

A COASEAN ANALYSIS OF MARKETING

ERIC GOLDMAN*

I. Introduction.....	1152
II. Media-Specific Regulation of Marketing.....	1156
III. Marketing and Social Welfare	1161
A. Consumer Welfare from Marketing	1162
B. Marketing as a Market Failure	1165
1. Cost-Benefit Accounting of Marketing	1168
2. The Coase Theorem	1170
3. Marketplace Matchmaking and Consumer Preference Disclosure Costs.....	1172
4. Entitlement Allocation in a Costly Environment	1174
IV. Marketing Regulation Schemes.....	1177
A. Opt-In	1178
1. Consumers May “Consent” When They Do Not Mean It	1179
2. Consumers May Not Opt In When They Want To...	1180
3. Opt-Ins and Intermedia Selection	1181
4. Some Positive NPU Marketing Becomes Unavailable	1181
B. Opt-Out	1182
1. Granular	1184
2. Personal	1186
3. Dynamic.....	1186
4. Low Costs.....	1187
5. Conclusion on Opt-Outs	1188

* Assistant Professor and Director, High Tech Law Institute, Santa Clara University School of Law. E-mail: egoldman@gmail.com. Website: <http://www.ericgoldman.org>. I appreciate the helpful comments of Ethan Ackerman, Alessandro Acquisti, Irene Calboli, Jason Czarnecki, Ben Edelman, Shubha Ghosh, Chris Hoofnagle, Peter Huang, Christine Hurt, Mark Lemley, Doug Lichtman, Michael McChrystal, Scott Moss, Frank Pasquale, Michael Risch, Mark Schultz, Dan Solove, Daniel Shiman, Rebecca Tushnet, and Tal Zarsky. I would also like to thank the participants at the Second Annual Conglomerate Junior Scholars Workshop, a presentation at the McCarthy Institute for Intellectual Property and Technology Law at University of San Francisco Law School, the Midwestern Law & Economics Association Meeting, the Association of Internet Researchers Annual Meeting, the Second Online Deliberation Conference, the Law & Society Association Annual Meeting, the Fourth Annual Intellectual Property Law Scholars Conference, the DePaul University College of Law Symposium on Privacy and Identity, and faculty presentations at Marquette University Law School and Santa Clara University School of Law.

C.	Mandatory Metadata	1189
V.	Marketplace Alternatives to Regulation	1194
A.	Attention Markets	1194
B.	Infomediaries	1198
C.	Bonded-Sender Programs	1199
D.	Summary of Marketplace Alternatives	1201
VI.	Coasean Filters as a Regulatory and Marketplace Alternative	1202
A.	How Coasean Filters May Solve the Marketing Problem	1202
1.	Improved Accuracy	1205
2.	Low Costs	1207
3.	Conclusion on Coasean Filters and the Marketing Problem	1208
B.	Policy Implications of Coasean Filters	1209
1.	Controlling Intermedia Selection	1209
2.	Deregulation of Surreptitious Monitoring Technologies	1211
C.	Coasean Filters and Privacy	1213
1.	How Coasean Filters Enhance Privacy	1213
2.	Coasean Filter Datasets as Targets	1215
3.	Coasean Filter Providers and Consumer Trust	1217
D.	Coasean Filters and the Political Process	1218
VII.	Conclusion	1220

I. INTRODUCTION

Consumers hate spam.¹ They hate pop-up ads,² junk faxes,³ and telemarketing.⁴ Pick any marketing method, and consumers probably

1. See, e.g., Memorandum from Deborah Fallows to Pew Internet & American Life Project 4 (Apr. 2005), http://www.pewinternet.org/pdfs/PIP_Spam_Ap05.pdf (“Internet users are more negative about spam than they are about other commonplace internet problems.”); Humphrey Taylor, *Spam Keeps on Growing*, HARRISINTERACTIVE, Dec. 10, 2003, at tbl. 3, http://www.harrisinteractive.com/harris_poll/index.asp?PID=424 (reporting that 90% of American adults find spam annoying); Dynamic Logic, *Consumer Perceptions of Various Advertising Mediums*, BEYOND THE CLICK, (Mar. 2004), http://www.dynamiclogic.com/na/research/btc/beyond_the_click_mar2004_part2.html (presenting data that shows consumers are extremely negative towards spam). See generally Peter J. Denning, *Electronic Junk*, 25 COMM. ACM 163, 164 (1982) (complaining about too much “electronic junk mail” in 1982).

2. See PONEMON INST., THE 2004 SURVEY ON INTERNET ADS 2 (2004) (reporting that 75% of respondents find pop-up ads “always annoying”); DYNAMIC LOGIC, ADVERTISING REACTION STUDY (2001),

say they hate it. In extreme cases, unwanted marketing can cause consumers to experience “spam rage.”⁵

There are many reasons for consumers’ deep antipathy towards marketing, but a principal cause is that consumers get too much of it. According to a 2004 Yankelovich study, “61% feel the amount of marketing and advertising is out of control; and 65% feel constantly bombarded with too much marketing and advertising.”⁶ Consumers have a good reason for these feelings: through a variety of media, consumers may be exposed to hundreds (or even thousands) of advertisements a day.⁷

Worse, the volume of marketing probably will increase as technology continues to lower marketing distribution costs and marketers seek out new ways to reach consumers. As one commentator has said, “marketers all over the world soak up every square inch of space, every extra second of time Every idle moment you possess is seen by some business somewhere as an opportunity to interrupt you

http://www.dynamiclogic.com/advertising_reaction-execsumml.pdf (stating that only 6% of respondents had positive feelings towards pop-up ads); Press Release, Hostway Corp., Survey Says: Internet Pet Peeves: What Drives Consumers Away From Your E-Business (Aug. 1, 2005), http://www.hostway.com/aboutus/press_releases/2005/07012005.html (relaying that 93% of consumers find pop-ups ads annoying, and 35% rank them as their number one Internet pet peeve); Jakob Nielsen, The Most Hated Advertising Techniques (Dec. 6, 2004), <http://www.useit.com/alertbox/20041206.html> (summarizing data from a study finding that 95% of Internet users had negative views towards pop-up advertising).

3. See U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-06-425, TELECOMMUNICATIONS: WEAKNESSES IN PROCEDURES AND PERFORMANCE MANAGEMENT HINDER JUNK FAX ENFORCEMENT 2 (2006), *available at* <http://www.gao.gov/new.items/d06425.pdf> (“[S]ince 2003, consumers have complained more to [the Federal Communications Commission] about junk faxes than about any other issue under FCC’s jurisdiction except indecency and obscenity in radio and television broadcasting.”). This report also indicates that the number of consumer complaints to the FCC has increased approximately 2000% from 2000 to 2005. *See id.*

4. See *infra* note 141 and accompanying text.

5. Spam rage is the digital analogue of road rage. Charles Booher became a folk hero after launching into a spam rage due to unwanted pop-up advertising. See Jon Swartz, *Spam Rage Drives Some E-mailers to Extremes*, USA TODAY, Feb. 11, 2004, at 1A. Many people barely contained their schadenfreude when Vardan Kushnir, a prolific Russian spammer, was found brutally murdered. See Posting of Margaret Kane to Blogma, http://news.com.com/2061-11199_3-5806641.html (July 27, 2005, 7:22 PDT) (summarizing some bloggers’ reactions to the spammer’s death).

6. Press Release, Yankelovich, Consumer Resistance to Marketing Reaches All-Time High: Marketing Productivity Plummetts, According to Yankelovich Study (Apr. 15, 2004), *available at* <http://www.commercialalert.org/Yankelovich.pdf>.

7. Estimates of the number of daily ad exposures by a consumer vary widely. See Posting of bobbie7-ga to Google Answers, <http://answers.google.com/answers/threadview?id=56750> (Aug. 20, 2002, 23:07 PDT) (citing sources estimating between 250 and 3,000 ad exposures per day).

and demand more of your attention.”⁸ Because human attention is a scarce and largely fixed resource, continued growth in marketing volume creates a seemingly unavoidable crisis.⁹ Eventually, consumers may experience information overload, where their attention will be overrun by too much marketing. Some might feel that they have reached this point already.

Spurred by popular demand,¹⁰ regulators have tried to combat the marketing tide with regulation. These marketing regulations primarily attempt to help consumers block unwanted marketing on an ad hoc, medium-by-medium basis. This “suppression” approach to regulating marketing¹¹ can find some support in economic theory. There is wide consensus that marketing imposes negative externalities on consumers.¹² To correct this, economists advocate forcing marketers to internalize the costs or, failing that, stop the cost-imposing activity.¹³ Under either approach, suppression-oriented regulation theoretically reduces the quantum of consumers’ unwanted marketing exposures.

While the marketing-as-negative-externality argument is seductively elegant and widely accepted, it is also wrong. As a result, it distorts policy responses.

First, the argument focuses on marketing supply but does not consider possible consumer demand for marketing. In fact, consumers want marketing when it creates personal benefits for them,¹⁴ and

8. Don Peppers, *Foreword* to SETH GODIN, *PERMISSION MARKETING* 9, 13 (1999); see also THOMAS H. DAVENPORT & JOHN C. BECK, *THE ATTENTION ECONOMY* 78 (2001) (“If there’s an environmental attention gap to be found, you can bet that someone will eventually try to fill it.”). In addition, “Seekers of attention have employed technology to squeeze information into almost every possible domain.” *Id.* at 85.

9. See Daniel R. Shiman, *An Economic Approach to the Regulation of Direct Marketing*, 58 *FED. COMM. L.J.* 321, 322-23 (2006).

10. See John E. Calfee & Debra J. Ringold, *The 70% Majority: Enduring Consumer Beliefs About Advertising*, 13 *J. PUBLIC POL’Y & MARKETING* 228, 235 (1994) (recounting that, for many decades, surveys have shown that 60 to 70% of consumers favor increased regulation of marketing).

11. See Ian Ayres & Matthew Funk, *Marketing Privacy*, 20 *YALE J. ON REG.* 77, 104 (2003) (“[E]xisting and proposed regulatory efforts to curb telemarketing abuse share a common goal of interdiction.”).

12. See *infra* Part III.B.

13. See, e.g., ROBERT S. PINDYCK & DANIEL L. RUBINFELD, *MICROECONOMICS* 621-51 (5th ed. 2001).

14. See LARRY PONEMON, *PONEMON INST., 2005 ONLINE CONSUMER PERMISSIONS STUDY* 8 (2005), http://www.dotomi.com/newsevents/dotomi_research.php (“[Ninety-two percent] of respondents want to be contacted by the online merchant when there is new information about a product or service that is of significant importance or value to them.”).

marketing also can have spillover benefits that improve social welfare.¹⁵ When these benefits are not accounted for, too much marketing is wrongly classified as a negative externality, and marketing can be excessively suppressed. As a result, suppression-oriented regulations may advance a second-order objective (stopping unwanted marketing) at the possible expense of a paramount first-order objective (improving social welfare).¹⁶

Second, the argument fails to consider the work of Nobel Prize-winning economist Ronald Coase. His seminal article, *The Problem of Social Cost*, discusses how parties can privately resolve negative externalities both when bargaining costs are zero and when they are substantial.¹⁷ In the face of substantial bargaining costs, Coase suggests that any resolution should minimize the negative effects of transaction costs in a way that improves social welfare.¹⁸

Applying these principles to marketing proves to be a complex task. Marketing creates benefits by making socially and privately beneficial matches between marketers and consumers.¹⁹ At the same time, the matchmaking process creates a variety of costs: marketers incur costs to communicate with consumers, and consumers incur costs to manifest their preferences by receiving, sorting, and discarding unwanted marketing. Typically, regulatory intervention allocates these costs among marketers and consumers, but these reallocations may not solve the underlying concerns.

Instead of reallocating those costs, a preferable alternative would reduce marketer-consumer matchmaking costs altogether. Doing so would improve social welfare by increasing the zone of socially beneficial matchmaking (as well as by avoiding some transaction costs of matchmaking). Unfortunately, regulatory solutions typically cannot reduce matchmaking costs and continue to impose—or even increase—

15. See *infra* Part III.A.

16. See Thede Loder et al., Information Asymmetry and Thwarting Spam (Jan. 14, 2004) (unpublished working paper, available at <http://ssrn.com/abstract=488444>) (arguing that social welfare improves by facilitating communication rather than blocking it). As John Gilmore has said, “Most people try to figure out what you hate But they’re going about it the wrong way. If they try to figure out what interests you, you have a tool that will help get rid of spam and make more efficient use of your time.” Jane Black, *Before Spam Brings the Web to Its Knees*, BUS. WK. ONLINE, June 10, 2003, http://www.businessweek.com/technology/content/jun2003/tc20030610_1670_tc104.htm

17. See Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

18. See *id.*

19. See PHILIP KOTLER, *MARKETING MANAGEMENT: ANALYSIS, PLANNING, IMPLEMENTATION, AND CONTROL* 4 (7th ed. 1991).

costs on consumers to manifest their preferences. It may be that no regulatory solution offers a social welfare-increasing outcome.

In contrast, emerging technology, which this Article refers to as a “Coasean filter,” may offer a superior alternative to regulation. This technology would automatically and surreptitiously monitor consumers to costlessly read their minds and effectuate their preferences by filtering unwanted content and soliciting wanted content. Coasean filters would improve consumer and social welfare by helping consumers get what they want without incurring significant costs to manifest their preferences.

Coasean filters are increasingly becoming feasible technologically, but significant social and policy barriers impede their proliferation. Coasean filters look a lot like adware (client-side software that delivers behaviorally triggered ads) and spyware (client-side software that monitors user behavior and reports that information back to a central repository), and regulators (partially driven by consumer fears) are enacting anti-adware and anti-spyware regulations²⁰ that may inhibit the development and deployment of Coasean filters. Ironically, legislative overreactions to adware and spyware, putatively intended to protect consumers, may counterproductively prevent consumers from obtaining technology that improves their welfare.

This Article proceeds in five parts. Part II describes the current system of medium-specific marketing regulation and its limits. Part III describes the various factors that determine consumer utility from marketing, and critiques the argument that marketing creates negative externalities. Using a Coasean analysis, this Part argues that marketing regulations should be evaluated based on how well they help consumers manifest their preferences. This Article uses the analytical model developed in Part III to evaluate several types of marketing regulations in Part IV and marketplace alternatives to marketing regulations in Part V. Part VI explains how Coasean filters can provide a better alternative than regulation or other marketplace solutions, and discusses some regulatory implications of Coasean filters.

II. MEDIA-SPECIFIC REGULATION OF MARKETING

Marketing seeks to persuade consumers to take a desired action, usually by creating or increasing consumer²¹ demand for the marketer’s

20. For a description of some of the efforts to legislate against adware and spyware, see Nat’l Conference of State Legislatures, 2006 State Legislation Relating to Internet Spyware or Adware, <http://www.ncsl.org/programs/lis/spyware06.htm>.

21. This Article principally focuses on commercial transactions, so the term “consumer” generally describes individual marketplace decision-makers. However,

products or services.²² Accordingly, this Article defines marketing as persuasive content that marketers pay third parties to disseminate to consumers.²³ This definition is intentionally inclusive and covers the universe of media used for advertising, including television, radio, cable, print, billboards, leaflets, postal mail, telephone, e-mail, and the Web.

A complex regulatory structure governs the dissemination and presentation of marketing, promulgated by every level of government (federal, state, and local) using every type of regulatory method (statute, administrative rules, and common law). Although some marketing regulations apply regardless of the delivery method (such as laws against false advertising), many marketing regulations only apply based on the specific medium used to deliver the marketing. This is not the result of some grand design or strategic plan; instead, it reflects an accretive process with five discrete stages:

1. A new communications technology becomes mainstream, such as faxes in the 1980s, e-mail in the 1990s, pop-up windows in the 2000s, or emerging technologies like instant messaging, Internet telephony, or text messaging (SMS).

2. In response to the increased opportunity to capture consumer attention, marketers exploit the new technology's marketing potential, creating new marketing formats. Recent examples include instant messaging marketing (called "spim")²⁴ and Internet telephony marketing (called "spit").²⁵ Inevitably, some marketers will push the

throughout this Article, the term also may describe individuals who consume information for other reasons, such as to make educated political decisions as citizens.

22. KOTLER, *supra* note 19, at 4 ("Marketing is a social and managerial process by which individuals and groups obtain what they need and want through creating, offering and exchanging products of value with others."); MSN ENCARTA DICTIONARY, Marketing, http://encarta.msn.com/dictionary_/marketing.html (last visited Feb. 19, 2006) ("[Marketing is] the business activity of presenting products or services in such a way as to make them desirable.").

23. For now, this Article does not distinguish between direct, brand, and informational marketing. However, consumers may value the substantive content of these marketing types differently, a point revisited in Part III.A.

24. See Posting of Lee Rainie to PIP Comments, <http://www.pewinternet.org/PPF/p/1052/pipcomments.asp> (Feb. 21, 2005, 13:52 EST) (estimating that almost 30% of American instant-messaging users have received spim).

25. See Michael Singer, *VoIP to Fuel Plague of 'Dialing for Dollars,'* INTERNETNEWS.COM, Mar. 11, 2005, <http://www.internetnews.com/xSP/article.php/3489591> (predicting that, in the future, the average household may receive up to 150 spit calls a day).

boundaries in these new formats to identify the most profitable techniques and to determine consumers' tolerance.²⁶

3. Consumers object to this marketing intrusion via the new technology. Consumer angst might be due to marketers who went too far in their boundary testing or a (perhaps naïve) belief on the part of some consumers that the technology should be ad-free.

4. Regulators intervene to control marketing in the new technology in response to consumer complaints.²⁷ Often, this intervention is predicated on prevailing business practices and the technological attributes of the medium.²⁸ The result is a new custom-crafted, medium-specific regulatory solution inherently constrained by its assumptions. Further, because regulators reinvent the wheel with each new technology, they make the same systematic regulatory errors with each new medium that could be avoided through holistic marketing regulation applicable to all media.²⁹

5. Technology and business practices evolve, exposing deficiencies in the regulatory framework. Regulators correct these deficiencies with targeted amendments that become outdated with continued advances in technology and business practices, and the cycle continues indefinitely.

This regulatory cycle is predictably (and almost comically) futile because it is not possible to craft rigorous statutory definitions of communication media.³⁰ Instead, technological evolution inevitably causes media to converge,³¹ which creates problems as rules custom-crafted for a specific medium (and reflecting technological assumptions about that medium) spill over into other media. Consider the odd statutory interpretation questions recently faced by courts: Is e-mail

26. See KEN SACHARIN, ATTENTION! 4 (2001) ("The tendency is for successful new ad formats to overpopulate and overgraze their attention environments until, inevitably, they start to lose their attention-getting power.").

27. See William Blundon, *The Next Threat to Start-Ups*, CNET NEWS.COM, Sept. 10, 2003, http://news.com.com/2102-1071_3-5074068.html ("[T]he public seems to expect the government to act as a kind of giant TiVo, filtering out all advertising before it is recorded on the eardrum or eyeball.").

28. The federal CAN-SPAM law is a flagship example, outlawing certain very specific practices that spammers were using at the time the law passed, such as dictionary attacks and registering free e-mail accounts to send spam. See 15 U.S.C.A. §§ 7701(b)(1)-(2) (2005).

29. Regulators may be realizing the errors of this approach. See, e.g., China View, *HK Starts Consultation on Anti-Spam Law*, Jan. 20, 2006, http://news.xinhuanet.com/english/2006-01/20/content_4079420.htm (discussing Hong Kong's consideration of a technology-neutral law that covers marketing in all electronic media).

30. See, e.g., Randolph J. May, *Why Stovepipe Regulation No Longer Works: An Essay on the Need for a New Market-Oriented Communications Policy*, 58 FED. COMM. L.J. 103, 104-07 (2006).

