COMMENT

Neither a Customer Nor a Subscriber Be: Regulating the Release of User Information on the World Wide Web

INTRODUCTION

The Stored Communications Act (SCA) was passed in 1986 to regulate information release on the developing Internet.[1] Twenty years later, while the quantity and quality of information collected online has grown, the amount that is regulated by the SCA is increasingly uncertain. Although the SCA was not intended to be "a catch-all statute designed to protect the privacy of stored Internet communications,"[2] it has been pressed into this role. Without the SCA to balance the interests of users, law enforcement, and private industry, communications will be subjected to a tug-of-war between the private companies that transmit them and the government agencies that seek to access them. Internet users will find themselves with little protection.

The flaws of the SCA's regulation of electronic communications today have been discussed and analyzed at length, but one danger in particular has received little attention. The SCA largely regulates information "pertaining to a subscriber to or customer of" a covered information service.[3] Although two decades ago virtually all user-service relationships fit within this model, today it may leave many Internet relationships uncovered. For example, search

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1. 18 U.S.C. §§ 2701-2712 (2000 & Supp. V 2005); *see* S. REP. NO. 99-541, at 5 (1986) (indicating that the Act seeks to remedy the fact that "there are no . . . Federal statutory standards to protect the privacy and security of communications transmitted by . . . new forms of telecommunications and computer technology").

2. Orin S. Kerr, *A User's Guide to the Stored Communications Act, and a Legislator's Guide to Amending It*, 72 GEO. WASH. L. REV. 1208, 1214 (2004).

3. 18 U.S.C. §§ 2702(a)(3), (c), 2703(c)(1), (g).

engines gather vast troves of information about their users—users who do not pay for, and often do not subscribe to, their services.[4]

This Comment briefly summarizes the history and structure of the SCA. It then examines the statutory meaning of "subscriber to or customer of," and the dangers posed by the Act's continued reliance on this terminology. It both identifies a specific, concrete weakness in the Act's structure and illustrates the danger of applying a statute written for 1986 technology to the modern Internet. Finally, it proposes a legislative solution. Whether the Act is overhauled or simply amended, it should be broadened to regulate all "user" information held by covered services. This will help ensure that the SCA remains an appropriate balance of interests on the Internet today.

I. THE HISTORY AND STRUCTURE OF THE STORED COMMUNICATIONS ACT

The Electronic Communications Privacy Act of 1986 (ECPA)[5] contains two parts: Title I, the Wiretap Act, which covers wire, oral, and electronic communications in transit;[6] and Title II, the Stored Communications Act (SCA), which covers communications in electronic storage.[7] Because electronic communications are stored in, and travel across, the computers of third parties, their protection under the Fourth Amendment is at best uncertain.[8] ECPA sought to address this uncertainty and to ensure protection for the privacy rights of Internet users.[9]

The existing literature has already analyzed the structure of the SCA in detail.[10] The Act centers on a series of distinctions developed in response to

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4.   *See, e.g.*, Tim Wu, *Keeping Secrets: A Simple Prescription for Keeping Google's Records Out of Government Hands*, SLATE, Jan. 23, 2006, http://www.slate.com/id/2134670/ (describing the extensive information gathered by Google about its searchers).

5.   Electronic Communications Privacy of 1986, Pub. L. No. 99-508, 100 Stat. 1848.

6.   18 U.S.C. §§ 2510-2522.

7.   *Id.* §§ 2701-2710.

8.   *See* United States v. Miller, 425 U.S. 435 (1976) (holding that a customer has no privacy interest in his bank records because he has committed them to the possession of a third party).

9.   S. REP. NO. 99-541, at 5 (1986), *reprinted in* 1986 U.S.C.C.A.N. 3555, 3559 ("Congress must act to protect the privacy of our citizens. If we do not, we will promote the gradual erosion of this precious right.").

