NOTES

IRRATIONALITY BOUND: TERMS OF USE LICENSES AND THE BREAKDOWN OF CONSUMER RATIONALITY IN THE MARKET FOR SOCIAL NETWORK SITES

AARON T. CHIU*

I. INTRODUCTION

Social network sites are revolutionizing the way people communicate and interact online. Sites such as Facebook, MySpace, and Twitter provide individuals with vast online spaces to share copious amounts of personal information and content.1 We are fast approaching an era of lessened control and privacy because our lives are being transplanted onto the Internet.2

There is a growing debate about which measures are appropriate to address the emerging online market of personal information—a market that is created by social networking sites and sustained with terms of use licenses. Some legal scholars argue that the existing law governing standard-form contracts suffices.3 Others argue that current contract law fails to adequate-

* Class of 2012, University of Southern California Gould School of Law; A.B. 2009, Princeton University. Thank you to Professor Jack Lerner, who encouraged me to write about something that ignited my passions. Thank you to the board and staff of the Interdisciplinary Law Journal for their hard work on getting this piece to publishable form. And thank you to my parents, Arthur and Jena, whose undying love and support have led me to where I am today.

1. See John Palfrey & Urs Gasser, Born Digital: Understanding the First Generation of Digital Natives 21–23 (2008) (discussing the trend of disclosing increasing amounts of information online and expressing social and personal identities on social network sites to the same degree as one does in the real world).

2. Id. at 40 (“In previous eras, third parties held information about individuals, but in nowhere near the amounts held in the digital era. . . . What’s different in the digital age is that the speed with which these data-collection practices are growing has reached an extraordinary clip.”).

ly protect consumers, and they call for greater judicial scrutiny of the contracts that are emerging online.\(^4\)

The desire to communicate and socialize is becoming the largest driver of online activity.\(^5\) Thus, focusing on social network sites and how their terms of use licenses bind users is particularly relevant if social networking is to become the most common Internet activity. There is a growing mismatch between the legal enforceability of online terms of use license agreements and the expectations of the average user. This disconnect allows social network sites to contract away ownership and control over the copious amounts of information that their users post.\(^6\)

This Note argues that the legal assumptions about standard-form contracts are incorrect in the context of social networking sites. The law’s position is premised on the assumption that when faced with the decision to enter into a standard-form contract or accept a terms of use license, the average user acts rationally.\(^7\) The law also assumes that competitive market forces influence businesses to adopt similar terms that are more or less fair.\(^8\) However, social networks are unique. When it comes to decisions about whether to join a particular social network site and assent to its terms of use license, consumer rationality is bounded.\(^9\) Moreover, there is no competitive market for social networks because they have a tendency to become monopolies.\(^10\) Thus, to the extent competition would correct for consumers’ occasional suboptimal decisions by driving businesses to offer

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\(^5\) Today, more than twice as many individuals use the Internet to socialize and communicate, rather than to do business or shop. See Ruder Finn Intent Index, http://www.intentindex.com/index.html (last visited Oct. 24, 2011).

\(^6\) Allyson W. Haynes, Online Privacy Policies: Contracting Away Control over Personal Information?, 111 Penn St. L. Rev. 587, 588 (2007) (“Increasingly, privacy policies have become the place where website operators can limit their liability for certain treatment of personal information by disclosing that they might in fact do exactly that.”).


\(^8\) See Hillman & Rachlinski, supra note 3, at 438–39.

\(^9\) See infra Part II.

\(^10\) David Easley & Jon Kleinberg, Networks, Crowds, and Markets: Reasoning About a Highly Connected World 509 (2010) (discussing how social network sites exhibit network effects and the tendencies of such sites to become monopolies).
reasonable terms in their standard forms, this effect is absent in the market for social network sites.\footnote{11}

This Note develops this argument by applying the law governing standard-form contracts to the terms of use licenses used by social network sites to demonstrate why the law threatens to enforce terms that may harm users. Consequently, it argues that courts should abandon their current assumptions regarding standard forms when scrutinizing contract terms used by social networks sites. It also suggests that particular terms should be statutorily barred.

Part II discusses the development of law on standard-form contracting and how courts have applied this law to electronic contracts. It then outlines two competing decision-making models—rational choice theory and bounded rationality theory—and how rational choice theory guides the law’s treatment of standard-form contracting. Part III discusses the social network phenomenon and lays out how these information products are unique, even in the world of Internet commerce. Part IV argues that the legal presumption that standard contract terms are per se valid threatens to harm consumers when applied to social network sites. Part V sets forth prescriptive remedies.

II. LEGAL APPROACHES TO STANDARD-FORM CONTRACTS IN THE PAPER AND ELECTRONIC WORLDS

The law treats electronic contracts—often called license agreements—as nothing more than digitized versions of the standard form.\footnote{12} Traditional contract principles govern their enforceability.\footnote{13} This section first examines the rationales behind the general presumption that standard-form contracts in the paper world are per se valid. It then discusses the law’s extension of this logic to electronic contracting and, in particular, online terms of use licenses.

\footnote{11. See infra Part IV.}
\footnote{12. See Register.com, Inc. v. Verio, Inc., 356 F.3d 393, 403 (2d Cir. 2004) (“While new commerce on the Internet has exposed courts to many new situations, it has not fundamentally changed the principles of contract.”).}
\footnote{13. See Specht v. Netscape Commc’ns Corp., 306 F.3d 17, 31 (2d Cir. 2002) (explaining that the requirement of constructive notice of the existence of contract terms applies equally in the “world of paper transactions,” as it does in the “emergent world of online product delivery”).}
A. STANDARD-FORM CONTRACTING

Standard-form contracting originated in the nineteenth century when the advent of mass production created the need for standardized contracts that manufacturers and suppliers could expect the other party to accept.\footnote{14} A standard-form contract is composed of unalterable terms; assent is not conditioned on whether or not the terms are read or understood.\footnote{15} These standard, unalterable terms reduce transactions costs because bargaining for alternative terms is disproportionately costly compared with the risk of harm a party faces in accepting the boilerplate terms.\footnote{16}

Today, individuals confront standard forms in almost all routine transactions.\footnote{17} From a valet ticket to a car lease, these contracts are ubiquitous in modern day commerce.\footnote{18} In a typical transaction, a business’s agent presents a standard form to the customer in a face-to-face encounter.\footnote{19} The form is used repeatedly by the business. The average customer reads few, if any, of the lengthy terms steeped in legalese.\footnote{20} The consumer probably does not comprehend the terms, and any objectionable term cannot be altered. More often than not, the consumer signs the form and is bound to the agreement.\footnote{21}

Standard-form contracting is not only a significant source of private law, but also “has become a considerable portion of all the law to which we are subject.”\footnote{22} The ubiquity of these forms reflects their necessity in an economy characterized by the mass production of goods and services.\footnote{23} Standard forms streamline and reduce the costs of the contracting process—especially for repeated sales of a particular good or service.\footnote{24} More-

\begin{itemize}
\item \footnote{14} James R. Maxeiner, Standard-Terms Contracting in the Global Electronic Age: European Alternatives, 28 YALE J. INT’L L. 109, 113 (2003).
\item \footnote{15} Id. at 114.
\item \footnote{16} Hillman & Rachlinski, supra note 3, at 436.
\item \footnote{17} See W. David Slawson, Standard Form Contracts and Democratic Control of Lawmaking Power, 84 HARV. L. REV. 529, 529 (1971) (“Standard form contracts probably account for more than ninety-nine percent of all the contracts now made.”).
\item \footnote{18} Id. at 529–530. See also Hillman & Rachlinski, supra note 3, at 435–37 (discussing the prevalence of standard-form contracts in day-to-day consumer transactions).
\item \footnote{19} Hillman & Rachlinski, supra note 3, at 435.
\item \footnote{20} Id.
\item \footnote{21} See id. at 435–37 (providing a general overview of the average standard-form transaction). See also Maxeiner, supra note 14, at 113–14.
\item \footnote{22} Slawson, supra note 17, at 530.
\item \footnote{23} Id.
\item \footnote{24} Id. at 531.
\end{itemize}
there is no bargaining over a standard-form contract. This departure from the traditional contractual notion of bargained-for exchange defines modern-day commerce.25