31. See NICHOLAS NEGROPONTE, BEING DIGITAL 18 (1995).

spam regulated by the anti-junk fax law?³² Is a pop-up ad regulated by a law prohibiting e-mail spam?³³ Or is a text message sent to a cell phone a “telephone call” for purposes of anti-telemarketing restrictions?³⁴ Television, like web browsing or direct mail, is now a personally targetable medium³⁵ that allows viewers to download files at a time of the viewer’s choosing.³⁶ E-mail, voice mail, and faxes are now all basically the same thing.³⁷ Convergence is pervasive, and it renders silly any efforts to create medium-specific regulatory silos.³⁸

Even if regulations are drafted precisely to govern only their target media, medium-specific regulations still may not be optimal. Each marketing medium has a cross-elasticity of demand with other marketing media.³⁹ The rational marketer chooses among media based on expected profits from marketing in each medium, a process this Article calls “intermedia selection.” To the extent that medium-specific regulations increase marketers’ dissemination costs (either directly or indirectly through costs such as extra administrative requirements), it will produce the following effects: First, some marketing messages will become newly unprofitable to disseminate via any medium,⁴⁰ with

32. See *Aronson v. Bright-Teeth Now, L.L.C.*, 2003 PA Super. 1132, ¶ 8, 824 A.2d 320, 323 (answering the question “no”).

33. See *Riddle v. Celebrity Cruises, Inc.*, 2004 UT App. 487, ¶ 15, 105 P.3d 970, 974-75 (answering the question “no”).

34. See *Joffe v. Acacia Mortgage Corp.*, 121 P.3d 831, 836 (Ariz. Ct. App. 2005) (answering the question “yes”).

35. See Jon Gertner, *Our Ratings, Ourselves*, N.Y. TIMES, Apr. 10, 2005, § 6 (Magazine), at 34; Lorne Manly, *The Future of the 30-Second Spot*, N.Y. TIMES, Mar. 27, 2005, § 3 (Magazine), at 1 (“The television commercial . . . is beginning to behave like a smarter version of direct mail.”); Associated Press, *Targeted TV Advertising Catches Interest*, BIZREPORT, Oct. 13, 2004, <http://www.bizreport.com/print/8182/> (“In the next year or so, [television] advertisers in some regions will be able to . . . target individual households—a sort of direct marketing over TV.”).

36. For example, TiVo is piloting a service where television shows will be downloaded to the TiVo unit on demand. See Greg Sandoval, *TiVo Experiments With Internet Download Service*, USA TODAY, Aug. 12, 2005, http://www.usatoday.com/tech/products/services/2005-08-12-tivo-internet_x.htm. Podcasts also let consumers enjoy “broadcasted” video and audio content at the time and place of their choosing.

37. See Danielle Dunne, *What Is Unified Messaging?*, DARWIN MAG. ONLINE, Jan. 24, 2001, <http://www.darwinmagazine.com/learn/curve/column.html?ArticleID=68>.

38. Cf. Seth Schiesel, *Your Own Affair, More (VCR) or Less (MP3)*, N.Y. TIMES, Oct. 2, 2003, at G1 (discussing the irrationality of medium-specific privacy regulations).

39. See C. EDWIN BAKER, *ADVERTISING AND A DEMOCRATIC PRESS* 83 (1994).

40. See SONIA ARRISON, PAC. RESEARCH INST., *CANNING SPAM: AN ECONOMIC SOLUTION TO UNWANTED EMAIL 2* (2004), available at <http://www.pacificresearch.org/pub/sab/techno/2004/spam01-26-04.pdf> (giving an example of a marketing campaign that would be foreclosed by anti-spam legislation).

uncertain social welfare consequences from the foregone messages.⁴¹ Second, some existing marketing media will become cost-effective, and some marketers will redirect some of their marketing to these media,⁴² increasing the quantum of marketing in these alternative media.⁴³ This redirection also has uncertain social welfare consequences.⁴⁴ Finally, some media not previously used for marketing will become cost-effective as marketing media, and some marketers will redirect their marketing to these new marketplace options. Thus, regulation of a marketing medium will cause new marketing media to proliferate, as seen in marketing formats such as billboard trucks,⁴⁵ ad-wrapped cars,⁴⁶ “bumvertising,”⁴⁷ “skinvertising,”⁴⁸ and toilet-stall advertising.⁴⁹

41. See Robert E. Kraut et al., *Pricing Electronic Mail to Solve the Problem of Spam* 36 (Yale Int'l Ctr. for Fin., Working Paper No. 05-24, 2005), available at <http://ssrn.com/abstract=753664> (reducing marketing volume may foreclose positive-utility messages).

42. See Chris Gaither, *Spam's Assault is Going Beyond Annoying E-Mail*, L.A. TIMES, May 31, 2004, at A1 (“‘It’s like water flowing down a hill—you try to block [unsolicited marketing], and it just flows elsewhere,’ said Doug Peckover, co-founder of . . . an anti-spam software company”); Declan McCullagh, *Hanging Up on Telemarketers*, CNET NEWS.COM, Oct. 1, 2004, http://news.com.com/2102-1028_3-5391178.html (discussing how the National Do Not Call Registry caused some telemarketers to shift their efforts to pre-recorded telemarketing calls or interactive chats).

43. In addition to the principal effect of redirected marketer demand, marketing in alternative media might increase if the regulation requires consumer opt-in, in which case some marketers may engage in marketing in one medium simply to procure consumer opt-in consent for marketing in other media. See DONALD G. OGIIVIE, NAT’L CTR. FOR POLICY ANALYSIS, BRIEF ANALYSIS NO. 360, FINANCIAL PRIVACY: THE CHOICE IS IN THE MAIL (2001), <http://www.ncpa.org/pub/ba/ba360/ba360.pdf> (reporting that U.S. West made an average of 4.8 phone calls to reach a consumer in order to seek opt-in consent); see also GODIN, *supra* note 8, at 72; SACHARIN, *supra* note 26, at 74, 169.

44. See Blundon, *supra* note 27 (discussing some negative intermedia selection consequences of do-not-contact registries); see also Susan Chang & Mariko Morimoto, *An Assessment of Consumer Attitudes Toward Direct Marketing Channels: A Comparison Between Unsolicited E-Mail and Postal Direct Mail* (Apr. 1, 2003), <http://www.inma.org/subscribers/papers/2003-Chang-Morimoto.doc> (comparing the utility profiles of direct mail and spam). See generally R.G. Lipsey & R.K. Lancaster, *The General Theory of Second Best*, 24 REV. ECON. STUD. 11 (1956).

45. See Tara Boyle, *Mobile Billboards Herald Age of Drive-By Ads*, NPR.ORG, Apr. 30, 2005, <http://www.npr.org/templates/story/story.php?storyId=4625487>.

46. During the dot-com heyday, several vendors provided consumers with a free car and a stipend if they would drive a car wrapped in advertising. See Ann Mullen, *Billboards on a Roll*, METRO TIMES (Detroit), Feb. 6, 2001, <http://www.metrotimes.com/editorial/story.asp?id=1288>; Rodney Ho, *Update on Small Business: Several Start-Ups Are Wrapping Cars in Advertisements*, WALL ST. J., June 6, 2000, at B2. As economic models predict, when the dot-com crash reduced the demand for, and lowered the price of, marketing in other media, the free-ad-wrapped-

Marketer intermedia selection also affects individual consumers. Some consumers will not receive marketing they would not have otherwise gotten because the marketer is using new media channels. Meanwhile, other consumers who would have been exposed to the marketing will not get that exposure, either because the overall quantum of marketing is reduced or because those consumers are not exposed through the alternative media chosen by the marketer.

III. MARKETING AND SOCIAL WELFARE

Due to intermedia selection, medium-specific regulations may eliminate some marketing altogether, drive marketers to other media, and change the identity of consumers who are exposed to the marketing. The aggregate social welfare effects of these changes are unclear. However, at a minimum, the intermedia-selection effect may create new problems in other marketing media, even as regulators attempt to temporarily correct the problems in the regulated medium.

Better results can be achieved through an integrated cross-medium regulatory scheme. However, developing a holistic solution requires an understanding of the social welfare effects of any marketing regulation. Therefore, to facilitate that understanding, this Part considers the social and private benefits and harms attributable to marketing.

car vendors failed as well. See Technology & Marketing Law Blog, Getting Paid to Drive an Ad-wrapped Car, http://blog.ericgoldman.org/archives/2005/03/getting_paid_to.htm (Mar. 29, 2005).

47. “Bumvertising” involves marketers paying panhandlers to include marketing on their signs. See Claudia Rowe, *‘Bumvertising’ Stirs Debate*, SEATTLE POST-INTELLIGENCER, Sept. 13, 2005, at B1; Benjamin Rogovy, The Economics of Bumvertising (Aug. 13, 2005), <http://www.bumvertising.com/econ.html>.

48. “Skinvertising” is tattoo advertising. See Jeff Stryker, *Forehead Billboards*, N.Y. TIMES, Dec. 11, 2005, § 6 (Magazine), at 70; Technology & Marketing Law Blog, Tattoo Advertising/Human Billboards, http://blog.ericgoldman.org/archives/2006/01/auctioning_tatt.htm (Jan. 2, 2006).

49. See Tim Schooley, *Is Restroom Advertising a Straight Flush or Just Money Down the Drain?*, PITT. BUS. TIMES, July 2, 1999, <http://pittsburgh.bizjournals.com/pittsburgh/stories/1999/07/05/focus3.html>; Wizmark, <http://www.wizmark.com>:

Wizmark can talk, sing, or flash a string of lights around a promotional message when greeting a ‘visitor.’ The large anti-glare, water-proof viewing screen is strategically located just above the drain to ensure guaranteed viewing without interruptions. Using the elements of surprise and humor in a truly unique location will allow Wizmark, in combination with your ad, to make a lasting impression on every male that sees it.

A. *Consumer Welfare from Marketing*⁵⁰

Three components determine an individual consumer's utility from a marketing exposure: (1) the consumer's substantive interest in the marketing, (2) the consumer's nonsubstantive reactions to the marketing exposure, and (3) the attention consumed by evaluating and sorting the marketing.⁵¹

First, a consumer derives utility from substantive content of marketing. This utility may be positive if the marketing leads to consumer surplus-producing transactions, entertains the consumer, or is otherwise relevant to the consumer's interests. The utility may be zero if the consumer is uninterested in the contents of the marketing, and there may be negative utility if the contents offend or annoy the consumer.

Second, a consumer may derive utility from the rote act of being contacted by marketers or exposed to the marketing, regardless of the marketing content. The consumer may have an intangible reaction, such as feeling annoyed by the interruption or intrusion.⁵² Or the consumer may incur tangible out-of-pocket costs, such as those associated with printing⁵³ or disposal.⁵⁴ While nonsubstantive reactions are typically negative, some consumers may derive positive utility.⁵⁵ For example,

50. This Article assumes that marketers procure marketing only so long as it is expected to be profitable (that is, expected to produce zero or positive producer welfare). It also assumes that the marketer-consumer transaction does not create any negative externalities (if it does, those should be corrected elsewhere). Therefore, to simplify the analysis, this Article focuses only on marketing's effects on consumer welfare because if consumers experience zero or positive consumer welfare, the marketing will produce zero or positive social welfare.

51. See generally Shiman, *supra* note 9 (accounting for costs to receive marketing).

52. See Ayres & Funk, *supra* note 11, at 83 ("The intrusion [from telemarketing] is not only in the time spent talking on the phone (or in extracting yourself from the conversation). But it is also in hearing the phone ring and literally moving your body across the room to pick it up."). *But see* Christine Hine & Juliet Eve, *Privacy in the Marketplace*, 14 INFO. SOC'Y 253, 255 (1998) (discussing inconsistent consumer perceptions about marketing intrusiveness).

53. For example, faxes can require toner and paper to print the message, although unified messaging may decrease or eliminate these costs. See *Damas v. Ergotron, Inc.*, 2005 WL 1614485, at *2-4 (Ill. Cir. Ct. July 6, 2005) (mem.). Further, courts may find these costs to be *de minimis non curiat lex*. See, e.g., *Edwards v. Emperor's Garden Restaurant*, 130 P.3d 1280, 1287-88 (Nev. 2006); *Rossario's Fine Jewelry, Inc. v. Paddock Pub'ns, Inc.*, 443 F. Supp. 2d 976 (N.D. Ill. 2006).

54. See Jill Smolowe, *Read This!!!!!!!!!!*, TIME, Nov. 26, 1990, at 62 (estimating that forty-one pounds of junk mail were generated annually for each adult American).

55. See U.S. Postal Serv., *The Mail Moment*, http://www.usps.com/directmail/_pdf/05MailMoment.pdf (reporting that 56% say

some consumers may like the implicit recognition of receiving marketing.⁵⁶

The third component in determining a consumer's utility is attention consumption. "[T]he definition [of attention] is complicated, as the word seems to mean something slightly different to almost everyone."⁵⁷ However, regardless of the applicable definition, human attention is widely considered to be a scarce resource.⁵⁸ Marketing consumes this scarce resource when consumers evaluate and sort it.⁵⁹ Because the attention consumed in the evaluation-sort process has an opportunity cost,⁶⁰ the process generates negative utility for consumers.

receiving mail is a "real pleasure" and 55% "look forward to discovering the mail they receive").

56. See Chang & Morimoto, *supra* note 44, at 26 (noting that one student says he gets a "thrill" when he receives mail, even if it is "junk").

57. See DAVENPORT & BECK, *supra* note 8, at 18. Nineteenth century psychologist William James has offered one well-known definition:

[Attention] is the taking possession by the mind in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought It implies withdrawal from some things in order to deal effectively with others, and is a condition which has a real opposite in the confused, dazed, scatterbrained state.

1 WILLIAM JAMES, *Principles of Psychology*, in THE WORKS OF WILLIAM JAMES, 381-82 (Frederick H. Burkhardt ed., Harv. Univ. Press 1981) (1890). Professors Davenport and Beck offer another useful definition: "Attention is focused mental engagement on a particular item of information. Items come into our awareness, we attend to a particular item, and then we decide whether to act." DAVENPORT & BECK, *supra* note 8, at 20.

58. See, e.g., DAVENPORT & BECK, *supra* note 8, at 208; GODIN, *supra* note 8, at 13; Michael H. Goldhaber, *Attention Shoppers!*, WIRED, Dec. 1997, at 182, 184; Michael H. Goldhaber, *The Attention Economy and the Net*, FIRST MONDAY, Apr. 1997, http://www.firstmonday.org/issues/issue2_4/goldhaber/index.html#dep3; Warren Thorngate, *On Paying Attention*, in RECENT TRENDS IN THEORETICAL PSYCHOLOGY 247, 249-50 (William J. Baker et al. eds., 1988); Warren Thorngate, *The Economy of Attention and the Development of Psychology*, 31 CAN. PSYCHOL. 262, 263 (1990) [hereinafter Thorngate, *Economy of Attention*] ("[A]ttention is a fixed asset."). But see Michael H. Goldhaber, *What's the Right Economics for Cyberspace*, FIRST MONDAY, July 1997, http://www.firstmonday.org/issues/issue2_7/goldhaber/index.html#dep3 (arguing that attention is not a "resource"); Charles Sieloff, *May I Have Your Attention, Please? Learning in a Hyperconnected World*, in TRANSFORMING CULTURE: AN EXECUTIVE BRIEFING ON THE POWER OF LEARNING 16, 17-19 (2002), available at <http://www.darden.edu/batten/clc/Articles/AttentionPlease.pdf> (discussing ways that humans can expand attention).

59. See GODIN, *supra* note 8, at 25; Thorngate, *Economy of Attention*, *supra* note 58, at 263 ("We must pay attention to be informed."). Time is a rough proxy for measuring attention consumption, but they are not equivalent because consumers can multi-task. See generally DAVENPORT & BECK, *supra* note 8, at 27 (discussing the differences between time management and attention management).

60. As Professor Herbert Simon has said:

What information consumes is rather obvious: it consumes the attention of its consumers. Hence a wealth of information creates a poverty of attention,

While the quantum of negative utility derived from any individual sorting decision may be small, collectively consumers spend a significant portion of their lives evaluating and sorting marketing.⁶¹

Based on these factors, a consumer's utility from a particular marketing exposure can be modeled by the following formula:

$$NPU = SU + RU + ACU$$

where

- NPU* = the consumer's net private utility attributable to the marketing exposure;
- SU* = utility from the message's substantive content (SU can be negative, zero, or positive);
- RU* = utility from the consumer's reaction to the exposure, regardless of its substance (RU is typically negative); and
- ACU* = utility from the attention consumed by the process to sort the marketing message (ACU is presumed to be negative).

and a need to allocate that attention efficiently among the overabundance of information sources that might consume it.

Herbert A. Simon et al., *Designing Organizations for an Information-Rich World*, in COMPUTERS, COMMUNICATIONS, AND THE PUBLIC INTEREST 37, 40-41 (Martin Greenberger ed., 1971); see also DAVENPORT & BECK, *supra* note 8, at 11, 20, 94; SACHARIN, *supra* note 26, at 4; Peppers, *supra* note 8, at 13; Daniel R. Shiman, *When E-Mail Becomes Junk Mail: The Welfare Implications of the Advancement of Communications Technology*, 11 REV. INDUS. ORG. 35, 36 (1996). *But see* Carl Bialik, *Reports on Spam Levels Paint Differing Views of the Problem*, WALL ST. J., Sept. 21, 2004 (questioning whether spam recipients would reallocate their time to other productive activities).

61. See MICHAEL F. JACOBSON & LAURIE A. MAZUR, *MARKETING MADNESS: A SURVIVAL GUIDE FOR A CONSUMER SOCIETY* 193 (1995) (“[T]elevision commercials and certain other kinds of advertising are nibbling away at our lives By the time one is seventy-five years old, advertising will have stolen about four years of his or her life.”) (citation omitted); Ross D. Petty, *Marketing Without Consent: Consumer Choice and Costs, Privacy, and Public Policy*, 19 J. PUB. POL’Y & MARKETING 42, 50 (2000) (“In the modern and future world, in which marketing solicitations intrude on the privacy of millions, the costs of avoidance to each consumer arguably are still quite modest. But in the aggregate, the costs of avoidance by consumers may be staggering.”); Smolowe, *supra* note 54, at 63 (“Over the course of a lifetime, the average American professional will devote eight entire months to sifting through mail solicitations.”); ROCKBRIDGE ASSOCS., 2004 NATIONAL TECHNOLOGY READINESS SURVEY (2005), http://www.rhsmith.umd.edu/ntrs/NTRS_2004.pdf (estimating that each consumer spends about three minutes a day sorting spam, which in aggregate causes almost \$22 billion of lost worker productivity per year).

B. Marketing as a Market Failure

Many people believe that truthful marketing⁶² causes market failures by creating negative externalities⁶³ or a tragedy of the commons.⁶⁴ The more common argument is that marketing creates negative externalities because exposed consumers bear costs that marketers do not internalize.⁶⁵ The costs in this argument could be (1) the consumer's time and attention spent evaluating and sorting the marketing (ACU),⁶⁶ (2) disposal and printing costs (RU),⁶⁷ (3) any

62. False marketing creates the risk of market failures, but to focus its analysis, this Article only addresses truthful marketing.

63. An externality is an “[a]ction taken by either a producer or a consumer which affects other producers or consumers but is not accounted for by the market price.” PINDYCK & RUBINFELD, *supra* note 13, at 294.

64. A “tragedy of the commons” occurs when each decision-maker consumes as much of a common resource as is individually profitable, even if collectively this results in extinction of the common resource. Garrett Hardin, *The Tragedy of the Commons*, 162 *SCIENCE* 1243 (1968). For example, if fishermen do not pay for the right to fish, collectively they may overfish and eliminate the fish supply for everyone. *See id.*

65. *See, e.g.*, Ayres & Funk, *supra* note 11, at 77; Ai-Mei Chang et al., *The Economics of Freebies in Exchange for Consumer Information on the Internet: An Exploratory Study*, *INT’L J. ELEC. COM.*, Fall 1999, at 85, 97 (calling marketing an externality and a “nuisance”); Scott E. Fahlman, *Selling Interrupt Rights: A Way to Control Unwanted E-mail and Telephone Calls*, 41 *IBM SYS. J.* 759, 759 (2002); Dennis W.K. Khong, *An Economic Analysis of Spam Law*, 1 *ERASMUS L. & ECON. REV.* 23, 25 (2004), <http://www.eler.org/archive/2004/eler-2004-1-23-khong.pdf>; Kraut et al., *supra* note 41, at 7-8; Kenneth C. Laudon, *Markets and Privacy*, 39 *COMM. ACM* 92, 93 (1996); Declan McCullagh, *Want to Stop Spammers? Charge ‘Em*, *CNET NEWS.COM*, May 5, 2003, http://news.com.com/2010-1071_3-999561.html (agreeing with former Federal Trade Commission Commissioner Orson Swindle that spam is “pollution”); Petty, *supra* note 61, at 42 (“All marketing communications impose costs on consumers.”); Shiman, *supra* note 60, at 35; Shiman, *supra* note 9, at 323; Sieloff, *supra* note 58, at 19 (“[U]nwarranted assaults on our attention [are] a cost that must be regulated, just as we regulate other externalities that are not reflected in market transactions, like environmental pollution.”); Randall Stross, *How to Stop Junk E-Mail: Charge for the Stamp*, *N.Y. TIMES*, Feb. 13, 2005, §3, at 5. Privacy advocates often make analogous arguments regarding market failures for privacy, where the principal privacy concern is unwanted marketing. *See, e.g.*, Paul M. Schwartz, *Property, Privacy, and Personal Data*, 117 *HARV. L. REV.* 2055 (2004).