10. For a more detailed analysis of the SCA, see generally Patricia L. Bellia, *Surveillance Law Through Cyberlaw's Lens*, 72 GEO. WASH. L. REV. 1375 (2004), which analyzes perceptions

1986 technology. It distinguishes between content and noncontent information,[11] voluntary and compelled data release,[12] and two kinds of Internet services: electronic communications services (ECS) and remote computing services (RCS).[13] A communication's classification determines how the SCA constrains its release. Recent academic analysis of the SCA has been increasingly critical, questioning how appropriate these distinctions are on the modern Internet.[14]

A fourth distinction that the SCA makes that has received little academic or judicial consideration is that, in most cases, the Act only regulates information pertaining to customers or subscribers of covered information services.[15] This distinction likely had little impact in 1986, when many, if not all, users of information services were also customers or subscribers. Today, however, a wide range of increasingly casual relationships between users and services may fall outside this designation.

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and reality of surveillance law and the SCA; and Kerr, *supra* note 2, which lays out the basic structure of the SCA and recommending certain amendments.

11. Content information concerns "the substance, purport, or meaning of [a] communication." 18 U.S.C. § 2510(8) (2000). *See, e.g.*, 18 U.S.C. § 2703(a)-(b) (2000 & Supp. V 2005) (regulating compelled disclosure of content information); *id.* § 2703(c) (regulating compelled disclosure of noncontent information).

12. Voluntary disclosure is regulated by 18 U.S.C. § 2702, and compelled disclosure by 18 U.S.C. § 2703.

13. An RCS is "the provision to the public of computer storage or processing services by means of an electronic communications system." 18 U.S.C. § 2711(2). An ECS is "any service which provides to users thereof the ability to send or receive wire or electronic communications." 18 U.S.C. § 2510(15) (2000). In 1986, ECS (e-mail) and RCS (data processing) were the two main Internet services. Today, however, fitting all Internet services into these categories is problematic. *See* Kerr, *supra* note 2, at 1229-31.

14. *See, e.g.*, Bellia, *supra* note 10, at 1428-30 (arguing that electronic noncontent information such as website addresses can also include content); Kerr, *supra* note 2, at 1229-31, 1235 (questioning the value of the ECS/RCS distinction, and recommending an amendment to eliminate it).

15. *See, e.g.*, 18 U.S.C. § 2702(a)(2) (2000 & Supp. V 2005) (restricting RCS from voluntary disclosure of content information only as it pertains to customers or subscribers); *id.* § 2702(a)(3) (restricting voluntary disclosure of noncontent information by an ECS or RCS so long as it pertains to a customer or subscriber of the service); *id.* § 2703(b)(1)(A) (assuming implicitly that any content information that a government agency compels the disclosure of from an RCS will relate to a "subscriber or customer," who must be notified, absent explicit exceptions); *id.* § 2703(c)(1) (regulating compelled disclosure of noncontent information by an ECS or RCS so long as it pertains to a customer or subscriber of the service).

II. TWENTY-FIRST CENTURY USER-SERVICE RELATIONSHIPS

When the SCA was first passed, the Internet was still relatively small,[16] and the most common remote services—e-mail and data processing—required users to explicitly connect and log in.[17] This limited the number of services that each user connected to and ensured clearly delineated relationships between users and services.

In 1992, the public release of the World Wide Web, with its graphical interface and ease of access, enabled a flood of new Internet services and users.[18] Instead of directly connecting and logging in to each remote service, Web users travel between sites at the click of a mouse, visiting hundreds in a single session. On the Web, the relationships between users and services have become increasingly difficult to fit into the SCA's customer-subscriber framework. Advertising-supported or free services such as search engines and blogs often require no registration or payment from their users.[19] Embedded services, such as video and advertising, allow a user to interact with a service without even browsing to that service's home page, and to interact with many services at once.[20] Invisible third-party services, such as edge caching[21] and

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16. In February 1986, the Internet consisted of about 2300 hosts (web services to which a user could connect). In July 2006, by comparison, there were nearly 440 million hosts. Robert H. Zakon, Hobbes' Internet Timeline, v8.2, http://www.zakon.org/robert/internet/timeline (last visited May 1, 2009) [hereinafter Hobbes' Timeline], tbl. Internet Growth.

17. *See, e.g.*, S. REP. NO. 99-541 (1986), at 8-12, *reprinted in* 1986 U.S.C.C.A.N. 3555, 3562-65 (describing e-mail, bulletin board systems, and remote computing services, all information services that, in 1986, required users to directly connect and login); Kerr, *supra* note 2, at 1214 (describing the SCA's distinction between ECS and RCS as "the understandings of computer network use as of 1986").