There are a few basic assumptions about an average consumer’s expectations regarding standard-form contracts. The average consumer is likely to be cognizant of the fact that: (1) boilerplate terms in a standard form are presented on a take-it-or-leave-it basis; (2) a majority of the terms are likely incomprehensible; (3) terms are unlikely to differ amongst similar businesses; and (4) risks allocated to the consumer are unlikely to materialize.26 In light of these assumptions, courts and commentators agree that standard-form contracts are generally enforceable despite lacking the element of bargained-for exchange.27 The idea of “blanket assent” further supports the presumed validity of standard paper forms: “[A]lthough consumers do not read standard terms, so long as their formal presentation and substance are reasonable, consumers comprehend the existence of the terms and agree to be bound to them.”28 This reduces transactions costs for both businesses and consumers.29 Standard forms allow businesses to allocate risks efficiently; in repeat transactions, businesses know best which risks they can bear and which are better allocated to the consumer.30 Efficient allocation of such risks reduces costs for businesses.31 These savings also translate to savings for the consumer.32

Furthermore, overly harsh terms in a standard form can be mitigated by competition and judicial oversight. Competition drives businesses to adopt comparable standard terms because a business offering less favorable

25. Id. at 529 (“The contracting still imagined by courts and law teachers as typical, in which both parties participate in choosing the language of their entire agreement, is no longer of much more than historical importance.”).


27. See Richard L. Hasen, Efficiency Under Informational Asymmetry: The Effect of Framing on Legal Rules, 38 UCLA L. REV. 391, 428 (1990) (“Both the Restatement and ‘law and economics’ adherents recognize that adhesion contracts are neither read nor understood, but they contend the contracts should be enforced . . . .”). See also Restatement (Second) of Contracts § 211 cmt. f (1981).


29. Hasen, supra note 27, at 426.


31. Id.

32. Id.
terms stands to lose consumers to competitors.\textsuperscript{33} Moreover, within a particular industry, businesses allocate risks similarly.\textsuperscript{34} Just as the price of a good converges in a competitive market, the contents of a standard contract converge upon a similar set of terms in a competitive industry.\textsuperscript{35}

Consumers are not left in the dark. As standard terms become ubiquitous, consumers become more familiar with them and are able to identify suspect or overly harsh terms.\textsuperscript{36} In the aggregate, this knowledge influences the competitive marketplace by pressuring competing businesses to provide more favorable standard terms.\textsuperscript{37}

However, some factors reduce incentives for businesses to draft non-offensive terms into their standard-form contracts. First, consumers rarely read standard terms and are unlikely to understand them.\textsuperscript{38} Without a comprehension of potentially offensive contract terms, it is unlikely that consumers can translate such information into market forces.\textsuperscript{39} The result is reduced pressure on firms to alter their standard terms.\textsuperscript{40} Second, even if some consumers do comprehend boilerplate terms, it is doubtful that an informed minority can effectively transmit such information to the market.\textsuperscript{41} Third, businesses intentionally frame contract terms in a manner that reduces a consumer’s willingness to review them meticulously.\textsuperscript{42} Finally,

\begin{itemize}
  \item[] 33. \textit{Id.} at 438–39.
  \item[] 34. \textit{Id.}
  \item[] 35. \textit{Id.} at 439.
  \item[] 36. \textit{Id.}
  \item[] 37. \textit{Id.} at 440.
  \item[] 38. \textit{Id.} at 435–36.
  \item[] 39. \textit{Hasen, supra note 27, at 428.}
  \item[] 40. \textit{Id.}
  \item[] 41. \textit{R. Ted Cruz & Jeffrey J. Hinck, Not My Brother’s Keeper: The Inability of an Informed Minority to Correct for Imperfect Information, 47 Hastings L.J. 635, 636 (1996) (“[T]he informed minority . . . cannot in practice generally correct for imperfect information.”).}
  \item[] 42. \textit{Hillman & Rachlinski, supra note 3, at 448–49. See also Michael I. Meyerson, The Reunification of Contract Law: The Objective Theory of Consumer Form Contracts, 47 U. Miami L. Rev 1263, 1270 (1993) (“[B]usinesses hardly want the consumer to read form contracts. If the purpose of using a form is to achieve uniformity in transaction, individualized negotiations will defeat that purpose. . . . [B]usinesses, like consumers, are short of time and prefer not to have their turnover slowed by hordes of consumers pausing to peruse pages of legalese.”).}
\end{itemize}
the ability of consumers to make fully informed and rational decisions is limited by such cognitive factors as the tendency to underestimate risk.43

When these factors fail to mitigate overly harsh terms, the courts can provide protection. These circumstances are rare, however, as courts rarely find standard-form contracts void.44 They are generally presumed to be valid and courts are reticent to find them void.45 When courts analyze police standard-form contracts, they apply either the doctrine of unconscionability or the doctrine of reasonable expectations.

The doctrine of unconscionability provides that a contract is unenforceable when it is formed in the absence of meaningful choice and contains terms that are unreasonably favorable to one party.46 For a particular clause or contract to be found unconscionable, procedural and substantive unconscionability must both be present.47 Procedural unconscionability focuses on whether assent occurred freely or whether it was influenced by oppression and surprise.48 Oppression exists when unequal bargaining power results in the lack of negotiation between the parties and an absence of meaningful choice on the part of one of the parties.49 Surprise “involves

43. See Melvin Aron Eisenberg, The Limits of Cognition and the Limits of Contract, 47 STAN. L. REV. 211, 216 (1995) (“[A]ctors will not process information perfectly even if they wish to do so, because human ability to calculate consequences, understand implications, and make comparative judgments on complex alternatives is limited. . . . [A]s a systematic matter, people are unrealistically optimistic.”).

44. See Todd D. Rakoff, Contracts of Adhesion: An Essay in Reconstruction, 96 HARV. L. REV. 1173, 1176 (1983) (“[T]here is a central theme that runs through the old law and the new: contracts of adhesion, like negotiated contracts, are prima facie enforceable as written.”).

45. Id.

46. See U.C.C. § 2-302 cmt. 1 (2003). See also Stirlen v. Supercuts, Inc., 60 Cal. Rptr. 2d 138, 145 (Ct. App. 1997) (“Under the U.C.C. provision, [u]nconscionability has generally been recognized to include an absence of meaningful choice on the part of one of the parties together with contract terms which are unreasonably favorable to the other party.”) (internal citations and quotation marks omitted).

47. Stirlen, 60 Cal. Rptr. 2d at 145 (“The prevailing view is that these two elements must both be present in order for a court to exercise its discretion to refuse to enforce a contract or clause under the doctrine of unconscionability.”). In what was originally a critique of U.C.C. § 2-203, Arthur Leff, Assistant Professor of Law at Washington University Law School, proposed this judicial framework for analyzing the unconscionability doctrine, which in his analysis required the presence of both procedural and substantive elements. See Arthur Allen Leff, Unconscionability and the Code—The Emperor’s New Clause, 115 U. PA. L. REV. 485, 487 (1967).

48. Stirlen, 60 Cal. Rptr. 2d at 145.

49. Id.
the extent to which the supposedly agreed-upon terms of the bargain are hidden in the prolix printed form drafted by the party seeking to enforce the disputed terms.