66. *See* JOHN HAGEL III & MARC SINGER, *NET WORTH: SHAPING MARKETS WHEN CUSTOMERS MAKE THE RULES* 15 (1999) (“[M]arketers don’t bear the cost of the interruption—the consumer, who pays for it with his or her time, bears it instead.”); Oleg V. Pavlov et al., *Mitigating the Tragedy of the Digital Commons: The Problem of Unsolicited Commercial E-Mail*, 16 *COMM. ASS’N FOR INFO. SYS.* 73, 74 (2005); Sieloff, *supra* note 58 (“[P]erhaps we will recognize unwarranted assaults on our attention (like unscrupulous advertising or spamming) as a cost that must be regulated . . .”). *See generally* Eric Horvitz et al., *Attention-Sensitive Alerting*, in *PROCEEDINGS OF THE 15TH ANNUAL CONFERENCE ON UNCERTAINTY IN ARTIFICIAL INTELLIGENCE* 305,

consumer annoyance attributable to the marketing exposure (RU),⁶⁸ or (4) the message's irrelevance to its recipients (SU).⁶⁹ The argument then concludes that, because marketers do not bear the true social costs of their marketing, they overproduce it.⁷⁰

Some conflate this argument with a possible market failure among marketers and any third party disseminators, such as Internet access providers who provide connectivity services to spammers without associated payment.⁷¹ Some predicate this argument on the inaccurate assumption that some marketers (such as spammers) do not pay for the dissemination of their marketing.⁷² However, every marketer incurs costs to engage in marketing—at a minimum, the opportunity cost of their time to produce the marketing—and most spammers typically pay

available at <ftp://ftp.research.microsoft.com/pub/ejh/priorities.pdf> (discussing a model for evaluating the costs attributable to interruptions).

67. See, e.g., *Destination Ventures, Ltd. v. FCC*, 46 F.3d 54, 56 (9th Cir. 1995) (acknowledging “the government’s substantial interest in preventing the shifting of advertising costs to consumers” in the context of junk faxes); Report and Order, *In re Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, 18 F.C.C.R. 14,014, 14,134 (2003) (“Facsimile messages sent to a computer or fax server may shift the advertising costs of paper and toner to the recipient, if they are printed.”); David E. Sorkin, *Unsolicited Commercial E-Mail and the Telephone Consumer Protection Act of 1991*, 45 BUFF. L. REV. 1001, 1008-09 (1997) (discussing a fax machine owner’s out-of-pocket costs incurred due to unsolicited faxes).

68. See, e.g., Ayres & Funk, *supra* note 11, at 79 (“Telemarketers don’t bear the full costs of their marketing because they do not compensate recipients for the hassle of, say, being interrupted during dinner.”); Petty, *supra* note 61, at 43 (“[T]he marketer probably does not consider all the [consumer-borne marketing costs], such as . . . telephone interruption, from each method of communication, because these are not costs paid by the marketer.”).

69. See, e.g., Shiman, *supra* note 60, at 37 (“Direct marketing firms and anyone else sending unsolicited messages therefore impose a negative externality on consumers, by sending out messages to consumers that may not want the good, but are forced to read the message to find this out.”).

70. See ARRISON, *supra* note 40, at 12; Ayres & Funk, *supra* note 11, at 79 (“Because of . . . externalized costs, telemarketers have an incentive to call too often.”); *id.* at 87-88 (“[T]elemarketers . . . over-consume a scarce resource: the time and attention of American consumers.”); Loder et al., *supra* note 16, at 1; JIM NAIL ET AL., FORRESTER RES., INC., THE REAL ANSWER TO THE SPAM PROBLEM (2003), <http://www.forrester.com/ER/Research/Brief/0,1317,33324,00.html>; Petty, *supra* note 57, at 43 (“[M]ore resources are being spent on marketing to consumers than would be optimal if the market were functioning perfectly.”); Shiman, *supra* note 60, at 40 (“Like most goods with a negative externality, lower production (of messages) than the market equilibrium yields higher welfare.”); see also sources cited *supra* note 65.

71. See generally Eric Goldman, *Where’s the Beef? Dissecting Spam’s Purported Harms*, 22 J. MARSHALL J. COMPUTER & INFO. L. 13, 14 (2003) (distinguishing the various harms caused by spam).

72. See, e.g., Ayres & Funk, *supra* note 11, at 136.

Internet access charges to disseminate their marketing.⁷³ Even if the costs to send each e-mail are minor, they are still greater than zero.

However, for simplicity, this Article assumes that there are no market failures between marketers and disseminators.⁷⁴ Thus, this Article can address the ideal level of marketing regulation assuming no defects in the dissemination chain. If marketers impose negative externalities on disseminators, separate regulatory solutions may be appropriate for those defects.⁷⁵

Responding to the marketing-as-negative-externality argument, economists typically propose to (1) increase marketer costs via a tax, where the tax proceeds accrue to the government;⁷⁶ (2) increase marketer costs via a liability rule, where the damages accrue to affected consumers;⁷⁷ or (3) create a property rule, such as an outright ban on marketing or an opt-in rule, that prevents the marketer from creating the negative externalities unless the marketer procures the right from consumers (and, presumably, compensates consumers accordingly).⁷⁸

While most commentators argue that marketing creates a negative externality, some commentators argue that the market failure is a tragedy of the commons.⁷⁹ This argument assumes that an unpropertyed resource—typically, the social pool of consumer attention—is “in the commons.” Because marketers do not incur any costs to consume the resource, marketers overconsume attention by

73. See Saul Hansell, *Totaling Up the Bill for Spam*, N.Y. TIMES, July 28, 2003, at C1 (estimating that spam costs at least \$0.00025 per message); Joshua Goodman et al., *Stopping Spam*, SCI. AM., Apr. 2005, at 42, 43 (estimating that spam costs \$0.0001 per message).

74. Though it may buck conventional wisdom, this assumption is not particularly radical. Most disseminators can pass through the fully loaded costs of a marketer’s activities. See Goldman, *supra* note 71. However, some may voluntarily choose other pricing models, such as flat-rate pricing. See *id.*

75. Existing property and liability rules may already correct any negative externality if a marketer uses a disseminator’s resources without permission or compensation. See, e.g., Computer Fraud & Abuse Act, 18 U.S.C. § 1030(a)(5) (2000); Thrifty-Tel, Inc. v. Bezenek, 54 Cal. Rptr. 2d 468 (Ct. App. 1996) (discussing common law trespass of telecommunications facility); Intel Corp. v. Hamidi, 71 P.3d 296 (Cal. 2003) (discussing common law trespass of e-mail servers).

76. See, e.g., Pavlov et al., *supra* note 66, at 78; Shiman, *supra* note 60, at 41. Negative-externality-correcting taxes are sometimes called “Pigovian taxes” after A.C. Pigou, an early twentieth-century economist. See A.C. PIGOU, THE ECONOMICS OF WELFARE 751 (1920).

77. See, e.g., Khong, *supra* note 65, at 30-31.

78. See, e.g., *id.* at 29-40.

79. See, e.g., *id.* at 32-33; Pavlov et al., *supra* note 66; Jonathan Rauch, *Want to E-Mail Me About this Article? Pay Up*, NAT’L J., Aug. 9, 2003, at 2531, 2531 (analogizing spam to a “tragedy of the commons” problem); Timothy Van Zandt, *Information Overload in a Network of Targeted Communication*, 35 RAND J. ECON. 542, 545, 550 (2004).

sending too much marketing.⁸⁰ This tragedy can be corrected by proprietizing the resource, which forces marketers to internalize the costs of consuming consumer attention.⁸¹

These marketing-as-market-failure arguments are deficient for two principal reasons. First, they do not accurately account for marketing's costs and benefits. Second, they do not consider the implications of a Coasean analysis.

1. COST-BENEFIT ACCOUNTING OF MARKETING

Arguments that marketing represents a market failure between marketers and consumers generally rely on an incomplete cost-benefit accounting. Typically, these arguments extract one component of the above NPU equation and identify why marketers may fail to internalize any marketing-associated negative utility from that component. However, to accurately determine consumer welfare attributable to a marketing exposure, each individual consumer's NPU must be considered in totality, not in pieces.

For example, an annoying message (RU) reduces NPU, as does the attention (ACU) required to sort the message. However, a sufficiently positive SU can override those effects⁸² and still produce a positive NPU for the consumer, in which case, the consumer has benefited from the marketing exposure either due to the marketing itself (for example, it may entertain or educate the consumer) or from a resulting transaction with the marketer. Treating these consumers as having experienced a negative externality from that exposure incorrectly accounts for NPU, even if RU and ACU were negative.

This same logic can be applied to the entire group of consumers exposed to a particular marketing item. Consumers have heterogeneous interests. As a result, any individual marketing exposure will cause some consumers to derive positive NPU, some to derive negative NPU, and others to derive zero NPU. Depending on the respective

80. See Kraut et al., *supra* note 41.

81. See *id.* at 7 (“The pricing of email is an example of using a market mechanism to allocate scarce resources—human attention in this case.”). See generally AttentionTrust.org, About AttentionTrust, <http://www.attentiontrust.org/about> (last visited Nov. 20, 2006) (describing AttentionTrust as a “non-profit organization dedicated to promoting the principles of user control” and listing its principles—including that consumers “own [their] attention” and “[their] attention has WORTH”).

82. Cf. Steven M. Edwards et al., *Forced Exposure and Psychological Reactance: Antecedents and Consequences of the Perceived Intrusiveness of Pop-Up Ads*, J. ADVER., Fall 2002, at 83, 89 (noting that a consumer's perceptions of relevance diminished the perception that the advertising was intrusive).

magnitudes of each individual NPU, some marketing exposures will produce aggregate positive consumer welfare.

This can be true even if a majority of exposed consumers derive negative NPU from the marketing: their aggregate negative NPU may be overcome by a minority of consumers who derive a large enough quantum of positive NPU. For example, consider marketing for a little-known remedy to an embarrassing physical malady suffered by a small number of consumers (for example, erectile dysfunction). The marketing may offend some consumers, who will experience significant negative NPU accordingly. Other consumers will deem the marketing irrelevant, and their NPU will be zero or slightly negative (due to negative ACU). However, the marketing may lead to significant positive NPU for the minority of consumers who suffer from the malady and learn about the cure due to the marketing. Depending on the respective quantities of NPU, the minority's positive NPU could outweigh the negative or neutral NPU experienced by the other exposed consumers. As a result, it would be a mistake to assess the utility of marketing based on a simple popularity contest. Some marketing could be widely uninteresting or even offensive but, due to strong and possibly unmet minority interests,⁸³ still produce aggregate positive consumer (and social) welfare.

Finally, marketing can increase competition, improving the quality of goods while lowering prices.⁸⁴ Therefore, marketing can produce positive externalities for consumers who are not exposed to the marketing themselves. This factor also must be considered in any cost-benefit analysis.

Collectively, this discussion illustrates that marketing has the capacity to create positive utility for individual consumers and for consumers as a class. Of course, these conclusions are hardly radical or novel. There is little doubt that some, but not all, marketing has individual and social benefits.⁸⁵ Yet, this point may be easily forgotten amidst the loud antipathy expressed towards marketing generally.⁸⁶

83. Cf. Chris Anderson, *The Long Tail*, WIRED, Oct. 2004, at 170, 172-74 (discussing how majority interests can impede the fulfillment of important minority tastes); Loder et al., *supra* note 16, at 2 (stating that consensus definitions of spam may override minority interests).

84. See Lee Benham, *The Effect of Advertising on the Price of Eyeglasses*, 15 J.L. & ECON. 337, 339, 344 (1972) (showing that states that permitted eyeglasses advertising had lower average prices than those that restricted such advertising); George J. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213, 223-24 (1961) (stating that advertisements that contain price information reduce pricing dispersion and average prices).

85. See, e.g., Loder et al., *supra* note 16; Van Zandt, *supra* note 79.

86. For more discussion about consumer antipathy towards marketing, see Part I *supra*.

Further, even if marketing can be beneficial in some cases, consumer NPU cannot be known until consumers evaluate the marketing based on their idiosyncratic preferences and interests. Without this information, it is not possible to identify beneficial marketing *ex ante*⁸⁷ and thereby encourage good marketing and discourage bad marketing. Additionally, even using cost-benefit analysis, it is virtually impossible to determine empirically if marketing collectively affects total consumer welfare positively or negatively.

Nevertheless, even if marketing's welfare effects are indeterminate, it would be erroneous to treat marketing as having negative NPU *per se*.⁸⁸ Instead, basing policy decisions on this erroneous assumption may create a new externality problem of producing too little marketing by causing marketers to overinternalize costs, which may counterproductively reduce social welfare.⁸⁹

2. THE COASE THEOREM

Because consumers have heterogeneous preferences, some consumers exposed to an individual marketing campaign will inevitably experience negative NPU from the marketing. From the perspective of these consumers, the marketing imposes a negative externality on them personally, even if the marketing has positive aggregate NPU effect on consumers as a class. Therefore, while it would be a mistake to categorize all marketing as imposing negative externalities on society, marketing does create negative externalities for individual consumers. These negative externalities may deserve a policy response.

The Coase Theorem is a standard tool for analyzing policy responses to negative externalities.⁹⁰ Yet, surprisingly (given the vast literature on marketing regulations), scholars have rarely applied it to

87. See ARRISON, *supra* note 40, at 3.

88. Cf. Ayres & Funk, *supra* note 11, at 84 (“[D]irect marketing is not *malum in se*.”); *Direct Inspection*, PROMO, Oct. 2002, at 33, 33, available at http://www.findarticles.com/p/articles/mi_kmpro/is_200210/ai_kepm193818 (“[C]onsumers are offended not by direct marketing *per se*, only by its shortcomings.”).

89. See Van Zandt, *supra* note 79, at 551-52 (stating that when sender costs did not reflect the positive recipient welfare that some recipients would have derived, senders produced a suboptimal level of communications); Kraut et al., *supra* note 41, at 37 (recounting an experiment that showed that when the cost of sending messages is too high, social welfare decreases).

90. See A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 14 (2d ed. 1989); David D. Friedman, *The World According to Coase*, L. SCH. REC., Spring 1992, at 4, 4-6.

marketing.⁹¹ The theorem says that if bargaining is costless, the parties will negotiate a private solution to a negative externality, and this bargained outcome will be economically efficient regardless of how the legal entitlements are initially allocated.⁹² As applied to marketing, the Coase Theorem predicts that it does not matter if marketers are entitled to disseminate marketing or if consumers are entitled to be free from marketing.⁹³ Either way, the parties will bargain to reach an outcome, and that outcome will be the same regardless of the starting point and economically efficient.⁹⁴

Unfortunately, bargaining over marketing is costly. Among other costs, the bargaining process itself requires attention from consumers—thereby incurring a cost that consumers seek to avoid in the first place.⁹⁵ In the face of nontrivial bargaining costs, the initial allocation of entitlements may dictate the outcome.⁹⁶ Also, the Coase Theorem makes the most sense when the number of bargaining parties is small.⁹⁷ In contrast, Coase says that government regulation may be appropriate when “a large number of people are involved and . . . therefore the costs of handling the problem through the market or the firm may be high.”⁹⁸

Arguably, marketing meets this precondition. A single marketer can easily disseminate marketing to thousands—or even millions—of consumers who derive negative NPU from the exposure, putatively requiring each of these consumers to bargain with this marketer.⁹⁹ With

91. It appears that only two articles have applied the Coase Theorem to marketing in a noncursory way: Khong, *supra* note 65, and Pavlov et al., *supra* note 66.

92. See Coase, *supra* note 17.

93. See Khong, *supra* note 65, at 29; Hal R. Varian, *Economic Aspects of Personal Privacy*, in *PRIVACY AND SELF REGULATION IN THE INFORMATION AGE* 35, 39 (1997), available at <http://www.sims.berkeley.edu/~hal/Papers/privacy/> (calling the initial allocation of entitlements “arbitrary”).

94. See Coase, *supra* note 17.

95. See Loder et al., *supra* note 16, at 3 (“[N]egotiating an acceptable division of surplus [between marketer and consumer] is complicated by the difficulty that the act of communication is itself the subject of the negotiation.”).

96. See Coase, *supra* note 17, at 16.

97. See *id.* at 17.

98. See *id.* at 17-18. However, Coase prefers market solutions when the costs of government intervention exceeded the associated gains. See *id.* at 18. In addition to government regulation and market solutions, Coase discusses a third approach: merging the affected parties into a single firm, which then would benefit from the reduced transaction costs of intrafirm negotiations. See *id.* at 16-17.

99. See PETER P. SWIRE & ROBERT E. LITAN, *NONE OF YOUR BUSINESS: WORLD DATA FLOWS, ELECTRONIC COMMERCE AND THE EUROPEAN PRIVACY DIRECTIVE* 8 (1998). Simply finding the bargaining party can be costly or impractical. See Pavlov et al., *supra* note 66, at 77 (explaining that the Coase Theorem does not apply to spam

millions of marketers in the United States alone disseminating marketing, this could collectively require trillions of bargains to be struck. The aggregate social costs of this bargaining could be overwhelming.

Accordingly, Coase's arguments could support government regulation of marketing to mitigate or avoid these high bargaining costs. Nevertheless, Coase also cautioned that "all solutions have costs and there is no reason to suppose that government regulation is called for simply because the problem is not well-handled by the market or the firm."¹⁰⁰ Thus, this Article looks at a variety of options to cope with the negative externalities of marketing. However, before evaluating these options, there is some benefit to looking more closely at the costs and benefits of marketing.

3. MARKETPLACE MATCHMAKING AND CONSUMER PREFERENCE DISCLOSURE COSTS

Marketing plays an important role in the marketplace exchange process. Consumers have needs that marketers can fulfill. Marketers want to identify and communicate with those consumers. Marketing allows marketers to match with interested consumers.

However, the matchmaking process is costly. Marketers incur costs to reach interested consumers, including the costs of preparing and disseminating marketing.¹⁰¹ Further, marketers may incur costs to target their marketing to improve the ratio of interested to uninterested consumers.¹⁰² These costs are partially driven by the fact that consumer preferences are heterogeneous but generally unknown to marketers (in other words, consumer preferences are the consumer's private information), and marketers incur costs to learn and act on these preferences.¹⁰³ As a result, marketing efforts cannot be perfectly

because spammers hide their identities, making it impossible for consumers to find them to initiate negotiations).

100. Coase, *supra* note 17, at 18.

101. There is a cross-elasticity between dissemination and targeting costs. As dissemination costs increase, marketers will spend more to target consumers more carefully. *See* Kraut et al., *supra* note 41, at 4 ("[P]er-message pricing does indeed improve targeting of messages."). Alternatively, as dissemination costs decrease, marketers will spend less on targeting. *See* Petty, *supra* note 61, at 43; Shiman, *supra* note 60, at 35; Ayres & Funk, *supra* note 11, at 85. Spam may be a good example of how targeting decreases as dissemination costs decrease. *See id.*

102. *See* Saul Hansell, *So Far, Big Brother Isn't Big Business*, N.Y. TIMES, May 7, 2000, § 3, at 1.