18. *Cf.* Hobbes' Timeline, *supra* note 16, tbl. Internet Growth.

19. *See, e.g.*, Google, http://www.google.com (last visited May 1, 2009); Concurring Opinions, http://concurringopinions.com (last visited May 1, 2009).

20. *See, e.g.*, Brian Herzog, Embedded Content, Swiss Army Librarian, http://www.swissarmylibrarian.net/tag/embedded-content (last visited May 1, 2009) (demonstrating how website owners can embed videos, pictures, weather reports, polls, quizzes, and RSS feeds into their sites); Sharing YouTube Videos, http://www.youtube.com/sharing (last visited May 1, 2009) (describing how website owners can embed YouTube videos and lists of YouTube videos into their own webpages).

21. Edge-caching services store copies of videos and other high-bandwidth content on servers around the world to ensure faster load times. *See* Wayne Berry, *Using Edge Caching To Speed Site Performance*, COMP. TECH. REV., Jan. 2001, at 14. Akamai, a leading edge-caching service, handles as much as twenty percent of Internet traffic. Akamai, Customers, http://www.akamai.com/html/customers/index.html (last visited May 1, 2009).

visitor tracking,[22] run on thousands of websites, often without visitors' knowledge. For each of these types of services, it is difficult to classify users as customers or subscribers. Thus, it is unclear whether these relationships fall under the SCA's current framework.[23]

In addition to empowering new relationships between users and services, the Web has also increased the quantity and quality of information that is stored about Internet users. Browsing logs provide detailed views of users' interests and desires.[24] Search engines routinely gather records of users' search queries.[25] Many services, such as advertisers, track their users across networks of websites, gathering a bird's-eye view of their interests and concerns.[26]

Finally, the modern Internet makes gathering and aggregating data extremely valuable to both companies and law enforcement. Much of the Internet economy is based on targeted advertising. To ensure that targeted ads are effective, services need to store information on their users.[27] Law

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22. *See, e.g.*, Google Analytics, http://www.google.com/analytics (last visited May 1, 2009) (describing Google's embedded visitor tracking service); *see also* Frequently Asked Questions for the Google Analytics Data Sharing Options, http://www.google.com/support/analytics/bin/answer.py?answer=87515 (last visited May 1, 2009) (describing how websites running Google Analytics can share the data they gather with Google).

23. Note that unless a service qualifies as an ECS or an RCS, it is not regulated by the SCA as currently written. This concern has already been discussed in the literature and is not the focus of this Comment. *See* Kerr, *supra* note 2, at 1229-31. It is likely, however, that as services that provide data processing (Internet searches, content delivery, or visitor tracking) to the public, each of the examples in this Comment qualify as RCS. 18 U.S.C. § 2711(2) (2000 & Supp. V 2005).

24. *See* Saul Hansell, *The Mother of All Privacy Battles*, Bits Blog, Mar. 20, 2008, http://bits.blogs.nytimes.com/2008/03/20/the-mother-of-all-privacy-battles (describing efforts by advertising companies to track "every single click users make").

25. *See, e.g.*, Michael Barbaro & Tom Zeller, Jr., *How a Face Was Exposed for AOL Searcher No. 4417749*, N.Y. TIMES, Aug. 9, 2006, at A1.

26. *See, e.g.*, Ellen Nakashima, *Some Web Firms Say They Track Behavior Without Explicit Consent*, WASH. POST, Aug. 12, 2008, at D1; Susan Wojcicki, *Official Google Blog: Making Ads More Interesting*, http://googleblog.blogspot.com/2009/03/making-ads-more-interesting.html (Mar. 11, 2009 2:01 EST).