Substantive unconscionability focuses on whether particular contract terms are overly harsh or produce one-sided results. Substantive unconscionability must be evaluated at the time the agreement is formed. While both procedural and substantive unconscionability must be found for a contract to be unenforceable, their presence need not be equally strong. Courts invoke a sliding scale; where one element is particularly strong, courts are willing to overlook the presence of only a lesser degree of the corresponding element.

Courts may, less commonly, apply the doctrine of reasonable expectations: “Where the other party has reason to believe that the party manifesting such assent would not do so if he knew that the writing contained a particular term, the term is not part of the agreement.” Courts will overturn express contract terms if they are at odds with a consumer’s reasonable expectations. In addition, the doctrine imposes an affirmative duty on businesses to identify and explain reasonably unexpected terms even if they are expressly presented in the standard form. This doctrine’s application, however, is largely limited to insurance contracts.

In sum, the current legal approach to standard-form contracts places a general confidence in the notion of blanket asset and the competitive market to yield reasonable contract terms, while also allowing courts the dis-

50. Id.
51. Id.
52. Id.
53. Id.
55. Id. (“[T]he more substantively oppressive the contract term, the less evidence of procedural unconscionability is required to come to the conclusion that the term is unenforceable, and vice versa.”).
56. See Restatement (Second) of Contracts § 211(3) (1981).
58. Hillman & Rachlinski, supra note 3, at 460.
59. See generally Thomas, supra note 57.
cretion to negate terms that are unreasonable, overly harsh, or procured unfairly.60

B. STANDARD-FORM CONTRACTS IN ELECTRONIC COMMERCE

Standard forms have entrenched themselves in the world of electronic commerce.61 In many ways, electronic transactions involving standard forms mimic traditional face-to-face transactions with paper forms.62 Consumers confront standard terms that are unalterable and that are often too complex to comprehend. They manifest assent through an electronic input, such as clicking a mouse.63

License agreements are the most common standard contract used in transactions involving information products such as software and online services.64 Consumers do not purchase the information product itself. Instead, they purchase licenses that grant and limit access to these products: “In typical information license agreements, the licensor retains ownership of the information and grants permission for the use of the information.”65

Although the product is the license, the license is also the contract. A license’s hybrid nature—as both the contract and the product itself—allows the commercialization of software and other information services at a low cost.66 Similar to how standard forms reduce transaction costs, licenses also eliminate the need for individual negotiations before each sale of an infor-

60. See Hillman & Rachlinski, supra note 3, at 461–62; Maxeiner, supra note 14, at 116.
61. Hillman & Rachlinski, supra note 3, at 464. See also Robert W. Gomulkiewicz, The License Is the Product: Comments on the Promise of Article 2B for Software and Information Licensing, 13 BERKELEY TECH. L.J. 891, 897–98 (1998) (“Today, a wide variety of organizations employ standard form contracts to provide software and information to the mass market. . . . Standard form contracts are not only ubiquitous in modern commerce; they are also regarded as an efficient method of distribution . . . .”).
62. Hillman & Rachlinski, supra note 3, at 468–69 (discussing the similarities between standard-form contracting online and in person).
63. See id. at 469.
65. Id. at 1368. See also Gomulkiewicz, supra note 61, at 896 (“For most software products, the license is the product; the computer program provides functionality to the user, but the license delivers the use rights.”).
national product, especially one that is widely distributed. Moreover, licenses protect non-copyrighted information from resale or redistribution by contractually limiting the ways it can be used.

Licenses have raised new issues regarding traditional notions of assent. Unlike a paper form, in which a consumer assents by signing the form, businesses use various methods to elicit assent to their licenses. Three types of licenses have emerged in the digital age and they are named according to how they procure assent: shrink-wrap, click-wrap, and browse-wrap.

1. Shrink-Wrap Licenses

Shrink-wrap licenses are placed on the outside packaging of a technology product and a contract is formed when the consumer unwraps the product packaging. Sellers dictate how a consumer assents to the license: by opening a box or ripping through the packaging.

One of the first cases to address shrink-wrap licensing—Step-Saver Data Systems, Inc. v. Wyse Technology—held them unenforceable. Step-Saver used Wyse’s operating system in the custom computer packages it sold to businesses. The companies negotiated the sale of the software over the phone and Wyse delivered the software prepackaged with a shrink-wrap license containing warranty provisions and a disclaimer of liability. When the operating systems turned out to be defective, Step-Saver sued Wyse for a breach of warranty. Wyse argued that Step-Saver’s claims were barred by the disclaimer in the shrink-wrap agreement.

The Third Circuit held that the warranty provisions and the disclaimer terms in the shrink-wrap license were unenforceable. Applying section 2-207 of the Uniform Commercial Code (“U.C.C.”), the court held that Step-

67. Streeter, supra note 64, at 1368 (“[License agreements] are thus central to the commercialization of software, information and other digital commodities.”).
68. Id. at 1368–69.
70. Streeter, supra note 64, at 1372.
72. Id. at 93–94.
73. Id. at 96–97.
74. Id. at 94.
75. Id. at 94–95.
Saver and Wyse formed a contract when they negotiated the sale over the phone; thus, the warranty and disclaimer in the shrink-wrap license were additional terms to which Step-Saver had not assented.\footnote{The Third Circuit explained that U.C.C. section 2-207 precludes Step-Saver’s opening of the software packaging and installation of the software on their computer systems from constituting constructive assent: UCC § 2-207 establishes a legal rule that proceeding with a contract after receiving a writing that purports to define the terms of the parties’ contract is not sufficient to establish the party’s consent to the terms of the writing to the extent that the terms of the writing either add to, or differ from, the terms detailed in the parties’ earlier writings or discussions. Id. at 99.} Other cases holding shrink-wrap terms unenforceable have similarly relied on U.C.C. section 2-207.\footnote{See Ariz. Retail Sys., Inc. v. Software Link, Inc., 831 F. Supp. 759, 764–65 (D. Ariz. 1993) (holding that a software shrink-wrap license was merely a proposal to modify an existing purchase agreement and therefore not enforceable under U.C.C. section 2-207). See also Klocek v. Gateway, Inc., 104 F. Supp. 2d 1332, 1340–41 (D. Kan. 2000).}

Courts began to analyze shrink-wrap licenses differently as they became more popular. In ProCD, Inc. v. Zeidenberg, the Seventh Circuit held that shrink-wrap licenses are enforceable despite the lack of negotiation prior to the sale of licensed software to an end user.\footnote{ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449 (7th Cir. 1996).} ProCD created and sold two versions of an electronic phone directory—one for business use and a cheaper version for personal use.\footnote{Id. at 1450–51.} A truncated version of the license was displayed on the box and the full version flashed on the screen before the software could be installed.\footnote{Id. at 1450.} The license prohibited end users from redistributing the software.\footnote{Id.} After buying a copy of ProCD’s software and posting it on the Internet, ProCD sued to enjoin Matthew Zeidenberg from further violating the license.\footnote{Id. at 1450–51.}

The Seventh Circuit rejected Zeidenberg’s claim that he was bound only to the license terms on the software box and not the more extensive terms that were displayed on screen during the software installation process.\footnote{Id. at 1450–51.} The court saw little difference between shrink-wrap licenses and traditional standard paper forms even though shrink-wrap licenses do not give rise to a contract until after the consumer pays for the product and un-
wraps it. The enforceability of shrink-wrap terms reinforces similar goals of efficiency and reduced costs for both sellers and consumers; otherwise, sellers would be forced to make “broad warrant[ies] and . . . pay consequential damages for any shortfalls in performance, two ‘promises’ that if taken seriously would drive prices through the ceiling or return transactions to the horse-and-buggy age.”