103. *See infra* notes 230-31 and accompanying text.

targeted.¹⁰⁴ Meanwhile, as explained above, imperfectly targeted marketing creates negative externalities for uninterested consumers.

Imagine a world where consumer preferences were public instead of private information. This world would unlock significant social benefits¹⁰⁵ by reducing the cost of marketer-consumer matchmaking. With public consumer preferences, marketers could better target their marketing and reduce the quantum of marketing they disseminate.¹⁰⁶ Marketers would benefit by spending less on marketing while getting better consumer response, and consumers would benefit by receiving less negative NPU marketing and more positive NPU marketing.¹⁰⁷

There are many reasons why this counterfactual is unrealistic, including the fact that consumers would not want their preferences publicly known.¹⁰⁸ For purposes of this Coasean analysis, consumers do not want to convert their preferences from private information to public information because the conversion process is costly. Disclosures are time-consuming, and preferences need to be constantly updated as they change.¹⁰⁹

Further, even if consumers want to disclose their preferences, they may not be capable of doing so if their preferences are latent.¹¹⁰ This Article defines latent preferences as preferences that the consumer cannot articulate prospectively but nevertheless will become manifest

104. See Hansell, *supra* note 102. As retailer John Wanamaker purportedly observed, “Half the money I spend on advertising is wasted; the trouble is I don’t know which half.” The Quotations Page, Quotation #1992 from Laura Moncur’s Motivational Quotations, <http://www.quotationspage.com/quote/1992.html> (last visited Nov. 20, 2006).

105. See Il-Horn Hann et al., *Direct Marketing: Privacy and Competition* (Korea Dev. Inst. Sch. of Pub. Policy & Mgmt., Working Paper No. 03-12, 2003), http://www.kdischool.ac.kr/faculty/paper_download.asp?lb_no=532&lb_title4=w03-12.pdf; George J. Stigler, *An Introduction to Privacy in Economics and Politics*, 9 J. LEGAL STUD. 623, 628-29 (1980) (explaining that the inability to accurately classify people due to privacy legislation leads to inefficient allocations of resources); Van Zandt, *supra* note 79; Varian, *supra* note 93, at 35 (“It is important to recognize that [annoying marketing] . . . arise[s] because the seller has *too little* information about the buyer.”).

106. At least, so long as the cost of incorporating this information into targeting schemes was less than prevailing dissemination costs. See sources cited *supra* note 101.

107. See Shiman, *supra* note 9 (discussing the benefits of marketer targeting).

108. See *infra* Part VI.C.

109. See *infra* Part IV.B.

110. See Jill Mahoney, *The Brave New World of Neuromarketing*, GLOBE & MAIL (Toronto, Can.), Sept. 10, 2005, at A10 (“Scientists believe an astonishing 80 percent or so of the mental processes—namely emotions—that slosh around in the human brain are rooted in the unconscious.”). See generally BARRY SCHWARTZ, *THE PARADOX OF CHOICE: WHY MORE IS LESS* 48-52 (2004) (discussing how hard it is for consumers to know their preferences).

when activated by some external stimulus. For example, a consumer may discover that a previously unknown product can solve a problem that the consumer is experiencing. The consumer could not articulate a need for that product without knowledge of its existence, and perhaps the consumer had developed a suboptimal coping mechanism or did not view the problem as solvable. In these cases, the consumer's discovery of a solution simultaneously educates the consumer and creates the demand for the solution. Sometimes, the discovery process results in an immediate purchase (for example, impulse purchases),¹¹¹ other times, once the consumer learns of the marketplace option, the consumer becomes able to articulate the preference, shifting it from latent to active.

Admittedly, not all of these latent preferences are intrinsic. Marketing sometimes can manufacture consumer preferences,¹¹² in which case those seemingly latent preferences are really imposed externally. Even so, this arguably should not matter; so long as satisfaction of the preference creates positive utility for the consumer, the preference's source should be irrelevant.

However, to the extent that latent preferences are really manufactured, marketing may not create new incremental social welfare. Instead, marketing might merely cause consumers to reallocate wealth to some marketers at the expense of other marketers. Marketing may also make consumers less happy overall because it can enhance preferences that ultimately cannot be satisfied.¹¹³ Unfortunately, there may be no way to determine with certainty the unique and definitive source of consumer preferences. Yet, unquestionably, some latent preferences exist in the absence of marketing, and this Article assumes that there would be value to identifying and catering to these latent preferences.

4. ENTITLEMENT ALLOCATION IN A COSTLY ENVIRONMENT

As the prior discussion illustrates (and as Coase predicts), any entitlement allocation (that is, the right to disseminate marketing, or the right to be free from marketing) has inherent costs.¹¹⁴ Marketers bear costs to disseminate and target marketing; consumers bear costs from exposure to unwanted marketing and from disclosure of their

111. See, e.g., Dennis W. Rook, *The Buying Impulse*, 14 J. CONSUMER RES. 188 (1987).

112. See, e.g., Jon. D Hanson & Douglas A Kysar, *Taking Behavioralism Seriously: Some Evidence of Market Manipulation*, 112 HARV. L. REV. 1420 (1999).

113. See, e.g., SCHWARTZ, *supra* note 110.

114. See Coase, *supra* note 17, at 17-18.

preferences or expression of their preferences through searching. In these situations, “the preferred legal rule . . . minimizes the effects of transaction costs.”¹¹⁵ This rule is easy to state but hard to apply in practice.

One approach to satisfying this preferred rule would allocate the entitlement to minimize overall transaction costs. This approach would have two benefits. First, minimizing social cost reduces waste generally. Second, with respect to marketing, reducing the matchmaking costs expands the range where marketers and consumers can make positive utility matches, which increases welfare-enhancing matchmaking.

This approach puts the burden on the least cost avoider by allocating the entitlement to the party that incurs relatively higher transaction costs.¹¹⁶ Under this entitlement allocation, the burdened party incurs lower costs than those that would have been incurred by the entitled party. For example, assume that it costs *A* \$40 to comply with a regulation and *B* \$20 to accommodate the absence of the regulation. All other things being equal, it would be better to adopt a regulatory scheme that makes *B* bear the \$20 burden than one that makes *A* bear the \$40 burden. Thus, by avoiding the higher costs, allocating entitlements based on transaction costs reduces total social costs.

When parties have asymmetrical information, a different but analogous approach—known as an information-forcing rule—allocates the entitlement to encourage the party with superior information to disclose its information.¹¹⁷ As with the least-cost-avoider principle, the information-forcing default reduces total social cost because the disclosing party incurs less costs than the entitled party would incur to conduct a costly investigation revealing the same information.¹¹⁸

Applying the cost-minimization approach, marketers arguably have superior information as compared to consumers about their business practices and the cost and profitability of targeting.¹¹⁹ Under this

115. POLINSKY, *supra* note 90, at 13. As Coase says, “The problem is to avoid the more serious harm.” Coase, *supra* note 17, at 2.

116. *Cf.* ROBERT GELLMAN, PRIVACY, CONSUMERS AND COSTS: HOW THE LAW OF PRIVACY COSTS CONSUMERS AND WHY BUSINESS STUDIES OF PRIVACY COSTS ARE BIASED AND INCOMPLETE 36 (2002), <http://www.epic.org/reports/dmfprivacy.pdf> (“If someone will pay for privacy, then the right question may be: Is there someone else who can bear the costs more efficiently and more fairly?”).

117. *See* Schwartz, *supra* note 65, at 2100-05; Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87 (1989).

118. *See* Ayres & Gertner, *supra* note 117.

119. *See* Loder et al., *supra* note 16, § 3.1 (“Our primary assumption is that the person who composes a message knows more about its content than a person who

argument, the entitlement should be given to consumers, which would force marketers to disclose or act on their superior information.¹²⁰

However, different assumptions could support an opposite conclusion. Specifically, only consumers know their private preferences,¹²¹ and marketers cannot learn about these preferences unless consumers actually disclose them.¹²² Under this counterargument, the marketers should get the entitlement as a way of forcing consumers to disclose their private information. So do marketers or consumers have superior knowledge? Without rigorous data, there is no easy way to decide who can disclose their information more cheaply.

More importantly, these alternatives are all incomplete because they do not consider how the parties behave in response to transaction costs.¹²³ This particularly applies to marketing. Marketing is not an end goal; it is a process that facilitates exchange. In turn, by reallocating goods and services to those who value them the most, private exchanges are the principal engine (or the “invisible hand”) that drives improvements in social welfare.¹²⁴

Consumer preferences are at the heart of the private exchange system; they are its *sine qua non*. Consumers manifest their preferences through private exchanges, and the entire private exchange system and social welfare improve as it becomes easier for consumers to manifest their preferences. Therefore, evaluations of entitlement allocations should consider both the effect on transaction costs and consumer-preference manifestations.

has not yet read it. This private information favors the sender”). Privacy advocates make an analogous argument, claiming that marketers know their business and marketing practices while consumers do not. *See, e.g.*, Julie E. Cohen, *Examined Lives: Information Privacy and the Subject as Object*, 52 STAN. L. REV. 1373, 1400-01 (2000) (arguing that businesses do not need more information about consumers, but that consumers need more information about businesses); Richard S. Murphy, *Property Rights in Personal Information: An Economic Defense of Privacy*, 84 GEO. L.J. 2381, 2414 (1996); Schwartz, *supra* note 65, at 2102-03.

120. *See* Ayres & Funk, *supra* note 11, at 85 (“Direct marketing is often a net social waste because the legal system does not give sellers of niche products adequate incentive to target likely customers.”); Kraut et al., *supra* note 41, at 8 (“[B]y charging a small price to send a message, the pricing system shifts the task of screening messages from recipients, who don’t know the content of a message, to senders, who do.”).

121. Consumers may not know their latent preferences, but they still have superior knowledge of those latent preferences as compared to marketers.

122. *See* Fahlman, *supra* note 65, at 761; Van Zandt, *supra* note 79, at 545.

123. *See* POLINSKY, *supra* note 90, at 13-14.

124. *See* ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS (Edwin Cannan ed., 5th ed. 1904) (1776).

IV. MARKETING REGULATION SCHEMES

Marketing regulations are diverse in their implementation, partially due to the medium-specific nature of their development. However, the regulatory implementations generally can be sorted into one of three principal categories:¹²⁵ (1) an opt-in scheme, which requires consumer consent before marketers can disseminate marketing to them;¹²⁶ (2) an opt-out scheme, which allows consumers to prevent future marketing exposures on a medium-specific basis;¹²⁷ or (3) a mandatory metadata¹²⁸ disclosure scheme, which requires marketers to make legally dictated disclosures that help the consumer sort the marketing or assess its trustworthiness.¹²⁹

In addition, some media have no regulatory delivery restrictions on marketing at all. In these situations, a consumer may not be able to avoid unwanted exposures to marketing in that medium except by avoiding the medium altogether. Unrestricted media include television, radio, cable, print periodical marketing, and billboards and other physical signs.

125. Cf. Shiman, *supra* note 9, at 346-50 (offering a similar taxonomy).

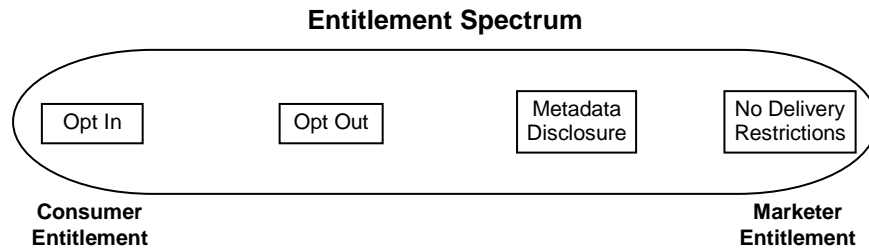
126. Currently, the only marketing delivery media governed by opt-in rules are fax marketing, 47 U.S.C. § 227(b)(1)(C) (2000) and some types of text-messaging marketing, 47 C.F.R. § 64.3100 (2006) (covering unsolicited marketing text messages sent to registered wireless domains).

127. Some opt-out systems allow consumers to opt out of all marketing in the medium, regardless of the marketer's identity. See, e.g., Telemarketing Sales Rule (Final Rule), 68 Fed. Reg. 4580 (Jan. 29, 2003) (codified at 16 C.F.R. pt. 310 (2006)) (establishing the Do Not Call Registry for telemarketing); 39 U.S.C. § 3010 (2000) (stating that consumers can opt out of "sexually oriented advertisements" sent by mail). Other opt-out systems require consumers to opt out of marketing on a marketer-by-marketer basis. See, e.g., 15 U.S.C.A. § 7704(a)(4) (2006) (e-mail marketing), 47 C.F.R. § 64.1200(c)(2) (telemarketing); 39 U.S.C. § 3008 (stating that consumers can opt out of "erotically arousing or sexually provocative" mailings from specified senders).

128. Metadata means "data about other data." See Posting of Tim Oren to Due Diligence, Metadata: Promises and Perils, <http://www.pacificavc.com/blog/2003/08/21.html> (Aug. 21, 2003, 17:21 PST).

129. Mandatory metadata disclosure schemes appear in a variety of regulatory contexts. For instance, telemarketers must make their name and phone numbers readable by Caller ID. See 16 C.F.R. § 310.4(a)(7). E-mail marketing must contain the marketer's physical address, see 15 U.S.C.A. § 7704(a)(5)(A)(iii), and must be labeled as advertising. See 15 U.S.C.A. § 7704(a)(5)(A)(i) ("It is unlawful for any person to initiate the transmission of any commercial electronic mail message . . . unless the message provides . . . clear and conspicuous identification that the message is an advertisement or solicitation . . ."); 16 C.F.R. § 316.4 ("Any person who initiates . . . the transmission of a commercial electronic mail message that includes sexually oriented material must . . . include in the subject heading the phrase 'SEXUALLY-EXPLICIT:' in capital letters as the first nineteen (19) characters at the beginning of the subject line . . .").

These categories create a spectrum of entitlement allocations as illustrated in the figure below.



At one end of the spectrum, opt-ins represent a consumer's entitlement to be free from marketing. At the other end of the spectrum, a marketer has the entitlement to disseminate marketing to consumers in unrestricted media. In between these two end points are the opt-out and mandatory metadata schemes, in which the entitlement is not absolute. Instead, each party shoulders some burden and, in effect, shares the entitlement. For example, with opt-outs, the marketer initially has the entitlement, but consumers can obtain the entitlement for themselves by communicating their preferences. The remainder of this Part will analyze each of the three regulatory options in which consumers have some entitlement to be free from marketing.

A. Opt-In

Privacy and consumer advocates typically favor opt-in regulatory schemes.¹³⁰ First, entitlement allocations have a distributional welfare effect,¹³¹ and opt-ins allocate private benefits to consumers instead of marketers because marketers must bargain for consent from consumers. Second, opt-ins also putatively give consumers maximum control over their marketing exposures.¹³² Consumers are not exposed to unwanted

130. See, e.g., Mike Hatch, *The Privatization of Big Brother: Protecting Sensitive Personal Information from Commercial Interests in the 21st Century*, 27 WM. MITCHELL L. REV. 1457, 1498-1500 (2001); Schwartz, *supra* note 65, at 2100.

131. When striking a private bargain, the nonentitled party typically transfers wealth to the entitled party. Thus, the entitlement allocation has distributional effects even though the resulting bargain is economically efficient. See POLINSKY, *supra* note 90.

132. See Jeff Sovern, *Opting In, Opting Out, or No Options at All: The Fight for Control of Personal Information*, 74 WASH. L. REV. 1033, 1101-03 (1999); Khong, *supra* note 65; Louisa Ha, *This Line is Mine: Consumers' Property Rights to Telephone Lines in Outbound Telemarketing*, TELECOM. POL'Y, Oct. 1993, at 540 (viewing telemarketing opt-ins as a control over physical property).

marketing, but they have the choice to affirmatively seek out desired marketing¹³³ or (depending on technology and business practices) possibly to selectively permit marketers to contact them.

Yet, opt-ins may not be as beneficial to consumers as is often portrayed. Counterintuitively, opt-ins may not empower consumers but instead may inhibit consumers' ability to manifest their preferences for at least four reasons.

1. CONSUMERS MAY "CONSENT" WHEN THEY DO NOT MEAN IT

Opt-ins require consumer consent, but current legal definitions of "consent" may not accurately reflect the consumer's true intent.¹³⁴ For example, marketers can obtain consent through artifices like (1) bundled consent, in which the marketer asks a consumer to manifest assent to multiple options packaged into a single choice;¹³⁵ (2) nonnegotiable consent, in which terms are presented on a take-it-or-leave-it basis;¹³⁶ and (3) ambiguous consent that marketers interpret

133. See, e.g., Khong, *supra* note 65, at 38-39.

134. See generally Schwartz, *supra* note 65, at 2081-82; Ayres & Funk, *supra* note 11, at 122-23 (expressing concern that telemarketers will procure less-than-informed consent).

135. Consumers will say "yes" if the bundle, on the whole, produces positive utility, even though some components may be unwanted. See Technology & Marketing Law Blog, "Does Anyone Really Like Adware?" My Response to Suzi's Question, http://blog.ericgoldman.org/archives/2005/10/does_anyone_rea.htm (Oct. 21, 2005, 10:47 PST). Bundled consent is ubiquitous, but it plays a particularly prominent role in adware distribution, where putatively unwanted adware is bundled, as a quid pro quo, with software or services that the consumer values. See *id.* Accordingly, assent to the bundle does not necessarily mean that the consumer wanted the adware (or the ads delivered by it). See THOMAS D. DUPONT, GATOR POP-UP AD LIKELIHOOD OF CONFUSION/CONSENT SURVEY (2003), available at <http://www.ftc.gov/os/comments/spyware/040323hertzllbeanwithpopupsurvey.pdf> (showing that almost two-thirds of surveyed users who had Gator's adware on their computer did not believe they consented to have the software deliver ads to their computers) This survey was used as an exhibit in the 2003 multidistrict litigation against Gator. *In re* The Gator Software Trademark & Copyright Litig., MDL No. 1517 (N.D. Ga. 2003); PC Pitstop, Survey Says: Gator Users Didn't Know, <http://www.pcpitstop.com/gator/Survey.asp> (reporting that 74% of Gator users did not know they had the software on their computers); Nathaniel Good et al., Stopping Spyware at the Gate: A User Study of Privacy, Notice and Spyware 1, 3, http://www.sims.berkeley.edu/~jensg/research/paper/grossklags-spyware_study.pdf (last visited Nov. 20, 2006) (discussing how consumers ignore disclosures about unwanted software when it is bundled with a software application that they want).

136. See Murphy, *supra* note 119, at 2413 (stating that to minimize their costs, merchants use standardized contracts to obtain opt-in consent); *Need for Internet Privacy Legislation: Hearing Before the S. Comm. on Commerce, Science and Transportation*, 107th Cong. 20-25 (2001) [hereinafter *Hearing*] (statement of Fred H.

aggressively.¹³⁷ Further, consumers may undervalue their consent¹³⁸ or give consent without understanding the implications.¹³⁹

These issues can be addressed through tighter regulation of the opt-in process to ensure that consumers really intend to give consent. Inevitably, this leads to progressively louder, scarier, and more intrusive disclosures to consumers.¹⁴⁰ However, regulating the consent process creates new costs for marketers and regulators, including compliance and enforcement costs. Consumers also bear costs from these heightened consent requirements; the marketer's disclosures require consumers to spend more time evaluating and sorting (that is, negative ACU), and some consumers will not find the marketer's disclosures useful to their decision making (in other words, negative SU).¹⁴¹

2. CONSUMERS MAY NOT OPT IN WHEN THEY WANT TO

On the flip side, consumers may voluntarily opt in at extremely low rates.¹⁴² This might reflect consumers' true interest towards opt-ins. However, it could also demonstrate that the transaction costs of opting

Cate, Professor of Law, Indiana University School of Law) (describing how opt-in consents become a vendor's precondition of providing service).

137. See Saul Hansell, *It Isn't Just the Peddlers of Pills: Big Companies Add to Spam Flow*, N.Y. TIMES, Oct. 28, 2003, at A1 (discussing ways that marketers obtain e-mail addresses and then loosely interpret the extent of the consumer's permission).

