUDGES, <https://nudges.wordpress.com/tag/default-rules/> (last visited Dec. 14, 2014) (providing examples of the influence of defaults).

¹²¹ Apple to Tighten iCloud Security After Celebrity Leaks, BBC NEWS, (Sept. 5, 2014, 5:25 AM), <http://www.bbc.com/news/technology-29076899>.