Although Step-Saver remains good law, it is distinguishable from ProCD because it involved a transaction between two businesses, whereas the transaction in ProCD involved the sale of software between a business and an individual consumer. Thus, ProCD validated the shrink-wrap license as a legitimate counterpart to standard paper form contracting for end-user information software transactions. The reasoning in ProCD has gained traction and is echoed in subsequent cases addressing whether shrink-wrap licenses, like standard paper form contracts, are presumptively valid agreements.

2. Click-Wrap Licenses

Click-wrap licenses display the terms of the license on a screen or website and elicit assent by requiring the user to click “I accept” or “I agree.” This method of procuring assent is most like standard paper forms because it presents the consumer with the license terms and makes it clear that clicking “I agree” creates a binding agreement. The user cannot pro-

84. *Id.* Judge Easterbrook explained:
Transactions in which the exchange of money precedes the communication of detailed terms are common. Consider the purchase of insurance. . . . [T]he device of payment, often with a ‘binder’ (so that the insurance takes effect immediately even though the home office reserves the right to withdraw coverage later), in advance of the policy, serves buyers’ interests by accelerating effectiveness and reducing transactions costs. . . . Consumer goods work the same way.

*Id.* at 1451.

85. *Id.* at 1452.

86. See, e.g., M.A. Mortenson Co. v. Timberline Software Corp., 998 P.2d 305, 313 (Wash. 2000) (relying on the reasoning in ProCD to hold that terms limiting consequential damages in a shrink-wrap license for construction bidding software were enforceable and not unconscionable).


88. See *id.* at 449 (explaining that click-wrap licenses avoid potential U.C.C. section 2-207 problems).
ceed without clicking “I agree.”

In *Recursion Software, Inc. v. Interactive Intelligence, Inc.*, Recursion Software (“Recursion”) sued Interactive Intelligence (“Interactive”), a fellow software developer, for breach of contract, alleging that Interactive embedded Recursion’s Voyager software into its own product, Interactive Recorder, in violation of Recursion’s terms.

The court found that Interactive had, in fact, assented to Recursion’s terms of use license because Voyager could only be downloaded if a user assented to Recursion’s terms by clicking a button on the Voyager download page. The court inferred the existence of assent to the program’s license terms from the fact that employees at Interactive could not have downloaded and embedded Voyager unless they clicked the button on Recursion’s website.

Courts have found click-wrap agreements unenforceable in the rare instance where there is no evidence that a user assented by clicking “I Agree.” For example, in *Softman Products Co. v. Adobe Systems Inc.*, the District Court for the Northern District of California refused to enforce Adobe’s software license, which prohibited the breakup and sale of individual parts of its packaged software.

The court found that because Softman Products (“Softman”) never actually installed any of Adobe’s software, but just split up Adobe’s software packages and distributed the parts individually, it did not assent to Adobe’s license agreement. Although the outer packaging of the software indicated that the user was subject to a software license, the court found that Softman’s knowledge of the license was insufficient to establish assent.

89. *Id.*
90. *Id.*
92. *Id.* at 783.
93. *Id.*
95. *Id.* at 1087–88.
96. *Id.* at 1087.
Cases similar to *Softman* are rare.\(^97\) Click-wrap licenses rarely result in disputes over whether a contract was formed, because they provide users with notice of an agreement and require an explicit manifestation of assent.\(^98\)

3. **Browse-Wrap Licenses**

Browse-wrap licenses are either displayed on a website’s main page or on a separate page that is accessible by a link.\(^99\) The user is not required to view the license; rather, assent is implied through the continued use of the website. Some courts find that merely placing the contract terms on the website, and inferring assent simply because a user browses the website, is insufficient to create a binding agreement.\(^100\) Other courts are less troubled with the notion of constructive assent and focus on whether a user had sufficient notice of a pending agreement.\(^101\)

In *Specht v. Netscape Communications*, Internet users brought a class action against Netscape, a software producer, alleging that its SmartDownload plug-in program invaded users’ privacy by transmitting personal information to Netscape.\(^102\) SmartDownload was a plug-in program that accompanied Netscape’s Communicator web-browser software.\(^103\) Although users had to assent to Communicator’s license agreement by clicking “Yes”
before installing the software, the license made no mention of SmartDownload.\textsuperscript{104} Rather, users merely had to click “Download” to install the SmartDownload plug-in.\textsuperscript{105} Netscape moved to compel arbitration, arguing that the plaintiffs’ claims regarding SmartDownload were subject to the arbitration provision contained in Communicator’s license agreement.\textsuperscript{106}

The Second Circuit held the arbitration provision was unenforceable as applied to claims regarding Netscape’s SmartDownload software.\textsuperscript{107} Netscape failed to provide adequate notice that its SmartDownload program was subject to a license agreement: “Plaintiffs were responding to an offer that did not carry an immediately visible notice of the existence of license terms or require unambiguous manifestation of assent to those terms.”\textsuperscript{108}

Although commentators often suggest that \textit{Specht} is a case that casts doubt on the enforceability of browse-wrap licenses,\textsuperscript{109} the Second Circuit did not hold that browse-wrap licenses are unenforceable as a matter of law—it merely held that Netscape provided insufficient notice that upon the download and installation of the SmartDownload plug-in, one would be bound to a license agreement.\textsuperscript{110}

The narrow holding in \textit{Specht} was reiterated in \textit{Register.com v. Verio}, in which the Second Circuit explained that the enforceability of a license agreement turns on whether there is sufficient notice of an agreement’s existence and not the way in which it requires assent.\textsuperscript{111} The Second Circuit explained that it saw “no reason why the enforceability of the offeror’s terms should depend on whether the taker states (or clicks), ‘I agree.’”\textsuperscript{112} Here, Register, a domain name registrar, sued to enjoin Verio, a company selling website development and design, from soliciting the personal information of individuals and companies who had registered a domain name

\begin{itemize}
  \item \textsuperscript{104} \textit{Id.}
  \item \textsuperscript{105} \textit{Id.} at 31.
  \item \textsuperscript{106} \textit{Id.} at 25.
  \item \textsuperscript{107} \textit{Id.} at 20.
  \item \textsuperscript{108} \textit{Id.} at 31.
  \item \textsuperscript{109} See, e.g., Femminella, \textit{supra} note 69, at 105–06.
  \item \textsuperscript{110} \textit{Specht}, 306 F.3d at 32 (“We conclude that in circumstances such as these, where consumers are urged to download free software at the immediate click of a button, a reference to the existence of license terms on a submerged screen is not sufficient to place consumers on inquiry or constructive notice of those terms.”).
  \item \textsuperscript{111} \textit{Register.com, Inc. v. Verio, Inc.}, 356 F.3d 393, 403 (2d Cir. 2004).
  \item \textsuperscript{112} \textit{Id.}
\end{itemize}
with Register. As a domain name registrar, Register had to provide free public access to the contact information of those who had registered domain names with its service. Every time a query for this information was made on Register’s website, however, the website displayed a browse-wrap agreement notifying the user of their agreement to not use the contact information for solicitation purposes. Verio argued that, like the plaintiffs in Specht, it was not bound to Register’s license agreement because it lacked notice of the terms.

The Second Circuit rejected Verio’s argument, noting that in Specht, because users visited Netscape’s website only once to download its software, “[t]here was no basis for imputing to the downloaders of Netscape’s software knowledge of the terms on which the software was offered.” In contrast, because Verio repeatedly visited Register’s website to access the contact information of domain name registrants, “each day [Verio] saw the terms of Register’s offer . . . [so] it was fully aware of the terms on which Register offered the access.” Coupled with Specht, Verio reflects the common view by courts that browse-wrap licenses are valid so long as they provide sufficient notice to the user that a binding agreement is being offered.