27. *See, e.g.*, Aaron O. Patrick, *Microsoft Ad Push Is All About You*, WALL ST. J., Dec. 26, 2006, at B2; Letter from Alan Davidson, Dir., Pub. Policy & Gov't Affairs, Google Inc., to John Dingell, Chairman, House Energy & Commerce Comm., Joe Barton, Ranking Member, House Energy & Commerce Comm., Edward Markey, Chairman, Subcomm. on Telecomms. & the Internet, and Cliff Stearns, Ranking Member, Subcomm. on Telecomms. & the Internet (Aug. 8, 2008), *available at* http://services.google.com/blog_resources/google_policy_davidson_letter.pdf (describing Google's plans to expand user tracking "on the Google content network").

enforcement rightly sees the Internet as a space where crimes are committed, and through which criminals need to be tracked. Indeed, bills have recently been introduced to Congress to compel data storage for law enforcement purposes.[28] As a result, the incentives for Internet services and law enforcement to gather user information are extremely high, and a great deal of information is becoming available. At the same time, it is increasingly unclear which user-service relationships fall under SCA regulation.

Without clear regulation, unauthorized government agencies or private institutions could gain access to user information, and data holders might resist lawful information requests by law enforcement. This uncertainty leaves enormous control in the hands of private companies that respond to market pressure and profit margins. Even if private companies resist these pressures, uncertain legal protection may make them less willing to innovate and users less likely to take advantage of new Internet services. Thus, the SCA's uncertain reach not only weakens users' protection online, it could depress online innovation overall.

III. THE MEANING OF "CUSTOMER OF OR SUBSCRIBER TO"

To understand how far the SCA reaches, we must examine the meaning of "customer" and "subscriber" under the Act. The SCA does not define either term, and its legislative history is of little help. Although the Senate Committee Report includes a glossary, it defines neither customer nor subscriber.[29] Indeed, discussion prior to the Act's passage reveals little effort by lawmakers to distinguish between customers, subscribers, or users.[30] At the same time, the Act defines "user," and the statute's separate use of "customer or subscriber" and "user" implies that "customer or subscriber" cannot mean simply "user."[31] When a statutory term is undefined, courts give that term its "ordinary meaning."[32] Considering the ordinary usage of "customer" and "subscriber," it seems unlikely that the SCA, as currently drafted, regulates the wide range of user-service relationships that exist online.

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28. Declan McCullagh, *Bill Proposes ISPs, Wi-Fi Keep Logs for Police*, CNET NEWS, Feb. 19, 2009, http://news.cnet.com/8301-13578_3-10168114-38.html.

29. S. REP. NO. 99-541, at 8-12 (1986), *reprinted in* 1986 U.S.C.C.A.N. 3555, 3562-65.

30. *See, e.g.*, 132 CONG. REC. 14,600 (1986) (statement of Sen. Leahy) (describing a "user" of an e-mail service, who would almost certainly also be considered a subscriber).

31. 18 U.S.C. § 2510(13) (2000) (defining a user as one who makes "duly authorized" use of "an electronic communication service").

32. *See, e.g.*, United States v. Daas, 198 F.3d 1167, 1174 (9th Cir. 1999).

One court has held that a customer is "one who buys goods or services."[33] The Federal Communications Commission (FCC) defined a long distance telephone customer as the "entity receiving and paying for long distance service."[34] The 1979 edition of *Black's Law Dictionary*, which was the most current edition when the SCA was passed in 1986, defines a customer as "[o]ne who regularly or repeatedly makes purchases of, or has business dealings with, a tradesman or business."[35] Relying on payment as the defining characteristic of a customer makes sense, but it leaves a wide range of free and advertising-supported Internet services uncovered. Indeed, it is unlikely that under this widely used definition, users of any of the three examples described in the last Part—search engines, embedded services, and invisible services—could be considered customers.[36]

Although the common usage of subscriber encompasses a broader range of user-service relationships, it still leaves many with at best uncertain coverage. For instance, the trial judge in *Viacom International v. YouTube, Inc.* found that YouTube was constrained from disclosing the contents of private videos because they were "stored on behalf of their subscribers."[37] According to this reasoning, YouTube posters, who must register to post videos, qualify as subscribers. Unregistered users, however, are likely not subscribers.[38]

In determining whether someone was a subscriber to a health, financial, or periodical service, courts have focused on whether or not the actor had entered into a contract.[39] As far back as 1895, the Supreme Court of Iowa concluded that subscribing to a newspaper required "some voluntary act on the part of the subscriber."[40] What constitutes a voluntary act in the Internet context? It is

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33. On Demand Mach. Corp. v. Ingram Indus., Inc., 442 F.3d 1331, 1339 (Fed. Cir. 2006).