138. See Alessandro Acquisti & Jens Grossklags, *Privacy Attitudes and Privacy Behavior*, in THE ECONOMICS OF INFORMATION SECURITY 165, 170-75 (L. Jean Camp & Stephen Lewis eds., 2004) (listing several defects in consumer decision-making processes on these matters).

139. For example, consumers may not read the applicable disclosures. See Eric Goldman, *On My Mind: The Privacy Hoax*, FORBES, Oct. 14, 2002, at 42, 42 (giving examples of how rarely consumers read privacy policies).

140. See, e.g., Securely Protect Yourself Against Cyber Trespass Act, H.R. 29, 109th Cong. § 3(c)(1) (2005) (specifying the text and placement of disclosures that marketers must make to consumers); Wayne R. Barnes, *Rethinking Spyware: Questioning the Propriety of Contractual Consent to Online Surveillance*, 39 U.C. DAVIS L. REV. 1545, 1618-19 (2005) (advocating that spyware should repeatedly solicit consumer consent).

141. The privacy notices mandated by the Gramm-Leach-Bliley Act, 15 U.S.C.A. § 6821 (2006), and the Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191, 110 Stat. 1936 (1996) (codified at 45 C.F.R. §§ 160-164 (2006)), illustrate how consumers can come to view mandatory notices as unwanted but unavoidable spam. Putting aside the significant compliance and enforcement costs that marketers and the government incur to effectuate these requirements, these notices consume attention, do not contain information that consumers actually find valuable, and cannot be stopped even if the consumer does not want them. See, e.g., Michele Derus, *New Privacy Paperwork Confuses*, MILWAUKEE J. SENTINEL, May 12, 2003, at 1D.

142. See *Sovern*, *supra* note 132.

in inhibit consumers from doing so even if they would prefer it—in other words, the expected payoff of opting in may be positive but lower than the costs of doing so. Either way, an opt-in regulatory system could have the practical effect of becoming a de facto ban of marketing in the regulated medium.

3. OPT-INS AND INTERMEDIA SELECTION

Regulators have only implemented opt-ins on a medium-specific basis,¹⁴³ but marketers can reach consumers via non-opt-in media even if the consumer never wants to hear from the marketer. To correct this, consumers could be given an across-the-board opt-in right (that is, an entitlement to be free of marketing exposure in any medium).

An across-the-board entitlement moots intermedia selection but creates other problems. Marketers can disseminate marketing via an effectively infinite number of media, so an across-the-board opt-in would require overwhelming compliance and enforcement costs. Plus, some media—like physical billboards—currently lack the technology to offer different displays to consumers based on their opt-in status.

Further, such a broad restraint on marketing dissemination may violate the First Amendment. Medium-specific marketing regulations are routinely upheld as acceptable restrictions because they leave open alternative means of communication.¹⁴⁴ An across-the-board entitlement eliminates those alternatives, thereby making serious incursions into the flow of protected speech.¹⁴⁵

4. SOME POSITIVE NPU MARKETING BECOMES UNAVAILABLE

Opt-ins putatively empower consumer choice by letting consumers affirmatively choose to seek out marketing that they value.¹⁴⁶ However, counterintuitively, this right actually disempowers some consumers by making some content unavailable to the consumer, thereby removing their ability to choose whether or not to consider it.

143. See, e.g., Debra A. Valentine, *Privacy on the Internet: The Evolving Legal Landscape*, 16 SANTA CLARA COMPUTER & HIGH TECH. L.J. 401 (2000).

144. See, e.g., *Mainstream Mktg. Servs., Inc. v. FTC*, 358 F.3d 1228, 1233 (10th Cir. 2004) (“The [National Do Not Call Registry] do[es] not hinder any business’ ability to contact consumers by other means, such as through direct mailings or other forms of advertising.”); see also *Petty*, *supra* note 61, at 49.

145. See *Reno v. ACLU*, 521 U.S. 844, 867 (1997) (stating that a more deferential time-place-manner restriction analysis is inappropriate when the regulation is content-based) (quoting *City of Renton v. Playtime Theatres, Inc.*, 475 U.S. 41, 46 (1986)).

146. See *infra* note 157 and accompanying text.

There are several ways that opt-ins keep marketing from reaching consumers. Under opt-in schemes, some positive NPU marketing will become unprofitable,¹⁴⁷ so those messages will not be disseminated in any media. Even if the marketing is disseminated in alternative media, consumers may not be able to find it because of high search costs (that is, a consumer's expected value from the content is less than the consumer's expected costs of seeking it out). And, perhaps most importantly, even if the content is available and search costs are low, some consumers will never initiate a search because the content relates to latent preferences.¹⁴⁸

Despite the potential for intermedia selection, the real concern is that opt-in schemes actually do too good a job of blocking marketing content. However, perhaps opt-ins do this job too well. Opt-ins can restrict consumers' exposure to positive NPU marketing in ways that potentially distort or circumscribe their exchange decisions.

B. Opt-Out

Opt-out schemes permit the Coasean entitlement to shift from marketers to consumers: marketers start with the entitlement to disseminate marketing, but when consumers opt-out, they obtain the entitlement to be free from marketing. As a practical matter, opt-outs are very popular with consumers¹⁴⁹—particularly do-not-contact registries.¹⁵⁰ Despite this, consumer and privacy advocates generally

147. See discussion *supra* Part II.

148. As the maxim goes, "you don't know what you're missing." Cf. CINDY COHN & ANNALEE NEWITZ, ELEC. FRONTIER FOUND., NONCOMMERCIAL EMAIL LISTS COLLATERAL DAMAGE IN THE FIGHT AGAINST SPAM 3-4, <http://www.eff.org/wp/SpamCollateralDamage.pdf> (explaining that server-level spam blocking removes choices from consumers because consumers do not know what messages they are not getting).

149. See George R. Milne & Andrew J. Rohm, *Consumer Privacy and Name Removal Across Direct Marketing Channels: Exploring Opt-In and Opt-Out Alternatives*, 19 J. PUB. POL'Y & MKTG. 238, 245 tbl.2 (2000) (indicating that 25% of the respondents want to be removed from all direct mail lists, 86% want to be removed from all telemarketing lists, and 50% want to be removed from all e-mail lists).

150. See David Krane, *National Do Not Call Registry Popular, but Public Perception of Impact on Calls Unrealistic*, HARRISINTERACTIVE, Sept. 4, 2003, http://www.harrisinteractive.com/harris_poll/index.asp?PID=400 ("An overwhelming majority (83%) thinks that the [National Do Not Call Registry] is a good idea."). Surveys indicate that a large percentage of users also favor a do-not- e-mail registry. See, e.g., Robert MacMillan, *Survey: Internet Users Want No-Spam List*, WASH. POST, Oct. 15, 2003 (indicating that 75% of Internet users want a do-not-spam list); Lisa M. Bowman, *Study: Do-Not-Spam Plan Winning Support*, CNET NEWS.COM, July 23, 2003, http://news.com.com/2102-1024_3-5053306.html?tag=st.util.print (indicating 74% of consumers want a do-not-spam list).

prefer opt-ins over opt-outs because: (1) opt-outs give the initial entitlement to marketers, allowing them to get at least “one bite at the apple” and disseminate potentially unwanted marketing,¹⁵¹ and (2) consumers incur costs to manifest their opt-out preferences,¹⁵² leading to low (and perhaps suboptimal) opt-out rates.¹⁵³

From a theoretical standpoint, opt-ins and opt-outs both act as consumer preference-disclosure mechanisms and convert some of the consumer’s private information into public information that marketers can act on. However, opt-ins may counterproductively hinder the actualization of consumer preferences.¹⁵⁴ Unfortunately, opt-outs suffer similar drawbacks.

The National Do Not Call Registry demonstrates the limits of opt-out schemes. Superficially, the registry looks like a success. The registry is very popular with consumers—it garnered 62 million registrations in its first year of operation¹⁵⁵ and now has over 107 million registrations.¹⁵⁶ Further, from a policy standpoint, the registry allows consumers to express their preferences about how they want to be contacted, preserving the interests of the minority of consumers who will accept telemarketing while allowing the majority to avoid telemarketing at a low cost.¹⁵⁷

While the National Do Not Call Registry does act as a preference-disclosure mechanism, it performs this function suboptimally. To accurately represent consumer preferences about marketing, any mechanism should reflect consumer preferences granularly, personally, dynamically, and at low cost. The registry performs weakly on each of

151. See, e.g., Ray Everett-Church, *It’s Not Called ‘Can’ Spam for Nothing*, CNET NEWS.COM, Dec. 16, 2003 http://news.com.com/Its+not+called+Can+Spam+for+nothing/2010-1028_3-5125192.html (critiquing the “one bite at the apple” phenomenon in the context of spam).

152. See, e.g., Jerry Kang, *Information Privacy in Cyberspace Transactions*, 50 STAN. L. REV. 1193, 1253 (1998); Gellman, *supra* note 116, at 22 (discussing the costs of opt-out schemes).

153. See, e.g., *Hearing*, *supra* note 136, at 21 (describing low rates of consumer opt-outs).

154. See discussion *supra* Part IV.A.

155. See Press Release, FTC, National Do Not Call Registry Celebrates One-Year Anniversary (June 24, 2004), available at <http://www.ftc.gov/opa/2004/06/dncanny.htm>.

156. See FTC, ANNUAL REPORT TO CONGRESS FOR FY 2005 PURSUANT TO THE DO NOT CALL IMPLEMENTATION ACT ON IMPLEMENTATION OF THE NATIONAL DO NOT CALL REGISTRY 1 (2006), <http://www.ftc.gov/os/2006/07/P034305FiscalYear2005NationalDoNotCallRegistryReport.pdf>.

157. See Posting of Todd Zywicki to The Volokh Conspiracy, Two New FTC Commissioners and the National Do-Not-Call Registry, <http://www.volokh.com/posts/1092515307.shtml> (Aug. 14, 2004 16:28 EST).

these attributes, thus hindering the flow of socially beneficial marketing.

1. GRANULAR

A preference-disclosure scheme should be detailed enough to communicate the consumer's preferences accurately. If the scheme elicits disclosures that are too general, the scheme may mischaracterize the consumer's preferences.¹⁵⁸

The National Do Not Call Registry offers consumers only the binary choice of "yes" or "no" to telemarketing, even though their preferences may be more nuanced.¹⁵⁹ This imprecision may not undermine consumer satisfaction with the registry; many consumers hate telemarketing so much¹⁶⁰ that many choose to opt out from all telemarketing.¹⁶¹ However, because the communicated preference is so general, it actually negates a lot of marketing that could have produced positive utility for consumers—and society generally.

For example, a consumer, looking prospectively, may expect that future telemarketing will produce forty-nine units of positive utility and fifty-one units of negative utility.¹⁶² For this consumer, the dominant

158. See generally Lorrie F. Cranor & Joel R. Reidenberg, Can User Agents Accurately Represent Privacy Notices? (Aug. 30, 2002), <http://web.si.umich.edu/tprc/papers/2002/65/tprc2002-useragents.PDF> (discussing the challenges that P3P—a system to enable web users to interact only with websites that had acceptable privacy practices—faced to accurately summarize consumer preferences and marketers' practices).

159. See Petty, *supra* note 61, at 46 ("[Do-not-call lists] offer only an all-or-nothing solution. They do not address the needs of consumers who would permit some calls but would like to avoid others."); Ayres & Funk, *supra* note 11, at 79 (criticizing the "all-or-nothing" nature of opt-out schemes).

160. See, e.g., Curt J. Dommeyer & Barbara L. Gross, *What Consumers Know and What They Do: An Investigation of Consumer Knowledge, Awareness, and Use of Privacy Protection Strategies*, 17 J. INTERACTIVE MKTG. 34, 43 (2003) (finding that 98% of consumers rated telemarketing negatively); Dynamic Logic, *supra* note 1 (reporting that 93% of consumers feel negatively toward telemarketing). See generally JACOBSON & MAZUR, *supra* note 61, at 127-29 (offering theories why consumers hate telemarketing).

161. See *supra* notes 148-49 and accompanying text.

162. This Article recognizes that telemarketing produces such strong antipathy that many consumers cannot conceive of any telemarketing call that would produce positive utility. However, some telemarketing calls can do exactly that. For example, in the summer of 2002, I had just moved to Milwaukee, and I planned to subscribe to the *Milwaukee Journal Sentinel*. After doing some research, I could not find any subscription offer at a price below the standard subscription rate. However, the day before I planned to place my subscription order, I received an unsolicited telemarketing call from the newspaper offering me the opportunity to subscribe at a \$50 discount. I want more calls like this!

strategy is to opt out, even though the opt-out choice foregoes the forty-nine units of positive utility.

In theory, this positive utility could be captured with more granular preference disclosure options.¹⁶³ Indeed, the National Do Not Call Registry could be configured to elicit more granular preferences on a variety of dimensions—like subject matter, identity of marketer, or schedule. For example, the registration options could allow the consumer to communicate that the consumer is: (1) actively seeking information about scuba gear and local snowplowing service providers; (2) willing to accept calls from Disney, the Gap, and Wells Fargo; (3) accepting other telemarketing calls only between 8 p.m. and 9 p.m. on Tuesdays and Thursdays; and (4) not accepting any other telemarketing calls.

Unfortunately, increases in the accuracy of preference disclosures also concomitantly make the system more complex, creating an accuracy-simplicity tradeoff. This added complexity increases the costs for all players—the consumer must pick and maintain options, marketers must honor the options, and any intermediary must build and manage the disclosure scheme.¹⁶⁴ In turn, these added costs can prevent realization of the theoretical incremental benefits. Many consumers do not configure complex preference systems, either due to bounded rationality (that is, the decision to maximize with imperfect information)¹⁶⁵ or expectations that the costs to configure the preferences are higher than any anticipated associated utility increases. In these situations, consumers may rely on default choices¹⁶⁶ or may adopt a heuristic—for example, making binary “yes” or “no” choices. Either way, increasing the robustness of disclosure schemes may not increase the disclosure of consumers’ actual preferences.

Finally, the National Do Not Call Registry does not cover certain categories of telemarketing, such as political¹⁶⁷ or charitable¹⁶⁸

163. See Benjamin E. Hermalin & Michael L. Katz, *Sender or Receiver: Who Should Pay to Exchange an Electronic Message?*, 35 RAND J. ECON. 423 (2004).

164. See Mark S. Nadel, *Rings of Privacy: Unsolicited Telephone Calls and the Right of Privacy*, 4 YALE J. ON REG. 99, 118 (1986).

165. See Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99 (1955).

166. See Eric J. Johnson et al., *Defaults, Framing, and Privacy: Why Opting In ≠ Opting Out*, 13 MKTG. LETTERS 5, 7 (2002).

167. The term telemarketing, as used in the Do Not Call Registry, does not include political telemarketing, but instead is essentially limited to “inducing the purchase of goods or services, or a charitable contribution.” See 16 C.F.R. § 310.2(cc) (2006).

168. Consumers can tell individual charitable organizations not to call them again, but the National Do Not Call Registry does not apply to charitable organizations. See 16 C.F.R. § 310.4(b)(3)(iii).

telemarketing. By not giving consumers the legal right to opt out of some types of calls they may not want, the registry fails to accurately communicate the full range of consumer preferences.

2. PERSONAL

Consumers have heterogeneous preferences, so the disclosure mechanism should reflect each consumer's individual preferences. As a result, each consumer opting out should make that choice only for themselves.¹⁶⁹ In contrast, the National Do Not Call Registry opt-out applies to a telephone number, not an individual consumer,¹⁷⁰ even though two or more adult consumers may share a telephone number. Also, a consumer's choice may be made by others when there is an unauthenticated registration¹⁷¹ or if a consumer acquires a previously registered telephone number.¹⁷²

3. DYNAMIC

Consumer preferences constantly change and evolve,¹⁷³ so preference-disclosure schemes should reflect these changes concomitantly. Otherwise, an out-of-date characterization effectively mischaracterizes the consumer's preferences.

169. See Note, *The Impermeable Life: Unsolicited Communications in the Marketplace of Ideas*, 118 HARV. L. REV. 1314, 1327 (2005) (giving the example of how a homeowners' association might choose to restrict door-to-door soliciting in the entire subdivision—a choice that governs every homeowner even if some homeowners would have individually chosen to accept soliciting). An exception arises when a consumer has legal responsibility for others, such as children.

170. See National Do Not Call Registry, Register Your Home or Mobile Phone Number, <https://www.donotcall.gov/register/Reg.aspx> (last visited Nov. 20, 2006) (providing forms for consumers to register phone numbers and reminding them that they “are registering for everyone who uses these lines”).

171. The FTC's donotcall.gov website permits a person to register a phone number without providing any evidence of being the telephone subscriber. See Technology & Marketing Law Blog, <http://blog.ericgoldman.org/archives/2005/03/donotcallgov.htm> (Mar. 24, 2005, 18:53 PST).

172. See Telemarketing Sales Rule (Final Rule), 68 Fed. Reg. 4580 (Jan. 29, 2003) (codified at 16 C.F.R. pt. 310 (2006)). When promulgating the rule, the FTC did not specify when it would purge disconnected or reassigned telephone numbers from the Do Not Call Registry. See *id.*

173. See DIRECT MKTG. ASS'N, STATISTICAL FACT BOOK 2001, at 33 (2001) (displaying data that shows 71% of consumers decided whether to open direct mail based on “[t]iming of the piece arriving” and their “need for the service, product or offer”); see generally SACHARIN, *supra* note 26, at 132 (discussing how relevancy changes dynamically).

A simple example illustrates the importance of dynamic preference disclosures. Consider a situation in which a marketer gives Dina a coupon offering a \$100 discount on a new Dell computer.¹⁷⁴ In the first scenario, Dina receives the coupon after she has already decided to buy a Dell computer but before she has made the purchase. In this case, the coupon may generate significant positive NPU for Dina.¹⁷⁵ In the second scenario, the coupon arrives shortly after Dina has purchased a Dell computer, and she cannot take advantage of the coupon. In this case, the coupon may be irrelevant and, in fact, could upset Dina by creating buyer's remorse because she overpaid. Therefore, the preference-disclosure scheme should indicate when Dina is in the market for a Dell computer and then update her preferences shortly after her purchase.

In contrast, the National Do Not Call Registry does not update dynamically. Registrations last five years,¹⁷⁶ and deregistering is not encouraged.¹⁷⁷ Meanwhile, consumer preferences about telemarketing may be contextual. For example, consumers that opt out of marketing in a medium may nevertheless respond to relevant offers delivered in that medium when those offers create positive NPU.¹⁷⁸

4. LOW COSTS

Any preference-disclosure scheme can create a variety of costs. As these costs rise, they undercut the utility of the scheme by inhibiting marketer-consumer matchmaking. With sufficiently high costs, other entitlement allocations may become more favorable.

174. For example, the *Milwaukee Journal Sentinel* telemarketing call came before I subscribed, but it would have been unhelpful if it came just after. See *supra* note 161.

175. See SACHARIN, *supra* note 26, at 62 ("A relevant interruption is not a rude intrusion, it's a welcome, useful piece of just-in-time information.").

176. See Telemarketing Sales Rule (Final Rule), 68 Fed. Reg. 4580, 4640 (Jan. 29, 2003) (codified at 16 C.F.R. pt. 310 (2006)).

177. For example, the FTC's donotcall.gov website does not publish information on how to remove a telephone number from the registry. See Technology & Marketing Law Blog, *supra* note 171. The FTC's main website does provide that information, however. See FTC, Delete a Registration?, <http://www.ftc.gov/bcp/conline/edcams/donotcall/removenumber.html> (last visited Nov. 20, 2006).

178. For example, consumers who technologically opt out of pop-up ads may nevertheless respond to pop-up ads that evade the blocking technology. See, e.g., Steven J. Vaughan-Nichols, *Pop-Up Ads Shed Blocks, Tackle Consumers*, WASH. POST, June 26, 2005, at F05.