C. THE LAW’S APPROACH TO ELECTRONIC LICENSE AGREEMENTS AND STANDARD-FORM CONTRACTS IS THE SAME

Although shrink-wrap, click-wrap, and browse-wrap licenses present different issues regarding assent, the law treats them as nothing more than digital analogues to standard forms. As the Second Circuit noted in Verio:

While new commerce on the Internet has exposed courts to many new situations, it has not fundamentally changed the principles of contract. It is standard contract doctrine that when a benefit is offered subject to stated conditions, and the offeree makes a decision to take the benefit with knowledge of the terms of the offer, the taking constitutes an acceptance of the terms, which accordingly become binding on the offeree.

113. Id. at 395.
114. Id. at 396.
115. Id.
116. Id. at 402.
117. Id.
118. Id.
119. Id. at 403.
Beyond the element of assent, courts have also scrutinized particular license terms with traditional contract principles. Like most standard-form contracts, the terms most commonly disputed and subject to unconscionability and public policy attack are forum selection and arbitration clauses. The law’s approach to a claim that a particular arbitration or forum selection clause is unconscionable is the same whether the term exists in a standard form or in an electronic license.

Perhaps unique to license agreements are claims that federal copyright law preempts them to the extent that particular terms restrict end users from engaging in certain activities, such as reverse engineering. These arguments, however, have not gained traction in the law. So while electronic license agreements presented courts with new issues regarding assent, they have consistently applied traditional contract principles in assessing the enforceability of these agreements.

D. DECISION-MAKING THEORIES UNDERLYING THE LAW’S APPROACH TO STANDARD-FORM CONTRACTS

1. Rational Choice Theory

The law’s position that standard-form contracts are presumptively valid in both the paper and electronic worlds is based on the assumption that individuals are acting rationally when they provide blanket assent. Pursuant to this school of thought—known as rational choice theory—the assumption is that decision-makers are able to: (1) estimate the probability of the various potential outcomes of a choice; (2) perceive the cost or value of each of these potential outcomes; (3) comprehend their attitudes toward risk; and (4) assess these factors in choosing the outcome that maximizes expected utility.

120. See Davis, supra note 97, at 591–95 (discussing how courts have examined the validity of forum selection and arbitration clauses in click-wrap agreements).
121. Id.
123. Davis, supra note 97, at 595–96.
124. Id. at 595 (“Copyright preemption has recently been raised unsuccessfully as a defense to claims alleging violations of clickwrap software license agreements.”).
125. Nehf, supra note 7, at 12.
The reliance on rational choice theory as the model of consumer decision-making explains why courts are reluctant to invalidate contract terms unless there is a clear lack of assent. 127 Courts focus on the notion of assent; where an actor manifests assent to a contract, the agreement is presumptively valid. 128 The law assumes that assent to a contract signifies the culmination of a process where a rational actor, considering all of the information and alternatives available, has bargained for and assented to a particular set of terms, having determined that those terms will yield the highest expected utility. 129

Although standard-form contracts are contracts of adhesion, the law also considers them presumptively valid. 130 Courts apply this reasoning to terms of use licenses. 131 At first glance, rational choice theory seems to break down in the context of standard-form contracting, because a rational decision involves the weighing of alternatives and choosing the one that yields the highest expected utility. Standard forms severely limit a decision-maker’s ability to weigh alternate terms because there is no opportunity to negotiate or bargain for the terms in the contract.

The law reconciles the notion of rational choice with the adhesiveness of standard forms by presuming that competitive market forces are powerful and pervasive enough to make businesses adopt standard terms that represent what a rational decision-maker would accept. 132 Although rational decision-makers are unable to bargain for particular terms in a standard-form contract, they may instead opt to buy a comparable good governed by a standard form with more favorable terms. Thus, rational decision-making still occurs, albeit at a higher level of abstraction. Instead of bargaining for particular terms to maximize expected utility, the individual merely chooses the standard form that provides the optimal set of terms.

127. As mentioned in Part II.A, courts apply a stringent test of unconscionability which requires both procedural and substantive unconscionability. See supra Part II.A.
129. Nehf, supra note 7, at 12.
130. See supra Part II.A.
131. See supra Part II.B.
132. See supra Part II.A–C (discussing the presumption that the competitive market will drive businesses in particular industries to adopt similar standard terms that represent an efficient allocation of risk between the business and the consumer).
2. Bounded Rationality

Contrary to rational choice theorists, proponents of the theory of bounded rationality argue that rational choice fails to accurately model human decision-making beyond a perfectly controlled environment.\textsuperscript{133} Yet this view has not gained traction in the law. Courts continue to believe that the competitive marketplace successfully influences businesses to adopt standard terms that reflect what the average rational decision-maker would choose.\textsuperscript{134}

Criticizing the law’s focus on the rational decision-maker, Melvin Eisenberg, Koret Professor of Law at the University of California at Berkeley, argues that the ability of humans to make fully objective rational decisions is limited by three factors: (1) bounded rationality, (2) disposition, and (3) defective capability.\textsuperscript{135} Bounded rationality recognizes that human decisions are not fully objective and rational because the human mind is limited by incomplete information and the inability to fully process the information that it has.\textsuperscript{136} Accordingly, “[a]ctors normally do not try to make optimal substantive decisions, but only satisfactory substantive decisions.”\textsuperscript{137} Even if the mind is not influenced by prejudice or emotion and remains aware of all of the relevant information required for a rational decision, it nevertheless fails to fully consider the alternatives.\textsuperscript{138} Disposition is the notion that humans are unable to make rational decisions because they systematically underestimate risk.\textsuperscript{139} Defective capability refers to the mind’s propensity to distort how it searches for and absorbs information.\textsuperscript{140} For example, the ability to choose an optimal outcome is often compromised by how outcomes are framed; this distracts a decision-maker’s abil-

\textsuperscript{133.} See Eisenberg, supra note 43, at 213 (“[E]mpirical evidence shows that actors characteristically violate the standard rational-choice or expected-utility model, due to the limits of cognition.”).

\textsuperscript{134.} See Hillman & Rachlinski, supra note 3, at 438–41. See supra Part II (discussing relevant cases applying the law governing standard forms to electronic license agreements).

\textsuperscript{135.} Eisenberg, supra note 43, at 213.

\textsuperscript{136.} Id. at 214.

\textsuperscript{137.} Id.


\textsuperscript{139.} Eisenberg notes various studies that find humans to be unrealistically optimistic. Eisenberg, supra note 43, at 216–17. For example, approximately 90 percent of drivers believe they drive better than average. Id. at 216. People also systematically overestimate their chances of success in their personal and professional lives. Id. at 217.

\textsuperscript{140.} Id. at 218.
ity to focus on expected utility. Framing explains why we often choose a sure gain over a bet even if the expected value of the bet exceeds the value of the sure gain.

The tension between rational choice and bounded rationality yields a couple of inferences. To the extent that rational choice theory better maps the average decision-maker who confronts a standard form, market forces and the law provide an adequate level of protection for consumers. To the extent that bounded rationality is a better model, then the combination of market forces and judicial oversight fail to protect consumers by over-enforcing standard contracts terms that a rational decision-maker would not accept.