34. AT&T's Private Payphone Comm'n Plan, 7 F.C.C.R. 7135, 7136 (1992).

35. BLACK'S LAW DICTIONARY 348 (5th ed. 1979). The most recent edition to define the term "customer," from 1990, includes an identical definition. BLACK'S LAW DICTIONARY 386 (6th ed. 1990).

36. *See supra* Part II.

37. 253 F.R.D. 256, 264 (S.D.N.Y. 2008).

38. Unregistered users search for and view videos, revealing their preferences and interests.

39. Aultman Hosp. Assoc. v. Cmty. Mut. Ins. Co., No. CA-7307, 1988 Ohio App. LEXIS 1939, at *13 (May 9, 1988) (defining a subscriber as one for whom "Blue Cross has issued . . . a Service Contract"); Pollace v. Time Standard (*In re* Establishment of the EUREKA REPORTER as a Newspaper of General Circulation), 81 Cal. Rptr. 3d 497, 500 (Ct. App. 2008) (defining a subscriber as "one 'who contract[s] to receive and pay for a certain number of issues of a publication'" (quoting AMERICAN HERITAGE DICTIONARY 1726 (4th ed. 2000))).

40. Ashton v. Story, 64 N.W. 804, 805 (Iowa 1895).

unlikely, for instance, that a single visit to a website is sufficient, any more than reading one issue of a newspaper makes one a subscriber. Repeated visits suggest a repeat user rather than a subscriber—the visitor has taken no affirmative act to secure continued access to the service. Thus, even "subscriber" may leave out a wide range of unregistered users. Unregistered Google searchers and users of many embedded and invisible services, for instance, may well be considered neither subscribers nor customers, and thus be unprotected by the SCA.

Given the SCA's role in regulating access to stored electronic communications, the lingering uncertainty of the customer and subscriber definitions leaves a range of Internet user information exposed.[41] If the SCA is to continue to regulate the release of electronic communications and encourage innovation on the Internet, its uncertain reach should be resolved. If it is to be overhauled or supplanted, its replacement must resolve this issue as well. Thus, the final part of this Comment proposes a targeted amendment to the SCA to clarify and broaden the statute's reach.

IV. RESOLVING THE UNCERTAINTY OF THE STORED COMMUNICATIONS ACT

Although broad judicial interpretation of "subscriber to or customer of" would expand the SCA's coverage, each new user-service relationship would require additional judicial clarification. Further, the judiciary's deliberative pace is ill-suited to the rapid development of Internet technologies, and conflicting rulings could encourage forum shopping as litigants seek favorable courts.

A more appropriate solution would be to broaden the SCA so that, instead of applying only to information pertaining to customers or subscribers, it regulates information pertaining to any *user* of an information service. This would ensure that the SCA regulates information release for the full range of user-service relationships that exist on the Internet today, and that it will be flexible enough to manage new relationships that will develop in the future.

This will broaden the SCA's reach to relationships without contractual privity between user and service. Although one might wonder whether contractual privity itself is the source of users' privacy interests, the SCA makes no mention of privity as a justification for regulation.[42] *Quon v. Arch Wireless*,

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41. *See supra* Part II.

42. S. REP. NO. 99-541, at 3 (1986), *reprinted in* 1986 U.S.C.C.A.N. 3555, 3557 (noting that, after United States v. Miller, 425 U.S. 435 (1976), little protection existed for personal information on the Internet, and that the SCA would address this need).

the only case to address the issue of privity under the SCA, concluded that "[t]here is no indication . . . that contractual privity between the service provider and the user is necessary under the statute to enable a claim by the user against the provider for violation of [the SCA]."[43]

The SCA already defines users as those who make "duly authorized" use of "electronic communication service[s]."[44] Although the SCA defines neither use nor due authorization, their ordinary usage and existing judicial meanings are broad enough to incorporate the expanding range of user-service relationships on the Internet. "Use" has generally been defined by its ordinary or dictionary meaning. In *Konop v. Hawaiian Airlines*, the Ninth Circuit defined use according to Webster's Dictionary: "'to put into action or service, avail oneself of, employ.'"[45] Due authorization, on the other hand, has often been defined by example. *Konop* concluded that computer hacking constituted "unauthorized access."[46] Other courts have also used computer hacking as an example of an unauthorized use under the Computer Fraud and Abuse Act (CFAA).[47] One recent author argued that unauthorized acts under the CFAA should be ones where a person "bypasses code-based protections designed to limit his use of the system."[48]