The National Do Not Call Registry imposes costs on all participants. Consumers incur costs to express their preferences,¹⁷⁹ which can inhibit accurate and precise disclosure of preferences. Marketers incur registration fees¹⁸⁰ plus costs to honor opt-out preferences,¹⁸¹ and these costs can affect marketers' dissemination of marketing, including the foreclosure of some marketing.¹⁸² The government, as the intermediary between consumers and marketers, incurs costs to manage the registry (although it may pass through these costs to marketers).¹⁸³ Consumers and the government also incur ex post monitoring and enforcement costs.¹⁸⁴ It is impossible to classify these costs as high or low without a baseline, but these costs—combined with problems like the accuracy-simplicity tradeoff—may keep the registry from being a welfare-maximizing solution.

5. CONCLUSION ON OPT-OUTS

While implementing the National Do Not Call Registry may not be bad policy, there are some serious questions about the registry's efficacy as a preference-disclosure scheme and its ultimate social welfare implications. Meanwhile, all opt-out schemes are susceptible to

179. See Telemarketing Sales Rule, 68 Fed. Reg. at 4640 (discussing consumer costs to register for and deregister from the National Do Not Call Registry).

180. See 16 C.F.R. § 310.8(c) (describing registration fees).

181. Cf. *Chamber Survey Finds Fax Rules Expensive, Time Consuming for Business*, PRIVACY L. WATCH, Mar. 12, 2004 (citing a survey estimating that small business compliance with an opt-out scheme for faxes would cost \$5,000 in the first year of implementation and \$3,000 each year thereafter).

182. See McCullagh, *supra* note 42 (noting that the National Do Not Call Registry led to some call-center closings and layoffs); Press Release, MCI, MCI Statement on Workforce Reduction Plans (Mar. 26, 2004), available at <http://www.verizonbusiness.com/about/news/news2.xml?newsid=10170&mode=long> (announcing a 4,000 worker layoff due in part to the National Do Not Call Registry).

183. See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-05-113, TELEMARKETING: IMPLEMENTATION OF THE NATIONAL DO-NOT-CALL REGISTRY 17, 22 (2005), available at <http://www.gao.gov/new.items/d05113.pdf> (discussing the government's cost to operate the National Do Not Call Registry). Cf. ANNE WELLS BRANSCOMB, WHO OWNS INFORMATION? FROM PRIVACY TO PUBLIC ACCESS 10 (1994) (recounting that the U.S. Postal Service did not create an opt-out system because there were cheaper options).

184. See Christopher Conkey, *Do-Not-Call Lists Under Fire*, WALL. ST. J., Sept. 28, 2005, at D1 (stating that 51% of registrants believe they are receiving prohibited calls, but that the FTC and FCC collectively have brought few enforcement actions despite one million reports of violations). In some cases, enforcement costs vastly exceed the value of enforcement to any individual. See, e.g., *Harris v. Time, Inc.*, 237 Cal. Rptr. 584, 589 (Ct. App. 1987) (discussing how the judicial administration costs of a lawsuit over unwanted junk mail far exceeded any commensurate harm suffered by the recipients).

challenges similar to those that the registry faces, including the accuracy-simplicity tradeoff, consumer costs to disclose and maintain their preferences as they change, enforcement costs, and marketer compliance costs.

This does not mean that opt-outs are irrelevant to the marketer-consumer mediation process. Marketers and consumers still can negotiate their own bargain. For example, when consumers voluntarily communicate preferences to marketers, most marketers will voluntarily honor those preferences. Further, consumers with high idiosyncratic antipathy towards marketing can deploy marketing suppression technologies¹⁸⁵ or practices that allow them to personally opt out of some marketing. However, as a regulatory matter, the transaction costs and accuracy-simplicity tradeoff of opt-outs raise the possibility that alternatives to opt-outs might be preferable.

C. Mandatory Metadata

Mandatory metadata schemes give marketers an entitlement to disseminate marketing, so long as they provide the required metadata to facilitate a consumer's evaluation and sorting of the marketing. There is a wide variety of metadata that marketers can be required to disclose, but this Article focuses on "mandatory labeling" laws that require marketing to be labeled as "advertising" or some synonym. There are mandatory labeling laws for e-mail,¹⁸⁶ telemarketing,¹⁸⁷ and some broadcast media,¹⁸⁸ but not generally for direct mail¹⁸⁹ or published media.¹⁹⁰ Mandatory labeling laws are often popular with consumers, who routinely say that they want to know when content is marketing.¹⁹¹

185. These devices are sometimes called "privacy-enhancing technologies." Examples include Caller ID, the TeleZapper, TiVo, and pop-up blocking software.

186. See sources cited *supra* note 129.

187. See 16 C.F.R. § 310.4(d)(2) (2006).

188. See, e.g., 47 U.S.C. §§ 317, 508 (2000) (requiring on-air disclosure of any payment by third parties made in return for the broadcast of specific material).

189. See Ayres & Funk, *supra* note 11.

190. Even if not legally required to do so, print periodicals may voluntarily require labeling as a matter of editorial policy. See, e.g., N.Y. Times, Advertising Acceptability Guidelines, <http://www.nyadvertising.com/was/ATWWeb/public/displayads/pages/contentDisplayAds.jsp?l1Id=6&l2Id=27&HLId=113> (last visited Nov. 20, 2006) ("The Times reserves the right to label an advertisement with the word 'advertisement' when, in its opinion, this is necessary to make clear the distinction between editorial material and advertising.").

191. See, e.g., Nielsen, *supra* note 2 (reporting that users liked ads that clearly identified themselves as advertising); PRINCETON SURV. RES. ASSOCS., A MATTER OF TRUST: WHAT USERS WANT FROM WEB SITES 17 (2002), <http://www.consumerwebwatch.org/pdfs/a-matter-of-trust.pdf> (finding that 80% of users want search engines to disclose when search results are ads).

To see the value of mandatory metadata, it is helpful to understand how consumers evaluate and sort incoming marketing.¹⁹² In response to a marketing exposure, a consumer makes a cursory predictive judgment about the marketing,¹⁹³ principally assessing the marketing's topicality.¹⁹⁴ If the marketing appears to lack topicality, the consumer typically disregards it. If the marketing appears to be topical, a consumer then makes a more careful evaluative judgment of its relevancy.¹⁹⁵ Even though consumers' relevancy-determination process is not entirely understood, consumers generally use multiple factors to judge relevancy, and they probably each use slightly different factors and weigh each factor differently.¹⁹⁶

This two-stage process should be familiar from most consumers' e-mail review process. Typically, a consumer scans an incoming e-mail's metadata (for example, the sender's name and the subject line) to make a predictive judgment about whether to open or delete the e-mail. If the metadata looks uninteresting or questionable, the consumer may delete the e-mail without reading it first. Otherwise, if the initial metadata hooks the consumer's interest, the consumer can open the e-mail and investigate it more closely to make an evaluative judgment.

An advertising label can help consumers make a predictive judgment by facilitating the assessment of topicality specifically and relevancy generally.¹⁹⁷ The label also can help consumers appropriately assess the marketing's trustworthiness and credibility—collectively

192. This process describes how consumers evaluate all content, both editorial and marketing.

193. See Michael Hopkin, *Web Users Judge Sites in the Blink of an Eye*, NEWS@NATURE.COM, Jan. 13, 2006 (detailing how web visitors make initial judgments about a website in the first fifty milliseconds of viewing (citing Gitte Lindgaard et al., *Attention Web Designers: You Have 50 Milliseconds to Make a Good First Impression*, 25 BEHAV. INFO. TECH. 115 (2006))).

194. See Soo Young Rieh, *Judgment of Information Quality and Cognitive Authority in the Web*, 53 J. AM. SOC'Y FOR INFO. SCI. & TECH. 145, 150-51 (2002).

195. See *id.* at 150.

196. Information scientists do not agree on the factors that determine relevancy or the weight consumers assign to each factor. See, e.g., Kelly L. Maglaughlin & Diana H. Sonnenwald, *User Perspectives on Relevance Criteria: A Comparison Among Relevant, Partially Relevant, and Not-Relevant Judgments*, 53 J. AM. SOC'Y FOR INFO. SCI. & TECH. 327, 328-31 (2002) (discussing twenty-nine criteria that bear on a user's judgment of relevancy); Richard Tang & Paul Solomon, *Use of Relevance Criteria Across Stages of Document Evaluation: On the Complementarity of Experimental and Naturalistic Studies*, 52 J. AM. SOC'Y FOR INFO. SCI. & TECH. 676, 677-79 (2001) (summarizing the literature on relevancy factors).

197. See Kraut et al., *supra* note 41, at 27 (discussing how experiment participants used message signaling—whether a message was sent high-priority or standard-priority—to decide which messages to read).

referred to as its “cognitive authority.”¹⁹⁸ Consumers typically assign lower cognitive authority to marketing than to editorial content because marketers have incentives to lie or mislead.¹⁹⁹ A mandatory advertising label gives consumers some information they can use to make their cognitive authority determinations. In electronic media, the label can also facilitate automatic sorting.²⁰⁰

Mandatory labeling laws can find some theoretical support.²⁰¹ In theory, mandatory labels can speed up and improve the accuracy of consumer sorting decisions, thereby reducing the negative ACU that consumers incur from marketing. Meanwhile, the labeling requirement usually imposes only modest production costs on marketers.²⁰² However, once again, it is difficult to achieve these theoretical benefits in practice. Metadata helps consumers only if it improves decision

198. See Rieh, *supra* note 194, at 146.

199. See Calfee & Ringold, *supra* note 10, at 236 (“[M]ost consumers—often, roughly two-thirds or 70%—think that advertising is often untruthful, it seeks (perhaps successfully) to persuade people to buy things they do not want, [and] it should be more strictly regulated.”); see also RICHARD ADLER, *THE FUTURE OF ADVERTISING: NEW APPROACHES TO THE ATTENTION ECONOMY* (1999) (“One long-standing problem is the wide-spread cynicism among consumers about the intentions and techniques used by advertisers. Even though individual advertising campaigns have proven popular, consumers are generally skeptical of advertising and hold advertisers in low regard.”). See generally JACOBSON & MAZUR, *supra* note 61, at 57-72 (discussing consumers’ negative perceptions towards marketing).

200. E-mail can be automatically filtered using metadata, although the FTC has expressed skepticism that mandatory labeling helps with automated sorting. See FTC, *SUBJECT LINE LABELING AS A WEAPON AGAINST SPAM: A CAN-SPAM ACT REPORT TO CONGRESS* 10-13 (2005), available at <http://www.ftc.gov/reports/canspam05/050616canspamrpt.pdf>. Other electronic media, including telemarketing, are also filterable. See DAVENPORT & BECK, *supra* note 8, at 88 (“Devices for filtering out unwanted telephone calls have proliferated over the past couple of decades.”); see also Ayres & Funk, *supra* note 11, at 103 (advocating technologies to facilitate automatic sorting of telemarketing calls); Walter S. Baer, *Controlling Unwanted Communications to the Home*, 2 TELECOMM. POL’Y 218, 224 (1978) (suggesting that the telephone should ring in different tones based on the caller’s identity).

201. See Ayres & Funk, *supra* note 11, at 102-04, 135 (advocating for broader labeling requirements, including requiring telemarketing calls to begin with the statement “this is an unsolicited telemarketing call,” a circled “J” on the envelope of direct mail, and a “UCE” label in e-mail subject lines).

202. Note, however, that labeling costs were nontrivial in the Internet indecent speech context, where the cost of “tagging” content as appropriate for adults contributed to the unconstitutionality of the Communications Decency Act of 1996. See *Reno v. ACLU*, 521 U.S. 844, 847, 881 (1997).

making,²⁰³ but metadata may not help—and may even hurt—the decision-making process.²⁰⁴

First, consumers may not find the mandatory metadata useful to their decision making.²⁰⁵ Two examples of possibly unhelpful metadata disclosures come to mind: (1) the disclosure of the name and address of a liquor advertiser’s distributor²⁰⁶ and (2) the “I approve this message” tagline that political candidates must include in their advertising.²⁰⁷ In both cases, it is unclear how this metadata improves the consumers’ decision-making process. If, in fact, metadata is unhelpful, then it imposes a cost on consumers by forcing them to evaluate the metadata without any commensurate benefits, thereby increasing their negative ACU.²⁰⁸

Second, as with preference-disclosure granularity, mandatory labels confront the accuracy-simplicity tradeoff. General metadata may communicate information to consumers imprecisely, which may increase sorting errors; conversely, detailed metadata can improve sorting accuracy but also increases costs for all participants.

There is reason to believe that mandatory labeling may contribute to erroneous predictive judgments. Because consumers generally think advertising deserves lower cognitive authority, an advertising label encourages consumers to discard the marketing via predictive judgment without a more careful review.

However, this quick decision making comes at a cost. The advertising label may not accurately predict the consumers’ utility from the marketing,²⁰⁹ unintentionally resulting in misgradings. A study by

203. See Chris Guthrie, *Law, Information, and Choice: Capitalizing on Heuristic Habits of Thought*, in *HEURISTICS AND THE LAW* 426 (Gerd Gigerenzer & Christopher Engle eds., 2006).

204. This Article assumes that marketers provide accurate metadata. False metadata can also distort consumer decision making, but it is already prohibited by consumer-protection laws, such as false-advertising statutes. See, e.g., 15 U.S.C. § 45(a)(1) (2000); *Id.* § 1125(a)(1)(B).

205. See generally Kent Walker, *The Costs of Privacy*, 25 *HARV. J.L. & PUB. POL’Y* 87, 106-11 (2001) (discussing the limitations of one-size-fits-all notices when consumers have heterogeneous informational needs).

206. See 27 U.S.C. § 205(e)(2) (2000); 27 C.F.R. § 5.63(a) (2006) (implementing regulation for spirits); *Id.* § 4.62(a) (implementing regulation for wine).

207. See 2 U.S.C. § 441d (2000); Stand by Your Internet Ad Act of 2005, H.R. 1580, 109th Cong. § 2(b)(4) (2005) (proposing to extend the obligation to Internet-mediated ads).

208. See generally Susan P. Crawford, *First Do No Harm: The Problem of Spyware*, 20 *BERKELEY TECH. L.J.* 1433, 1450-57 (2005) (discussing the consequences of imposing notices on consumers who may not want them).

209. This partially reflects consumers’ conflicted views towards marketing generally. See Smolowe, *supra* note 54, at 63 (characterizing American attitudes towards direct mail as “ambivalen[t]” and “schizophreni[c]”). Even though consumers

Professors Bernard Jansen and Marc Resnick illustrates this risk.²¹⁰ In their study, they showed consumers Internet search results, some of which were labeled as advertising.²¹¹ Although the search results contained the same substance, consumers rated the unlabeled search results as more relevant than the labeled results.²¹² In other words, the advertising labels single-handedly degraded the consumers' relevancy assessment, even though the search results had the same level of relevancy.²¹³ Thus, in the consumers' rush to judgment, the advertising label may encourage consumers to mistakenly discard positive NPU marketing. Automated sorting only compounds this problem, by prospectively and systematically overreacting to the label.

More precise mandatory labels reduce the misgrading risk, but they may increase costs in other ways. Marketers bear increased costs to categorize their messages correctly, and consumers may experience information overload, spending more time to configure automated filters or evaluate the metadata to make their predictive judgments. These costs continue to be governed by the accuracy-simplicity tradeoff: a comparatively simple scheme of a few mandatory labels will do little to increase judgment precision, while a more robust scheme of alternative labels may be granular enough to improve decision making but also may present administrative problems for both marketers and consumers. A complex mandatory labeling scheme may also create enforcement challenges.

may say that they hate marketing, they also find it useful. *See* Calfee & Ringold, *supra* note 10, at 233 (“[A]bout 70% of consumers think advertising is useful for information.”); *see also* Louisa Ha & Barry R. Litman, *Does Advertising Clutter Have Diminishing and Negative Returns?*, *J. ADVER.*, Spring 1997, at 31, 33 (1997) (discussing various research finding that consumers find advertising helpful); ABHILASHA MEHTA & SCOTT C. PURVIS, GALLUP & ROBINSON, INC., *WHEN ATTITUDES TOWARDS ADVERTISING IN GENERAL INFLUENCE ADVERTISING SUCCESS* 4 (1995), *available at* <http://www.gallup-robinson.com/reprints/whenattitudestowardsadvertising.pdf> (“Many more readers than not claimed to like to look at advertising and felt it keeps them up-to-date about products in the marketplace.”).

210. *See* BERNARD J. JANSEN & MARC RESNICK, *EXAMINING SEARCHER PERCEPTIONS OF AND INTERACTIONS WITH SPONSORED RESULTS* (2005), http://www.ist.psu.edu/faculty_pages/jjansen/academic/pubs/jansen_ecommerce_works_hop.pdf.

211. *See id.*

212. *See* Press Release, Pa. State Univ., *Consumers Suspicious of Sponsored Links* (June 10, 2005), *available at* <http://live.psu.edu/story/12348> (“While study participants rated 52 percent of the organic results as ‘relevant,’ searchers described 42 percent of sponsored links as ‘relevant’ even though both sets of results were identical.”).

213. “[E]ven when the returned results are exactly the same, people still view what they thought of as the organic results as better [than the advertising results].” *Id.* (quoting Jansen).

Ultimately, as Coase contemplates, every regulatory scheme creates some costs, and there is no easy way to measure and compare these costs and disadvantages.²¹⁴ However, each regulatory scheme has, for different reasons, a significant capacity to distort consumer marketplace decisions. Because of the serious downsides of such distortion, there is value in evaluating alternatives to these regulatory schemes. The next Part evaluates some marketplace alternatives to regulation to assess their merit as regulatory substitutes.

V. MARKETPLACE ALTERNATIVES TO REGULATION

Having analyzed the consequences of various regulatory options, this Part will discuss several types of marketplace options to facilitate marketer-consumer matchmaking, including attention markets, infomediaries, and bonded-sender programs. As with the regulatory options, the marketplace options suffer from the accuracy-simplicity tradeoff. Further, high costs borne by consumers to manifest their preferences weaken the theoretical support for these options and—as a practical matter—have inhibited marketplace success.

A. Attention Markets

An attention market allows marketers to pay, using cash or other valuable consideration like content, consumers for the right to deliver marketing.²¹⁵ Paying for attention is a ubiquitous part of our information economy.²¹⁶ In a sense, all ad-supported media—including broadcast television, radio, and print publications—exemplify this principle.

However, the advent of computer-based communications has spurred innovative proposals to improve on the indirect attention marketplaces of print and broadcast advertising. For example, in 1996, Professor Kenneth Laudon proposed a “National Information Market” where consumers could deposit their personal information with a bank-like intermediary, and marketers could access the information for marketing purposes by paying the prices set by each individual

214. See generally Coase, *supra* note 17.

215. The marketing could be delivered within the marketplace’s confines (such as through a web page served by the marketplace or e-mail delivery mediated by the marketplace) or via an alternative medium (such as the right to place a telemarketing call outside of the marketplace).

216. See Kate Kaye, *Web Ads 101: Company Pays College Students to Watch Ads*, *MEDIA DAILY NEWS*, Feb. 24, 2004 (on file with the Wisconsin Law Review) (giving examples of why “the notion of rewarding people for viewing ads is not new”).

consumer.²¹⁷ In 2003, Professor Ian Ayres and Matthew Funk proposed a “reverse 1-900” telemarketing system, in which consumers would establish prices to receive telemarketing, and telemarketers would compensate consumers accordingly.²¹⁸ Other commentators have proposed additional variations on this pay-for-attention model.²¹⁹

Attention markets offer some theoretical advantages. First, by setting prices, consumers disclose their preferences. Consumers may be able to price their preferences granularly and dynamically, giving them a relatively precise mechanism to communicate their preferences. With this additional information about consumer preferences, marketers can target more accurately. Second, because the marketplace pricing mechanism causes marketers to internalize consumers’ expected negative NPU from the marketing,²²⁰ marketers have incentives to do better targeting. Third, an attention market could allow consumers to offer to pay for expected positive NPU content,²²¹ establishing a two-way flow of content and consideration.

Collectively, these attributes should improve matchmaking while reducing the quantum of marketing to socially beneficial levels. Plus, consumers who individually derive negative NPU from the marketing receive compensation.²²² With these theoretical benefits, it is not surprising that attention markets are constantly proposed and sometimes implemented.