III. THE CHARACTERISTICS OF SOCIAL NETWORK SITES

Social network sites are web-based services that provide a platform for users to create an online identity and interact with others. Users begin by creating profiles. They then establish their friend or “buddy” lists and communicate with those contacts through bulletins or messages. They can continuously update their profiles and post content such as photos and videos. They can organize their contacts into groups. They can integrate their activities on other websites with their social network profiles through the use of third-party applications. They can meticulously manage their existence on the social network. Despite this ostensible auton-

141. Id. at 219 (“[C]hoice often does depend on how outcomes are framed.”).
142. Id.
145. Id. at 203.
146. Id.
149. Id.
omy, “users” nevertheless remain subject to the social network site’s terms of use license.151

Social network sites foster this online activity by providing the platform to engage in it. Users are transplanting more of their lives onto these online spaces: “Increasing portions of our social, communicative, and commercial acts now take place in this digital world of effortless, habitual, involuntary persistence.”152 Ongoing research suggests the primary purpose of many individuals who use the Internet is to socialize and communicate with others.153

Consequently, social network sites are unlike any other information technology product. First, they serve as platform for the disclosure and exchange of vast amounts of personal information.154 Thus, social network sites have the potential to significantly affect the identity and relationships of individuals. Second, the large amount of time and information users invest into social network sites make them stickier than other websites.155 Third, unlike other information products, social network websites’ value increases with the number of users they attract. Last, because they possess significant amounts of information, social network websites’ terms of use licenses have greater implications for users than other types of websites’ licenses do.156

151. Edwards & Brown, supra note 144, at 203.
153. Research indicates that, increasingly, the primary purpose of individuals who go online is to socialize and communicate. See RUDER FINN INTENT INDEX, supra note 5.
154. See infra Part III.A.
156. See infra Part III.B.
A. IDENTITY, RELATIONSHIPS, AND INTERACTIONS IN THE SOCIAL NETWORK SPACE

An individual’s identity on a social network site crystallizes when the user creates a profile. The most basic profiles on social network sites include data such as the user’s age, location, interests, and a photo. Profiles are ever-changing; beyond the most basic information, users can continue to tweak their profiles to reflect various aspects of their lives. On one end of the spectrum, a profile may be a real-time ticker of the happenings in the user’s life. On the other end, it may have only the most basic information required by the site. A profile is the basic tool for the user to “control[] impressions for a specific audience.” It reveals what the user wants others on the social network to see: “You are the person you present yourself as, to your contacts, in the context of the [social network] site, using the site’s lexicon of profile questions.”

Relationships and connections with other users in the social network also contribute to one’s identity. When two particular users connect and interact, social network sites send signals to other users that an interaction is taking place. These signals add information to the identity of particular users, as well as also fostering the reciprocation of social interactions between other users. The public nature of user interactions allows social network sites to capitalize on the human impulse to mimic what others in a social sphere are doing. Just as individuals are defined largely by the company they keep in the real world, so too are their online identities defined by its relationships in the social network space.

With increased interactions in a social network, a user’s identity ostensibly gains standing. In addition to knowing personal information about the other users and those users’ connections, the level and extent of a user’s own interactions are available for others to see. This establishes an identity’s social standing by placing the user in relationship to others within the

157. See Grimmelmann, supra note 143, at 1152.
158. Boyd & Ellison, supra note 147.
159. Id.
160. Id.
161. Grimmelmann, supra note 143, at 1153.
162. Id.
163. See id. at 1154–55.
164. Id. at 1156.
165. Id. at 1155–56.
social network space. Just like our real-world interactions, user activity on a social network site could be viewed as reflecting a user’s status within that group.

Navigating one’s existence on a social network site requires deciding what information to post on the site and then managing the extent to which each datum is public or private on the site.166 Thus, the disclosure of information is inherent in creating and managing a social network identity. Users are becoming increasingly skilled at this process.167

Social network interactions and how much information a user discloses are also governed by social norms. Reciprocity weighs on the side of more disclosure; “friending” someone on a social network site is of minimal utility if that friend’s profile displays little information.168 Meaningful interactions between users on social networks require some minimum amount of information. Norms of truthfulness also encourage veracity in the information that users post—because users increasingly use social networks to complement and extend their real, offline lives, there are expectations that information disclosed on a social network site is somewhat truthful.169

These norms govern the social network space and reflect the human impulse to socialize—whether in the real world or on a social network. Bolstered by the fact that privacy controls reinforce a perception that social networks are private and secure, individuals are injecting more personal and truthful information into the social network space.170 These sites actu-

166. See Tufekci, supra note 150, at 31–33 (examining user decisions to join and subsequently disclose information).
167. Id. at 33.
168. Norms of reciprocity reflect basic human instincts in social interactions. Social network sites capitalize on this instinct:
These sites also piggyback on the deeply wired human impulse to reciprocate. People reciprocate because it helps them solve collective-action problems, because participation in a gift culture demands that gifts be returned or passed along, because it’s disrespectful to spurn social advances, because there’s a natural psychological instinct to mirror what one’s conversational part is doing, and because we learn how to conduct ourselves by imitating others.
Grimmelmann, supra note 143, at 1156.
169. PALFREY & GASSER, supra note 1, at 25 (“Social life for many people has a crucial online component; the virtual world complements and extends the offline social sphere.”).
170. See Grimmelmann, supra note 143, at 1151 (“Why do so many Facebook users entrust it with so much personal information? The answer is that people have social reasons to participate on social network sites, and these social motivations explain . . . why users value Facebook notwithstanding its well-known privacy risks . . . ”).
ally provide greater transparency into the lives of individuals by blurring the lines between their online and offline identities. As information disclosure will likely only increase, users will simply manage their online identities by adjusting who can view such information.

Ultimately, the way in which users create identities and interact with one another on social network sites is causing a paradoxical result. Despite the ability to create various identities that are meticulously managed and controlled, what is actually emerging is a more complete and singular identity of an individual who lives in the social network space. So, while users may control whether the information they disclose is private or public, their decisions and disclosures merely add to a single, growing identity that spans both the online and offline worlds.

B. SOCIAL NETWORK SITES ARE STICKY

Social network sites are sticky because they provide an online space to create identities, form relationships, and interact with others. “Stickiness” is defined as a user’s “deeply held commitment to reuse [a] Web site consistently in the future, despite situational influences and marketing efforts that have the potential to cause switching behavior.” While the Internet lessens the transaction costs of switching between products because alternatives are only a click away, stickiness counteracts this lack of friction.

171. Palfrey & Gasser, supra note 1, at 36.
172. Tufekci, supra note 150, at 31 (“Once the students did make the jump [to using social network sites], they managed their concerns about unwanted audiences by adjusting their usage of nicknames on Myspace and through adjusting the visibility of their profiles on Facebook and Myspace but not by regulating their levels of disclosure . . . .”).
173. See Palfrey & Gasser, supra note 1, at 35 (“[M]uch more of [a] Digital Native’s identity may be visible at any one moment than was possible for individuals in pre-Internet eras. If the Digital Native has created multiple identities, those identities might be connected to create a much fuller picture of the individual than was possible before, spanning a greater period of time.”). See also Tufekci, supra note 150, at 35 (“[N]orms of disclosure are having an effect that is opposite of some of the early predictions about the impact of the Internet: Instead of being able to experiment with multiple identities, young people often find themselves having to present a constrained, unitary identity to multiple audiences, audiences that might have been separate in the past.”).
174. Tufekci, supra note 150, at 35.
Stickiness reflects the human tendency to regard websites as social entities and to exhibit feelings of attachment to a particular site. The potential for an individual to form such a relationship with a website is a function of three factors: investment, commitment, and trust. The more time and resources a user invests into a relationship, the greater the commitment. Commitment is the user’s belief that an ongoing relationship is important enough to warrant continued efforts to sustain it. Trust is the user’s confidence in the other party’s reliability and integrity.