Another Ninth Circuit ruling, *Theofel v. Farey-Jones*, provided a more robust definition of authorization by analogizing to common law trespass: "Just as trespass protects those who rent space from a commercial storage facility . . . the Act protects users whose electronic communications are in

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43. Quon v. Arch Wireless Operating Co., 309 F. Supp. 2d 1204, 1209 (C.D. Cal. 2004), *rev'd in part on other grounds*, 529 F.3d 892 (9th Cir. 2008).

44. 18 U.S.C. § 2510(13) (2000). Unless the ECS/RCS distinction is removed, this language would need to be broadened to cover users of remote computing services as well.

45. 302 F.3d 868, 880 (9th Cir. 2002) (quoting WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 1299 (1985)); *see also* Barrett v. Rosenthal, 146 P.3d 510, 526-27 (Cal. 2006) (analyzing 47 U.S.C. § 230, another Internet-regulating statute, and defining "user" equally broadly).

46. *Konop*, 302 F.3d at 889-90.

47. 18 U.S.C. § 1030(a) (outlining penalties for knowingly accessing "a computer without authorization or exceeding authorized access"). *See, e.g.*, United States v. Phillips, 477 F.3d 215, 219-21 (5th Cir. 2007) (analyzing a range of cases considering hacking and concluding that a password-generating program was an unauthorized use under the CFAA); United States v. Morris, 928 F.2d 504, 510 (2d Cir. 1991) (holding that distributing a computer virus constituted unauthorized access under the CFAA).

48. Katherine Mesenbring Field, Note, *Agency, Code, or Contract: Determining Employees' Authorization Under the Computer Fraud and Abuse Act*, 107 MICH. L. REV. 819, 825 (2009) (analyzing courts' varied understanding of authorized use under the CFAA and proposing a single standard).

electronic storage . . . ."[49] *Theofel* also notes, however, that "[a] defendant is not liable for trespass if the plaintiff authorized his entry."[50] Under this theory, an act is unauthorized only if it (1) has not been explicitly authorized and (2) rises to the level of computer hacking or some other clear trespass.

Under the SCA, both information services and users may authorize conduct.[51] This allows a user to authorize a friend's access to his account, or an information service to authorize third party access.[52] Applying *Theofel* suggests that these authorizations should be a floor, not a ceiling. Unanticipated acts not explicitly authorized should be required to constitute a trespass — such as hacking — against a user or information service if they are to be unauthorized under the SCA. Innovation on the Internet has often hinged on unanticipated uses, and broadening the SCA to cover information pertaining to all duly authorized users will provide balanced protection for information online, encourage innovation, and allow law enforcement access where appropriate.

CONCLUSION

Arguing for the passage of the Stored Communications Act two decades ago, Senator Patrick Leahy warned that existing law was "hopelessly out of date."[53] Today, the Act itself suffers the same flaw. Broadening the Act to cover all user-service relationships will by no means cure all of the SCA's anachronisms. Nevertheless, it would be an important step toward ensuring broad, balanced regulation of the increasing store of user information being gathered by information services on the Internet.

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49. Theofel v. Farey-Jones, 341 F.3d 978, 982 (9th Cir. 2003) (citing PROSSER & KEETON ON THE LAW OF TORTS § 13, at 78 (W. Page Keeton ed., 5th ed. 1984)).

50. *Id.*

51. 18 U.S.C. § 2701(c).

52. Consider Friendfeed, which allows users to aggregate social networking services onto a single site, FriendFeed – About Us, http://friendfeed.com/about/ (last visited May 1, 2009), and Google Flu Trends, which uses Google searches to predict flu pandemics. Google Flu Trends | How does it work?, http://www.google.org/about/flutrends/how.html (last visited May 1, 2009).

53. S. REP. NO. 99-541, at 2 (1986), *reprinted in* 1986 U.S.C.C.A.N. 3555, 3556 (internal quotation marks omitted).