However, consumer response to attempted attention markets has been underwhelming. During the dot-com boom in the late 1990s, several prominent Internet companies (for example, Cybergold²²³ and

217. See Laudon, *supra* note 65, at 99-100. Although Laudon focused principally on user “privacy,” he designed his marketplace to force marketers to internalize the “coping costs” of marketing (such as opening mail, responding to mail, and losing productive or leisure time). See *id.* at 98-99.

218. See Ayres & Funk, *supra* note 11, at 110-13.

219. See, e.g., Denning, *supra* note 1, at 164 (proposing that users specify an “asking price” and that senders specify a maximum price that they will pay); David Friedman, *Mail Me the Money!*, TCS DAILY, Aug. 8, 2002, <http://www.techcentralstation.com/080802A.html> (proposing that e-mail senders pay for access to e-mail inboxes); Rauch, *supra* note 79 (proposing a type of attention market for spam); see also Barbara Ehrenreich, *Make the Ad Guys Pay*, THE PROGRESSIVE, Aug. 1999, at 13 (arguing that requiring marketers to pay for attention would combat marketing-media proliferation).

220. See sources cited *supra* note 120.

221. See Loder et al., *supra* note 16, § 6.1; see also Hermalin & Katz, *supra* note 163 (discussing the theoretical benefits of a two-way payment flow between senders and receivers).

222. This differs from a Pigovian tax, where revenues flow to the government.

223. Cybergold initially paid consumers cash for each advertisement viewed. See Jeff Peline, *Browsing for Dollars*, CNET NEWS.COM, May 20, 1997,

AllAdvantage²²⁴) launched attention markets, but these businesses disappeared with the dot-com bust in the early 2000s.²²⁵ New market entrants (such as e-Rewards²²⁶ and BrandPort²²⁷) subsequently have carved out small niches, but attention markets collectively play a negligible role in marketer-consumer matchmaking.

There are several possible reasons why attention markets have not found more success. Perhaps the technology has not adequately matured, or perhaps the right entrepreneurs have not tackled the challenge. But it is also possible that attention markets have not found success because they do not fundamentally solve the key matchmaking problems for either marketers or consumers.

From the marketer's perspective, attention markets increase marketer costs because the marketers internalize the consumer's NPU. In theory, marketplace-mediated matches may be valuable enough that marketers will use the marketplace despite its higher costs. However, if marketers do not recoup this extra value, then marketers will rationally choose cheaper marketing-dissemination options that do not require marketers to compensate consumers for their negative NPU.²²⁸ Marketers also may be concerned that consumers will sell their time and attention in the marketplace solely for the cash benefit, without any interest or intention of considering the marketing message on its own merits.²²⁹

http://news.com.com/Browsing+for+dollars/2100-1023_3-279931.html (discussing Cybergold's launch).

224. AllAdvantage initially paid consumers for each hour that consumers browsed the Internet using software that displayed a frame containing advertising around the consumer's web-browsing software. See Kora McNaughton, *Pay-Per-View Ads Get New Twist*, CNET NEWS.COM, Mar. 30, 1999, http://news.com.com/2102-1017_3-223715.html (discussing AllAdvantage's business).

225. See Geoffrey A. Fowler, *Internet IPO Darlings: Where Are They Now?*, WSJ.COM STARTUP J., June 11, 2002, <http://www.startupjournal.com/financing/public/20020611-fowler.html> (discussing Cybergold's acquisition and shutdown); Gwendolyn Mariano, *Sweepstakes Site Awards Its Last Prize*, CNET NEWS.COM, Feb. 1, 2001, http://news.com.com/2102-1023_3-251949.html (discussing AllAdvantage's 2001 shutdown).

226. See e-Rewards, <http://www.e-rewards.com/> (last visited Oct. 25, 2006).

227. BrandPort's website states that it is "[t]he only place where you get paid in cash for your undivided attention" BrandPort, <https://www.brandport.com/Webapps/index.aspx> (last visited Oct. 26, 2006); see also Zachary Rodgers, *Marketers Pay Their Way to the Youth Audience*, CLICKZ, May 28, 2004, <http://www.clickz.com/news/print.php/3360711> (discussing BrandPort and its predecessors).

228. Of course, regulators can force marketers to participate in this scheme. See Ayres & Funk, *supra* note 11, at 93-96, 110-11.

229. See, e.g., Sandeep Krishnamurthy, *Are Paid Advertising Models All They're Cracked Up To Be?*, CLICKZ, July 22, 1999, <http://aef.com/industry/news/data/2000/1186>.

From the consumer's perspective, the attention market resembles other preference-disclosure mechanisms in that it requires the consumer to incur costs by setting prices or expressing preferences initially and then maintaining that information over time based on preference changes.²³⁰ Consumers generally will make these investments only if justified by the return. However, marketing is a type of experience good, so consumers cannot easily estimate the negative NPU from marketing that has not been reviewed.²³¹ Consumers also cannot put a price on their latent interests, which by nature cannot be articulated. Further, even if consumers can set prices on their attention, the market-clearing prices may be low.²³² As a result, consumers may not believe that the resulting payoffs will justify their upfront and ongoing investments in the marketplace.

Meanwhile, the marketplace itself is costly to build and operate,²³³ and it will generate policing costs. For example, if consumers set different prices on their interests,²³⁴ marketers have incentives to mischaracterize their marketing as relating to the lower-priced interest.²³⁵ These mischaracterizations can be avoided *ex ante* through marketplace-operator prescreening of marketing disseminations or corrected *ex post* through consumer, marketplace, or government enforcement—but any of those approaches creates costs. Collectively, these intermediary costs must be spread among consumers and marketers, providing further disincentives for the cost-bearing group to participate in the marketplace.

230. See DAVENPORT & BECK, *supra* note 8, at 85 (“Attention-protecting technologies will require that we invest attention in our own preferences and then communicate these preferences to machines by selecting among alternatives.”).

231. See Rauch, *supra* note 79, at 2531-32 (discussing the challenges of correctly setting prices).

232. See McNaughton, *supra* note 224 (stating that during the late 1990s, the prevailing per-hour rate for “pay-to-surf” businesses was as low as \$0.50); *cf.* Goldman, *supra* note 139, at 42 (describing how consumers “sell” their private data cheaply).

233. See, *e.g.*, Thomas Claburn, *The War on Spam Takes a Novel Turn*, INFORMATIONWEEK, May 17, 2005, <http://www.informationweek.com/shared/printableArticle.jhtml?articleID=163104354> (discussing the costs of building a micropayment infrastructure); Goodman et al., *supra* note 73, at 43 (discussing transaction costs).

234. For example, a consumer interested in skiing may price an interest in skiing-related marketing content at \$1 per contact and all other marketing content at \$100 per contact.

235. See Loder et al., *supra* note 16, § 2.3 (“[Senders have] the ability to lie about content *ex ante* in order to elevate interest.”).

B. Infomediaries

In the late 1990s, John Hagel and Marc Singer proposed an alternative to attention markets called an “infomediary,” which facilitates marketer-consumer matchmaking and then mediates communication between the parties.²³⁶ Hagel and Singer enumerated four essential roles of an infomediary: (1) the infomediary should lower a consumer’s search costs to find the optimal product to meet that individual’s needs,²³⁷ (2) the infomediary should actively seek out the lowest price for a desired good or service, (3) the infomediary should protect consumers from unwanted marketing while informing consumers about desired products, and (4) the infomediary should protect the consumer’s personal information from marketers.²³⁸ Unlike attention markets, infomediaries do not require that marketers pay consumers for the right to contact them.²³⁹

Like attention markets, the dot-com boom saw a number of market entrants into the infomediary business.²⁴⁰ Unfortunately, like attention markets, all of the infomediaries appear to have failed as well.²⁴¹ This

236. See HAGEL & SINGER, *supra* note 66, at 19-20. The book extended Hagel and Rayport’s earlier article describing an infomediary. See John Hagel III & Jeffrey F. Rayport, *The Coming Battle for Customer Information*, HARV. BUS. REV., Jan.-Feb. 1997, at 53.

237. Hagel and Singer contemplate that infomediaries may try to identify and respond to consumers’ latent interests. See HAGEL & SINGER, *supra* note 66, at 62. However, the infomediary’s success in doing so depends on the quality of the dataset available to it, see *infra* notes 246-59 and accompanying text, a point not directly considered by Hagel and Singer.

238. See HAGEL & SINGER, *supra* note 66, at 26; see also Laudon, *supra* note 65, at 101 (contemplating a similar mechanism for “information fiduciaries” in his proposed National Information Marketplace); Sieloff, *supra* note 58, at 19 (discussing an agent that will filter and make connections).

239. See HAGEL & SINGER, *supra* note 66.

240. In response to Hagel and Singer’s work, a number of companies launched infomediary businesses, including Lumeria, PrivaSeek, InterOmni, @YourCommand, and PrivacyBank. See James Glave, *The Dawn of the Infomediary*, WIRED NEWS, Feb. 24, 1999, <http://www.wired.com/news/print/0,1294,18094,00.html>.

241. Lumeria’s website still exists but appears not to have been updated since 2001. See Lumeria, Inc., <http://www.lumeria.com> (last visited Oct. 26, 2006). Lumeria acquired InterOmni in 1999. Press Release, Lumeria, Lumeria Announces Intent to Acquire InterOmni Services, Inc. (Mar. 9, 1999), <http://www.lumeria.com/press3.shtml>. In 2000, PrivaSeek changed its name to Persona, Inc. HighBeam Research, PrivaSeek Changes Name to Persona, <http://www.highbeam.com/doc/1G1-62866284.html>. The persona.com domain now resolves to a dating site, and the privaseek.com domain now promotes “frame grabbing” software. The yourcommand.com domain name is available for sale. See <http://www.sedo.de/search/details.php4?domain=yourcommand.com&tracked=&partnerid=&language=e>. InfoSpace.com bought PrivacyBank in 2000; it is unclear what happened thereafter. See Clint Boulton, *InfoSpace.com Aims for Mobile Clients*,

could be because infomediaries and attention markets face the same limitations, including marketer disincentives to pay to participate, consumer reluctance to invest, and operation costs.²⁴² Further, consumers may have difficulty trusting infomediaries not to skew content displays based on marketer payments.²⁴³

C. Bonded-Sender Programs

Bonded-sender programs are another marketplace alternative. In a typical bonded-sender program, an intermediary (for example, an e-mail service provider) requires marketers to deposit money with the intermediary before disseminating marketing to the intermediary's customers. Depending on its customers' reactions to the marketing, the intermediary may return some or all of the deposit to the marketer.²⁴⁴

For example, Daum Communications, a major Korean Internet access provider, runs a bonded-sender program,²⁴⁵ in which bulk e-mail marketers purchase "postage" for the right to send bulk e-mail to Daum's e-mail customers.²⁴⁶ Customers then vote on the message's

INTERNETNEWS.COM, Jan. 4, 2000, <http://www.internetnews.com/ec-news/article.php/273021>.

242. See Thomas F. Cotter, *Some Observations on the Law and Economics of Intermediaries*, 2006 MICH. ST. L. REV. 67, 81 (2005).

243. See Mark R. Patterson, *On the Impossibility of Information Intermediaries* 9, 12 (Fordham Univ. Sch. of L., L. & Econ. Res. Paper No. 13, 2001), available at <http://papers.ssrn.com/abstract=276968>. Hagel and Singer addressed the need for infomediaries to behave scrupulously as a precondition for winning consumer trust, but they also acknowledged that infomediaries face a significant challenge. See HAGEL & SINGER, *supra* note 66, at 240-41; see also *infra* Part IV.C.3.

244. See ARRISON, *supra* note 40, at 12 (proposing that receivers could choose to return deposit money to marketers when the received communication is desired); Ayres & Funk, *supra* note 11, at 136 n.202 (describing a proposal from Yale School of Management professor Barry Nalebuff to the same effect); Fahlman, *supra* note 65, at 759 (proposing that marketers should make a "binding offer" to compensate consumers for the interruption, with cash held in escrow pending the consumer's judgment of the content).

245. Daum's ability to get senders to participate voluntarily in its program is influenced by Daum's near-monopoly status on e-mail services in Korea. See Gina Chon, *Making Spam Pay*, FORTUNE ASIA, Apr. 15, 2002, at 23 (explaining that 80% of Korean Internet users have a Daum e-mail account). In fact, a Korean consumer-protection agency investigated Daum to determine if Daum abused its market power to implement its payment system. See *Legality of Online Stamp System Questioned by Korea's FTC*, ASIAPULSE, Oct. 17, 2003.

246. See JAEWOONG LEE, INTERNET WITHOUT SPAM, IS IT POSSIBLE? (2003), http://www.apcauce.org/meeting/meeting_3rd/Jaewoong_Lee.pdf. The system applies to a marketer sending more than one thousand messages a day to Daum's system, and the maximum charge is approximately 0.08 cents per message (subject to downward adjustment based on recipient reactions). See Kraut et al., *supra* note 41, at 38-39 (discussing Daum's program).

relevance to them; depending on the aggregate customer votes, the marketer gets some money back or forfeits the postage.²⁴⁷ Daum reports that 70 percent of its customers felt that spam decreased after it implemented the bonded-sender program.²⁴⁸

Typically in bonded-sender programs, the marketer's payments do not accrue directly to the recipients' benefit.²⁴⁹ For example, Daum keeps any money forfeited by marketers, although it does provide incentives to its customers to rate e-mails.²⁵⁰ In these implementations, the bonded-sender program is usually designed to pass through the intermediary's operations costs (and possibly any negative externalities the marketers impose on them),²⁵¹ and is not meant to cause marketers to internalize consumers' negative NPU from the marketing.²⁵²

However, bonded-sender programs could directly compensate consumers for any negative NPU they experience.²⁵³ Thede Loder, Professor Marshall Van Alstyne, and Rick Wash proposed an e-mail system, in which an e-mail sender communicating with a consumer for the first time would deposit a small amount of money in escrow as an "attention bond" (also called an "interrupt fee").²⁵⁴ After reviewing the message's contents, the consumer could choose to pocket the money from the escrow.²⁵⁵

247. See Lee, *supra* note 245.

248. See *id.* This may be because recipients received fewer marketing e-mails; however, Daum has also reported that marketers improved the content of their e-mails due to the system. See Kraut et al., *supra* note 41, at 39.

249. Other options are possible. See, e.g., Claburn, *supra* note 233 (discussing Return Path, a bonded-sender program in which the money goes to the Internet Education Foundation).

250. See Kraut et al., *supra* note 41, at 38.

251. This may accurately characterize America Online and Yahoo's announcement of a certified e-mail delivery program based on technology from Goodmail Systems. See Saul Hansell, *Postage Due, With Special Delivery, for Companies Sending E-Mail to AOL and Yahoo*, N.Y. TIMES, Feb. 5, 2006, § 1, at 25. A principal goal of such systems is to charge e-mail senders for carriage over the e-mail service provider's network. See *id.* In exchange, these systems may improve the marketer's response from consumers by increasing the chances that consumers will read the message. See *id.*

252. However, if the bonded-sender program lowers the intermediary's operating costs, the service provider can indirectly pass along these benefits to consumers in the form of lower prices or improved services.

253. See Loder et al., *supra* note 16, § 3.2. A few start-up enterprises are trying to implement this model in the marketplace. See Claburn, *supra* note 233 (discussing two such start-ups, Paritive Inc. and Vanquish Inc.).

254. See Loder et al., *supra* note 16, § 3.2. After the sender's first contact, the recipient can "whitelist" senders that the recipient would be willing to hear from again. See *id.*

255. See *id.*

Bonded senders have several advantages over attention markets and infomediaries. Bonded-sender programs create the opportunity for marketers to stimulate consumers' latent interests because the marketing actually reaches consumers. Marketers also have incentives to provide accurate metadata about their marketing, because any misrepresentations to consumers will cause them to grade the marketing poorly and cost the marketer money through forfeiture of the bond.

Unfortunately, bonded-sender programs do not necessarily solve the consumer-marketer matchmaking problem. First, consumers may deliberately misreport their perceived relevancy of marketing either for illegitimate purposes (for example, to punish speakers of different viewpoints)²⁵⁶ or as strategic behavior to get the cash placed in escrow.²⁵⁷ Second, bonded-sender programs create program-development and operations costs. Finally, the risk of bond forfeiture may encourage marketers to engage in intermedia selection.

Bonded-sender programs also may be controversial because the implicit price discrimination may violate "Net neutrality" norms and principles.²⁵⁸ AOL and Yahoo discovered this when they received heavy criticism for deploying Goodmail's certified e-mail delivery technology, requiring some bulk e-mailers to pay a fee to reach AOL and Yahoo subscribers.²⁵⁹ In the future, intermediaries may be reluctant to pursue bonded-sender programs because of possible negative consumer or press reactions.

D. Summary of Marketplace Alternatives

Superficially, as a form of private ordering, marketplace options seem attractive compared to regulatory solutions. However, marketplace options may place too high a burden on consumers to manifest their preferences without a clear return on those efforts, which may explain why no marketplace option has become a widespread success. Marketplace options may play a role in facilitating consumer-

256. See Cohn & Newitz, *supra* note 148, at 8 (expressing concern that political enemies or competitors may misreport as a way to raise the marketer's costs).

257. Loder, Van Alstyne, and Wash assume that consumers will use "different bond seize policies." See Loder et al., *supra* note 16, § 5.2. But why would they? The rational, self-interested consumer should seize the bond in all cases because bond seizure increases the consumer's wealth without any countervailing disadvantages.

258. Network neutrality means that "all packets are delivered on a first-come, first-served basis" by Internet access providers. See TechWeb, Network Neutrality, <http://www.techweb.com/encyclopedia/defineterm.jhtml?term=networkneutrality>. For an ongoing summary of the Net neutrality debate, see CNET News.com, Net Neutrality Showdown, http://news.com.com/2009-1028_3-6055133.html.

259. See Jon Swartz, *AOL's Push to Keep Pesky Spam Off Internet Lands Goodmail in Hot Seat*, USA TODAY, Mar. 5, 2006, at 3B.

marketer matchmaking, but there is little reason to believe that marketplace options will moot regulation.

VI. COASEAN FILTERS AS A REGULATORY AND MARKETPLACE ALTERNATIVE

A. *How Coasean Filters May Solve the Marketing Problem*

The regulatory and marketplace options discussed above seem to offer little hope of substantially improving the consumer-marketer matchmaking process. Each offers some way to allocate costs among the parties, but none offer much hope in materially reducing those costs. Instead, the options generally are inhibited by the accuracy-simplicity tradeoff and the costs incurred by the consumer in manifesting their preferences. Without some radical way to actually reduce those costs—and not just redistribute them—it seems unlikely that the marketing problem ever will be solved.

However, it is possible to envisage a hypothetical solution that would offer dramatic improvements over all of the options discussed to date. In an ideal world, an omniscient matchmaker could costlessly—but accurately—read consumers' minds, infer their expressed and latent preferences without the consumer bearing any disclosure costs, and act on the inferred preferences to screen out unwanted content and proactively seek out wanted content.²⁶⁰ Such a mind-reading wonder may sound like either theology or science fiction, but such technology is not only possible, it is inevitable—perhaps imminently.²⁶¹ For lack of a better term,²⁶² this Article refers to this emerging technology as “Coasean filters.”²⁶³

260. “The perfect search engine . . . would understand exactly what you mean and give back exactly what you want.” Google.com, Our Philosophy, <http://www.google.com/corporate/tenthings.html> (quoting Google co-founder Larry Page). Sergey Brin has described the perfect search engine as “the mind of God.” Jason Pontin, *Dinner With the Mind Behind the Mind of God*, RED HERRING, July, 2002, at 29.

261. See Steve Smith, *Querying the Next Generation*, OMMA, Mar. 2006, available at http://www.kelseygroup.com/news/2006/mediapost_060324.htm (“The search box is going beyond the desktop to evolve into a ubiquitous engine that matches both content and laser-targeted marketing to our desires This evolution is not only plausible; it's already happening, and it will transform all content and its distribution in the not-too-distant future.”).