Social network sites are stickier than other websites because these three elements exist naturally and are self-sustaining in the social network space. These sites complement our real-world social lives by extending them online. As users disclose more information online to interact with others, they are simultaneously increasing their investment, commitment, and trust in the social network site itself. Thus, by providing an online social space, the very purpose of a social network site can reinforce its stickiness.

The implication of this phenomenon is that user interaction with a social network site is not merely an economic exchange or an arm’s length transaction. Instead, like relationships with others on a social network, interaction with the social networking site is itself a relationship that gains strength as involvement with the site increases. Because social network sites foster interactions among users that also reinforce stickiness, user relationships with social network sites are much stronger than with other websites.

C. SOCIAL NETWORK SITES EXHIBIT NETWORK EFFECTS

The value of a social network site increases with its number of users. This is known as a network effect. The effect is observed when there is an explicit benefit to aligning one’s decisions or behavior with that of another. Goods with network effects deviate from the norm of supply

177. See Li, Browne & Wetherbe, supra note 175, at 111.
178. Id. at 112–13.
179. Id. at 112.
180. Id. at 113.
181. Id.
182. See infra Part III.B for further discussion of website stickiness and tipping points.
183. Easley & Kleinberg, supra note 10, at 449.
184. Id.
185. Id.
and demand, which provides that the scarcity of a good increases its value. In the market for a good with a network effect, however, the demand for the good increases with consumer expectation that it is in high demand. A classic example of a good with a network effect is a particular type of standard of platform for technology products, such as DVDs or Blue-Ray Discs.

Goods exhibiting network effects have the tendency to dominate the market. Market power, however, develops only after a tipping point. Tipping points occur when a sufficient number of consumers have consumed a good such that it begins to exhibit a network effect: “The product that first gets over its own tipping point attracts many consumers and this may make the competing product less attractive. Being the first to reach this tipping point is very important—more important than being ‘best’ in an abstract sense.” Reaching the tipping point is difficult because a good with a network effect cannot slowly gain users one at a time. It must capture a sufficiently large group of initial users to propel it past the tipping point before its network effect kicks in. Once Facebook reached its tipping point, it began to experience exponential growth in its user base. Social network sites undoubtedly exhibit network effects. They provide users with an online social space and the value of the site depends on the number of users and the extent to which the users choose to disclose information. There is little utility in being part of a social network with no one to interact with—each person’s potential to connect with others in-

187. EASLEY & KLEINBERG, supra note 10, at 455 (“The market for a good with network effects is more complicated, since the amount of the good demanded by consumers depends on how much they expect to be demanded . . . .”).
188. Id. at 465.
189. Id.
190. Id.
191. Id. at 463–64 ("Starting small and hoping to grow slowly is unlikely to succeed, since unless your product is widely used it has little value to any potential purchasers. Thus, you somehow need to convince a large initial group to adopt your product before others will be willing to buy it.").
192. See id.
193. See id.
194. Id. at 449 ("[T]he benefit to you from a social networking site is directly related to the total number of people who use the site."). See also Robert Terenzi, Jr., Note, Friending Privacy: Toward Self-Regulation of Second Generation Social Networks, 20 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1049, 1081–82 (2010).
creases with the number of people who use the website. 195 A high demand for a social network site is met by a corresponding supply: most sites do not limit their membership so there is no shortage of social network accounts. 196

Two of the current leading social network sites, Facebook and Twitter, exhibit this network effect. Facebook and Twitter accounts have little value if there are few other users. They are both the dominant sites in their respective social network markets today. 197

Facebook is currently the dominant social network site in almost all countries throughout the world. 198 Facebook accounts are valuable precisely because so many individuals have one. The site initially launched at Harvard University in 2004, and within a day of its launch 1200 students joined. 199 Within a year, Facebook operated in 882 colleges and 85 percent of students at these schools had accounts. 200 Facebook breached the tipping point by initially targeting a select, but sufficiently large group of users—students at Harvard. It immediately became the dominant social network site for college students. Once it extended beyond college it quickly breached another tipping point—that of post-college adults—which made it the dominant social network site for all individuals. 201 Today, anyone with an e-mail address who claims to be older than thirteen can use Facebook. 202 It currently has more than 800 million active users. 203

195. POSTER, supra note 186, at 46. See also EASLEY & KLEINBERG, supra note 9, at 449.
197. See M.S., Facebook and Freedom, ECONOMIST (Sept. 29, 2010, 7:41 PM), http://www.economist.com/node/21011297; Branckaute, supra note 196185; About Twitter, supra note 204192.
200. Grimmelmann, supra note 143, at 1144.
201. See M.S., supra note 198.
203. Statistics, supra note 196.
Twitter is a real-time information network that allows users to post short messages called Tweets. Tweets can consist of short messages, photos, videos, and other media content. The site moved toward a tipping point by initially drawing the allegiance of technology gurus. It then garnered the attention of bloggers who began micro-blogging with Tweets. Mass media, such as news outlets like CNN, pushed Twitter past its tipping point. Twitter’s power was evidenced by users tweeting instant updates about the siege in Mumbai, India in November, 2008. Today Twitter is the social network of choice for businesses, politicians, celebrities, and everyday users as it dominates the market in real-time information with over 500 million users.

As Facebook and Twitter show, social network sites exhibit network effects precisely because they operate to provide users with an interactive social space. So long as a social network site reaches its tipping point, it will tend to dominate the market.

Alternatively, goods that exhibit network effects may also tend to lose popularity or their monopoly status, especially when a mass exodus of consumers or users coincides with the nearing of a tipping point by a competing good. This appears to have occurred with MySpace, a social network site similar to Facebook, where there seemed to have been a reverse network effect: “When a social network passes out of favour [sic] in a small network, the large network suffers. The loose connections that held the wider network together start to disappear. So the occasional thing which crossed over into different tightly knitted groups has also disappeared.” Almost overnight, MySpace lost its dominance in the social network market. It became “boring, [and] people ha[d] . . . no reason to come back. Which is a pattern which can start repeating across the whole network, but

205. Id.
207. Id.
208. Id.
209. Branckaute, supra note 196; About Twitter, supra note 204.
211. Id.
spreads like a virus from small group to small group, as they’re loosely connected to each other.”

So while social network sites exhibit network effects and can tend towards monopoly if they reach the tipping point, they also face the prospect of quick decline, especially if all of a sudden a critical mass of users leaves for a competitor.

D. TERMS OF USE LICENSES AND PRIVACY POLICIES

Prior to creating a social network account, users must assent to two click-wrap agreements: a terms of use license and a privacy policy. A terms of use license consists of the traditional elements of many standard forms—delineating the rights and responsibilities of the user and the website, disclaimers of liability, forum selection clauses, and arbitration provisions.

Beyond these commonplace terms, social network sites often incorporate additional noteworthy terms into their license agreements: (1) terms that fully disclose personal information and content by default; (2) terms that grant the site an unencumbered license to use any or all of the content posted by a user; (3) terms reserving the right to retain user information

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212. Id.

213. See Sign Up, FACEBOOK, http://www.facebook.com/index.php?lh=31d7ce38b9fd9956f5522281b3150790&eu=znvQ08F3XfaWecz-7ETgfA (last visited Oct. 3, 2011) (“By clicking Sign Up, you are indicating that you have read and agree to the Terms of Use and Privacy Policy.”); Sign Up, TWITTER, https://twitter.com/signup (last visited Oct. 3, 2011) (“By clicking the button [Create my account], you agree to the terms below: [Terms of Service and the Privacy Policy].”); LINKEDIN, https://www.linkedin.com/ (last visited Oct. 02, 2011) (“By clicking Join Now or using LinkedIn, you are indicating that you have read, understood, and agreed to LinkedIn’s User Agreement and Privacy Policy.”).


215. Facebook’s privacy policy provides that: “Choosing to make your information public is exactly what it sounds like: anyone, including people off of Facebook, will be able to see it... [Certain] types of information... are always publicly available, and are treated just like information you decided to make public.” Data Use Policy, FACEBOOK, http://www.facebook.com/full_data_use_policy (last updated Sept. 23, 2011).

216. The social network sites Facebook and Twitter both have such terms in their Terms of Use Agreements. According to Twitter’s Terms of Service:

By submitting, posting or displaying Content on or through the Services, you grant us a worldwide, non-exclusive, royalty-free license (with the right to sublicense) to use, copy, reproduce, process, adapt, modify, publish, transmit, display and distribute such Content in any and all media or distribution methods (now known or later developed).
and content if they decide to remove an account;\textsuperscript{217} and (4) terms reserving the right to amend the terms of use and privacy policy without explicitly notifying the user.\textsuperscript{218}

The incorporation of these terms reflects the unique nature of the transaction between social network consumers and sites—one where the site is providing a dynamic online space for users to disclose information and create content, all at breakneck pace. They also reflect that fact that social network users are contracting away control and privacy of more personal information and content than in any other transaction governed by standard forms or electronic licenses.

IV. THE ASSUMPTIONS UNDERLYING THE LAW’S TREATMENT OF STANDARD FORMS ARE INCORRECT WHEN APPLIED TO SOCIAL NETWORK SITES

The law assumes that users are rational and that competitive market forces influence businesses to adopt reasonable and fair license terms.\textsuperscript{219} These two assumptions break down in the context of social network sites. First, the unique characteristic of the social network space compromises an

\textit{Terms of Service, Twitter, supra note 214. Facebook’s terms have a similar provision: “[Y]ou 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.” Statement of Rights and Responsibilities, Facebook, supra note 214.}

\textsuperscript{217} The terms of use agreement on social network site Myspace specifies that “once Content is distributed to a Linked Service or incorporated into other aspects of the Myspace Services, Myspace is under no obligation to delete or ask other Users or a Linked Service to delete that Content, and therefore it may continue to appear and be used indefinitely.” MySpace.com Terms of Use Agreement, supra note 214. Facebook has a similar provision: “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).” Statement of Rights and Responsibilities, Facebook, supra note 214.

\textsuperscript{218} For example, LinkedIn, a social network site for professionals, has a privacy policy which provides that:

\begin{quote}
We may update this Privacy Policy at any time, with or without advance notice. In the event there are significant changes in the way we treat your personally identifiable information, or in the Privacy Policy document itself, we will display a notice on the LinkedIn website or send you an email . . . . Using the LinkedIn Services after a notice of changes has been sent to you or published on our site shall constitute consent to the changed terms or practices.
\end{quote}


\textsuperscript{219} Nehf, supra note ?, at 12.
individual’s ability to act rationally when deciding to assent to a site’s terms. Second, due to network effects, the market for social network sites is not competitive enough to offer meaningful alternatives. This section first addresses these two arguments. It then suggests that the law’s current approach threatens to harm consumers.

A. BOUNDED RATIONALITY MOST ACCURATELY ACCOUNTS FOR AN INDIVIDUAL’S DECISION TO USE A SOCIAL NETWORK SITE

Individuals are particularly prone to suboptimal decisions when it comes to social network sites. Instead of rational choice, bounded rationality better reflects how users approach these choices. Bounded rationality theory suggests that human decision-making is limited by three factors: (1) incomplete information and the inability to fully process information; (2) the tendency to systematically underestimate risk; and (3) the propensity to distort information.220

Because the social network phenomenon is still in relative infancy, perfect information about the consequences of a decision to join and use a social network is nonexistent. Also, the low initial cost and the uncertain consequence of using social network sites compromise one’s ability to estimate the risk of one’s use. Finally, individual reliance on group dynamics and cascades tends to distort the information the user absorbs about these sites.

1. Full Information Regarding the Consequences of Social Network Site Use Is Non-Existen
t

Rational choice theory assumes that when faced with a decision, an actor is aware of all the possible outcomes and their respective probabilities.221 This is impossible for an individual facing the decision to join a social network site. We have yet to experience the full impact of the social networking phenomenon—one where individuals’ entire lives exist online and perfectly mirror their real lives.222 The existence of social networks hardly spans a decade. Full knowledge of the possible consequences of social network site use will be unavailable until an entire generation has lived with this technology:


221. Id. at 213 (citing Thomas S. Ulen, Cognitive Imperfections and the Economic Analysis of Law, 12 HAMLINE L. REV. 385, 386 (1989)).

222. See PALFREY & GASSER, supra note 1, at 62.
No one has yet experienced the aggregate effect of living a digitally mediated life over the course of eighty or ninety years. . . . Given that there may be hundreds of bits of information in many different online files kept by different private parties on each [individual] by the time he or she is a teenager, hundreds more that accumulate during the college years and young adulthood, and thousands by middle age, the absence of protections may have a far greater effect than society has anticipated. A single, isolated breach or use of aggregated data that occurs today may not seem very troubling. But the true impact over the long run is yet to be seen.223

We are still coming to terms with the possible results of engaging in social network sites and ceding possession over much of our personal information. A decision-maker is unable to make a rational decision regarding the use of social network sites because it is objectively impossible to consider all of the possible relevant outcomes. We have yet to discover them.

For these reasons, users are only able to make sub-optimal choices when deciding whether to use a particular social network site. This calculus is better accounted for by the theory of bounded rationality, which recognizes that human decisions are limited by incomplete information and the inability to fully process that information.224 An individual simply lacks adequate information to make a rational decision when it comes to social network sites.

2. Users Are Likely To Underestimate the Risk of Using Social Network Sites

Individuals are predisposed to underestimate risk,225 which also reduces the likelihood that consumers will fully consider the potential costs of assenting to a social network site’s terms of use. Bounded rationality theory recognizes the mind’s tendency to underestimate risk.226 This is known as the “availability heuristic,” and it often kicks in when an individual attempts to evaluate the likelihood that a risk will materialize.227 The availability heuristic can be explained as follows:

[A]n actor . . . commonly judges th[e] probability [that a risk will materialize] on the basis of comparable data and scenarios that are readily available to his memory or imagination. This heuristic leads to systematic biases, be-

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223. Id.
224. Eisenberg, supra note 43, at 214. See also supra Part II.D.2 (discussing bounded rationality generally).
225. Id. See also, Eisenberg, supra note 43, at 223.
227. Id. at 220.
cause factors other than objective frequency and probability affect the sali-
ence of data and scenarios . . . .

In the context of social networks, the availability heuristic can cause
individuals to underestimate the risks of ceding possession of personal in-
formation and content. Because full information regarding the possible
consequences of using a social network site remains objectively nonexist-
ent, the extent to which a user is aware of—or even able to imagine—
possible harms is limited. Studies show that while individuals have become
adept at managing the boundaries of their information in the social network
space, they remain unaware of the risks posed by the fact that their data
will likely exist online indefinitely.

Moreover, the prevalence of privacy harms caused by the misuse of
personal information by social network sites is understated because such
harms are difficult to trace. Even if a particular harm is concrete and
identifiable, the likelihood that an average user knows that he or she has
suffered such harm is slight. Thus, increased publicity about privacy
harms is not necessarily correlated with increased suspicion of the risks of
social network sites, even in light of their adhesive terms of use agree-
ments.

Another reason why individuals are likely to underestimate the risks
of assent is because they often exert only the minimal effort required to
reach a satisfactory, and not optimal, decision. This behavior is known as
“satisficing,” where individuals often select the option that satisfies a pre-
sent purpose and fail to consider the future costs that may accrue. Satis-
ficing reflects the tendency of the mind to minimize cognitive effort when