262. This technological concept is relatively new, and no single term has yet emerged to describe it. For several years, Microsoft researchers have been developing technology they call an “Attentional User Interface.” John Markoff, *Microsoft Sees Software “Agent” as Way to Avoid Distractions*, N.Y. TIMES, July 17, 2000, at C1:

In this hypothetical solution to the marketing problem, consumers will constantly carry a Coasean filter device with them, much like they carry cell phones today.²⁶⁴ Enabling consumers to send and receive any type of electronic communication, this device will perform the current functions of a cell phone and an Internet access device. It will monitor incoming and ongoing communications and draw insights from the consumer's current location and physical movements. The device then can use this dataset to make inferences about consumer preferences, to sort incoming electronic messages, and to proactively obtain and deliver electronic content that the device "thinks" will serve the consumer's inferred preferences.

A personal example illustrates the Coasean filter's operation. I am a long-time vegetarian and a collector of Slinky toys. By monitoring my data flows (my e-mails, telephone calls, and web activities), the Coasean filter will infer these facts about me. Thus, it will let unsolicited marketing about local vegetarian restaurants reach my attention but will block any solicitations from Farmer John Meats. Meanwhile, by monitoring my communications, the Coasean filter will learn that I have been seeking the crescent-shaped Slinky toy for over a decade, so it may proactively research the Internet to find a place for me to buy that particular toy. At the same time, because the Coasean

In the new world of the Attentional User Interface, as the [Microsoft] researchers call it, a software program known as a notification manager would continuously monitor streams of data that include electronic mail, voice mail, Internet news alerts and so-called instant messaging notes.

. . . .

But the Attentional User Interface would not be confined to the desktop computer. It would be a software cloak enveloping the users wherever they might be, able to alert them via cell phone, hand-held computer, pager or other digital means—whenever and wherever the software deemed something worthy of their attention.

Craig Silverstein, a Google technologist, has used the term "search pet" to describe an analogous concept. See Stefanie Olsen, *Google's Man Behind the Curtain*, CNET NEWS.COM, May 11, 2004, http://news.com.com/2008-1024_3-5208228.html.

263. The Coasean filter supports a decisive allocation of property rights while costlessly effectuating private preferences—hence, the name "Coasean" filter.

264. About 65% of Americans have a cell phone. CTIA: The Wireless Association, *Wireless Quick Facts*, http://files.ctia.org/pdf/Wireless_Quick_Facts_October_05.pdf. On average, cell-phone owners have their phones within reach over twelve hours per day. See EDISON MEDIA RESEARCH, *USE OF THE CELL PHONE AS A MEDIA MEASUREMENT DEVICE* (2006), <http://www.edisonresearch.com/home/archives/Cell%20Phone%20Measurement%20Presentation.pdf>.

filter will see my transactions, it will know that I already own the Slinky Bucko²⁶⁵ and will moderate incoming solicitations accordingly.

While Coasean filters do not exist today, cell phones already perform many of the functions of Coasean filters. Commentators have called the cell phone a “remote control for your life,” since it can act as a digital wallet and a GPS device.²⁶⁶ A cell phone equipped with emerging technologies can make significant inferences: it can recognize faces²⁶⁷ and walking gait,²⁶⁸ determine a person’s emotional state,²⁶⁹ and accurately predict its user’s future behavior.²⁷⁰ Collectively, these technologies, combined with increased computing power,²⁷¹ could evolve into the Coasean filter.²⁷² As a mediator of marketer-consumer matchmaking, Coasean filtering technology offers a number of advantages over the regulatory or marketplace solutions discussed earlier. Most obviously, Coasean filters improve matchmaking accuracy while reducing costs.

265. A Slinky Bucko is a pull toy with a plastic horse mounted on a platform with wheels of different sizes. The horse’s body is a slinky, and the toy includes a plastic cowboy designed to “sit” on the slinky. When the toy is pulled, the different-sized wheels cause the entire toy to move up and down, which causes the mounted cowboy to “ride” the Slinky.

266. Greg Sandoval, *Cellphones: Not Just Voice Mail Anymore*, USA TODAY, Sept. 18, 2005, http://www.usatoday.com/tech/products/gear/2005-09-18-phones-double-duty_x.htm. See generally Sinead Carew, *Wireless to Organize—and Maybe Save—Lives*, MSNBC.COM, Feb. 10, 2006, <http://www.msnbc.msn.com/id/11273035/> (discussing a variety of future applications of smart cell phones).

267. Oki Electric Industry Company sells face recognition technology for cell phones. See *Cellphones Learn to Recognize Their Owners’ Faces*, DEVICEFORGE.COM, Oct. 19, 2005, <http://www.deviceforge.com/news/NS2876211743.html>.

268. See Will Knight, *Cell Phone Could Identify Its Owner by Their Walk*, NEWSSCIENTIST.COM, Oct. 14, 2005, <http://www.newscientist.com/article.ns?id=dn8161>.

269. See Candace Lombardi, *MIT Group Develops “Mind-Reading” Device*, CNET NEWS.COM, Apr. 4, 2006, http://news.com.com/MIT+group+develops+mind-reading+device/2100-1008_3-6057638.html.

270. In an experiment, a cell phone equipped with artificial intelligence and the ability to obtain various environmental and behavioral data about its user correctly predicted the user’s next activity up to 85% of the time, given enough data. See Ryan Singel, *When Cell Phones Become Oracles*, WIRED NEWS, July 25, 2005, <http://www.wired.com/news/wireless/0,1382,68263,00.html>; see also Reality Mining, <http://reality.media.mit.edu/> (last visited Nov. 16, 2006).

271. See Victoria Shannon, *Coming to Cellphone Near You: On-the-Go Job Life Becomes More of a Practical Reality*, INT’L HERALD TRIB. (Barcelona, Spain), Feb. 15, 2006, at 13 (“Even midrange cellphones have turned into miniature personal computers . . .”).

272. Cf. David H. Freedman, *Why Privacy Won’t Matter*, NEWSWEEK, Apr. 3, 2006, at 38-42.

1. IMPROVED ACCURACY

The Coasean filter would more accurately determine consumer preferences than other preference-disclosure schemes because it would rely upon a superior dataset about the consumer's preferences. The device could automatically capture the consumer's actual behavior and communications without any change in the consumer's behavior. This dataset would comprehensively represent all facets of the consumer, making it more insightful, up-to-date, and accurate than datasets captured other ways.²⁷³

In contrast, other preference-disclosure schemes generally rely on consumer self-reporting, which is both costly and incomplete. Self-reporting mechanisms have all of the following limitations: (1) consumers may inadvertently or deliberately misreport their preferences,²⁷⁴ (2) consumers may be unable to communicate their preferences precisely if the preference-collection instruments are not sufficiently granular, (3) consumers cannot communicate data relating to latent preferences, and (4) consumers may not remember, or want to spend the time, to communicate or update their preferences.²⁷⁵

The power of comprehensive preference datasets sheds some insight on the limits of current marketing filters.²⁷⁶ Filters that rely on self-reported datasets, like collaborative filtering tools, tend to fail because consumers do not provide enough personal data for the filter to make good insights. Alternatively, tools that try to infer consumer preferences based on consumer interactions with a server—like

273. See JIM GEMMELL ET AL., MICROSOFT BAY AREA RES. CTR., MYLIFEBITS: A PERSONAL DATABASE FOR EVERYTHING (2006), <ftp://ftp.research.microsoft.com/pub/tr/TR-2006-23.pdf> ("We have observed that the more [of what we see] that is captured, the more correlations are possible to help find things."); Hansell, *supra* note 102 ("[T]he sites that people go to—and the searches they conduct—tend to reflect their interests better than even the most elaborate mailing lists developed in the pre-Internet era."); Javed Mostafa, *Seeking Better Web Searches*, SCI. AM., Jan. 24, 2005, at 66, 70 ("If search engines could take the broader task context of a person's query into account—that is, a user's recent search subjects, personal behavior, work topics, and so forth—their utility would be greatly augmented.").

274. See Jason Fry, *Under Recommendation Engines' Hood*, WALL ST. J. ONLINE, June 12, 2006, http://online.wsj.com/public/article/SB114961753581872822-rR3vT0iNg5HrPfdR6tdSAbRAZZA_20060711.html.

275. See Mostafa, *supra* note 273, at 70 ("Acquiring and maintaining accurate information about users may prove difficult. After all, most people are unlikely to put up with the bother of entering personal data other than that required for their standard search activities.").

276. Professor Dan Hunter rightly expresses skepticism about the ability of any filtering technology to work perfectly. See Dan Hunter, *Phillipic.com*, 90 CAL. L. REV. 611, 627-36 (2002) (reviewing CASS SUNSTEIN, *REPUBLIC.COM* (2001)). However, his examples all involve filters that act on incomplete datasets.

recommendation engines drawing on consumer-selected search terms or consumer purchases—may misinterpret the consumer’s behavior.²⁷⁷ With only limited data, these tools do not know such basic things as the consumer’s motivation for the purchase—for example, buying a gift—or how much money the consumer is spending with competitors.²⁷⁸

In contrast, filters that automatically generate consumer-preference datasets by monitoring the consumer’s normal behavior and communications—like Bayesian spam filters,²⁷⁹ Gmail,²⁸⁰ or social-network-based e-mail sorting tools²⁸¹—can do a significantly better job of inferring and effectuating consumer preferences.²⁸² Coasean filters would go well beyond these examples by obtaining a more comprehensive dataset of consumer communication and behavior and combining that data with the consumer’s physical location. As a result, Coasean filters should be able to costlessly identify latent interests and proactively present content relevant to those interests.²⁸³

277. See Alex Pham & Jon Healey, *Telling You What You Like*, L.A. TIMES, Sept. 20, 2005, at A1.

278. See HAGEL & SINGER, *supra* note 66, at 13 (giving the example of an airline that cannot tell that an infrequent patron might be a major customer of a competitor).

279. See Scarlet Pruitt, *In Search of the Perfect Spam Filter*, PCWORLD.COM, Jan. 17, 2003, <http://www.pcworld.com/news/article/0,aid,108859,00.asp> (discussing Bayesian filters that can achieve over 99% accuracy); William S. Yerazunis, Mitsubishi Elec. Research Labs., *The Spam-Filtering Accuracy Plateau at 99.9% Accuracy and How to Get Past It* (2004), <http://www.merl.com/reports/docs/TR2004-091.pdf> (discussing how Bayesian filters can reach 99.9% accuracy). See generally Paul Graham, *A Plan for Spam*, in HACKERS & PAINTERS: BIG IDEAS FROM THE COMPUTER AGE 121 (2004) (describing Bayesian filters).

280. See Eric Hellweg, *Google’s Gmail Ads Hit the Mark*, CNNMONEY.COM, Sept. 20, 2004, <http://money.cnn.com/2004/09/20/technology/techinvestor/hellweg/index.htm> (“[T]he ads that appeared next to my e-mails were startlingly relevant.”).

281. Microsoft is developing an e-mail filtering tool it calls “Social Network and Relationship Finder,” or SNARF. See Rob Knies, *Too Many E-Mails? SNARF Them Up!*, MICROSOFT.COM, <http://research.microsoft.com/displayArticle.aspx?id=1365> (last visited Jan. 21, 2006). SNARF monitors e-mail traffic to make inferences about a consumer’s social and professional networks, and then sorts incoming e-mail according to these networks. See *id.* According to a Microsoft researcher, “I was surprised and pleased by how much power you can get from simply counting the e-mails you send to people and using that information to organize e-mail for users. Social information is very powerful.” *Id.*

282. See Jaime Teevan et al., *Personalizing Search Via Automated Analysis of Interests and Activities* (Aug. 2005), http://research.microsoft.com/~horvitz/SIGIR2005_personalize.pdf. See generally James Pitkow et al., *Personalized Search*, 45 COMM. ACM 50, 50 (2002).

283. Multiple tools are trying to proactively generate and display relevant content, such as Microsoft’s “implicit search” functionality, the Aware desktop search application, and the Sidebar application in Google’s desktop application. See Mostafa,

However, even with their rich preference datasets, Coasean filters would not be 100 percent perfect.²⁸⁴ Marketers could successfully “game” the filters,²⁸⁵ and the filter could make errors—for example, automatically blocking important nonmarketing communications.²⁸⁶ Nevertheless, Coasean filters should be able to achieve relevancy determinations that vastly exceed other options.

2. LOW COSTS

Coasean filters could achieve these accuracy increases with comparatively low costs. Unlike regulatory solutions, Coasean filters would not impose any compliance costs on marketers or enforcement costs on the government. Meanwhile, automated data-collection process virtually eliminates consumer costs for preference disclosures.²⁸⁷ Inevitably, consumers would have to correct filtering mistakes as they occur; but those mistakes should be rare, and the Coasean filter would not require significant upfront training. Thus, it could overcome the accuracy-simplicity tradeoff that plagues many other options. The Coasean filter could be both accurate in its inferences while being simple to use from a consumer standpoint.

The Coasean filter also would reduce consumer costs by screening out incoming negative NPU content without the consumer incurring any costs (that is, before the consumer is exposed to it)²⁸⁸ and by proactively seeking out and delivering positive NPU content.²⁸⁹ Still,

supra note 273, at 70; Chris Sherman, *Making Your Searches More Contextually Aware*, SEARCHENGINEWATCH, Mar. 30, 2005, <http://searchenginewatch.com/searchday/article.php/3493791>; Google.com, Google Desktop Features, <http://desktop.google.com/features.html> (last visited Oct. 26, 2006).

284. See Hunter, *supra* note 276, at 627-36 (reviewing the limits of various types of filtering approaches).

285. Marketers are notorious for finding ways to bypass filters. See Mark Ward, *How to Make Spam Unstoppable*, BBC NEWS, Feb. 4, 2004, <http://news.bbc.co.uk/1/hi/technology/3458457.stm> (describing ways to beat Bayesian spam filters); Eric Goldman, *Deregulating Relevancy in Internet Trademark Law*, 54 EMORY L.J. 507, 531 (2005) (discussing search-engine marketers' gaming of search-engine algorithms).

286. There are other challenges, too, including the amount of computing power required to process large and complex datasets and the difficulties of making good inferences or recommendations outside of taste-based product categories.

287. Cf. LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 160 (1999) (advocating for machine-automated manifestations of privacy preferences).

288. See HAGEL & SINGER, *supra* note 66, at 47.

289. See Michael Kanellos, *Microsoft Aims for Search on Its Own Terms*, CNET NEWS.COM, Nov. 24, 2003, http://news.com.com/2102-1008_3-5110910.html. The article quotes a Microsoft researcher as saying that, as a searcher, she thinks “I don't want to stop everything I am doing. Bring the search results to me.” *Id.*

Coasean filters would not eliminate all consumer costs. In addition to the costs of errors (for example, the loss of positive NPU from erroneously blocked content, the accrual of negative NPU caused by erroneously unblocked content, and the costs of educating the filter), the consumer must compensate the Coasean filter vendor. Coasean filters also raise significant privacy issues.²⁹⁰

3. CONCLUSION ON COASEAN FILTERS AND THE MARKETING PROBLEM

Coasean filters could radically change the way we think about regulating marketing dissemination. With the widespread deployment of Coasean filters, there would be no need to try to reduce the quantity of marketing disseminated in filterable media. Even if marketers increase their volume of marketing and do a poor job of targeting, Coasean filters should insulate consumers from any negative externalities due to that marketing.

Indeed, assuming no defects with the marketing (for example, false advertising or negative externalities imposed on intermediaries), consumer and social welfare would improve with broader marketing dissemination filtered by the Coasean filter.²⁹¹ Wider marketing increases the odds that marketers will match with consumers that have esoteric or minority interests. In many cases, these esoteric interests are unreachable due to regulatory suppression that increases marketers' cost structures.²⁹² Wider marketing also increases the odds that consumers will make serendipitous discoveries that activate latent interests and result in new welfare-increasing transactions.

Thus, Coasean filters would change the basic paradigm of marketing regulation. Instead of using regulation to restrict marketer behavior, consumer and social welfare may increase if marketing regulations encourage the broad dissemination of filterable marketing. By removing legal regulation as an inhibitor of marketing

290. See discussion *infra* Part VI.C.

291. Loder, Van Alstyne, and Wash argue that, in some cases, an ex post attention bond will lead to greater social welfare than a "perfect filter." See Loder et al., *supra* note 16, § 5.1. They reach this result by ignoring any social welfare created from consumer actualization of latent interests. Their model assumes that a "perfect filter" accurately represents the consumers' expressed preferences, but a Coasean filter would capture and act upon consumers' latent interests as well—welfare that their model does not capture.

292. See *supra* Part II.

dissemination, Coasean filters may lead to unprecedented consumer control over individual marketing flows.²⁹³

B. Policy Implications of Coasean Filters

1. CONTROLLING INTERMEDIA SELECTION

If Coasean filters were widely deployed, marketers should get the marketing entitlement because consumers would not experience negative NPU from unwanted marketing. This entitlement allocation would support the deregulation of marketing dissemination. Specifically, there would be no reason to regulate various kinds of electronic marketing media differently if the Coasean filter could mediate all of them. As the percentage of electronic communication increases, the Coasean filter's power to mediate marketing would increase as well. Indeed, perhaps someday, the Coasean filter may be able to mediate some types of aural marketing.²⁹⁴

However, there may be limits to the Coasean filter's effectiveness across all media. In theory, a Coasean filter could control aural content and perhaps even some types of offline visual content, but marketing disseminated for other senses²⁹⁵ may not be filterable by the device.²⁹⁶ So long as some marketing-dissemination media are outside the

293. Cf. Cohn & Newitz, *supra* note 148, at 10 ("Individual recipients should have ultimate control over whether they receive the messages they wish to receive. They can be assisted by software or anti-spam services, but knowledge of and control over receipt of e-mail should remain with recipients and end users.") According to this article, "The best method for ensuring that wanted mail is delivered is to place the tools in the hands of the recipient, on the client side." *Id.* at 12.

294. Noise-canceling technology is proliferating and improving. See Joe Sharkey, *Subduing Life's Clamor, But Not Its Sweeter Tones*, N.Y. TIMES, July 26, 2005, at C7. A Coasean filter equipped with noise-canceling or related technology might be able to screen out unwanted aural marketing.

295. For example, there is no widely available technology that can filter smells. Smell can be used for marketing purposes through a process called "olfactory marketing." See Barry J. Davies et al., *The Sweet Smell of Success: Olfaction in Retailing*, 19 J. MKTG. MGMT. 611, 619 (2003) (summarizing some of the olfactory-marketing literature). Olfactory marketing can work in a variety of ways, including (1) enhancing consumer enjoyment of a product during consumption, (2) motivating consumers to purchase a specific product, or (3) enhancing a retail environment (such as putting buyers in a shopping mood). See *id.*

296. See Hunter, *supra* note 276, at 640 (noting in his review of Sunstein's *Republic.com* that, even with Sunstein's worst fears about filtering, physical-space sidewalks will still remain).

Coasean filter's reach, marketers would have an incentive to engage in intermedia selection to bypass the filtration process.

To achieve the goal of having all marketing mediated by the Coasean filter and of plugging the intermedia-selection hole, marketing in unfilterable media may need to be regulated. The obvious approach is to ban marketing in unfilterable media.²⁹⁷ While this solution is simple, it is not realistic. First, the definition of marketing is sufficiently amorphous that it cannot be cleanly segregated from editorial content.²⁹⁸ Second, such a broad marketing ban likely violates the First Amendment by eliminating too many channels of communication.²⁹⁹

Alternatively, marketing in unfilterable media could be subject to an attention tax. For example, a marketer could send marketing via e-mail tax-free, but the same marketing delivered via an unfilterable billboard would trigger an attention tax. An attention tax inhibits marketer intermedia selection by increasing marketer costs in the media outside the Coasean filter's reach,³⁰⁰ thus channeling some of the marketing back into filterable media.

The attention tax may be superior to an outright ban because it does not foreclose communication options, but instead it readjusts pricing to internalize the likely consequences. A tax also has a greater likelihood of withstanding constitutional scrutiny because it does not actually prevent speech from occurring.³⁰¹ However, as with a total ban, defining taxable marketing may be tricky. Further, setting the appropriate tax rate for attention would be very challenging,³⁰² and the tax could be counterproductive if the wrong rate is set.³⁰³ At best, an attention tax may be helpful only for those unfilterable media for which

297. See Laudon, *supra* note 65, at 100-01.

298. See generally Alex Kozinski & Stuart Banner, *Who's Afraid of Commercial Speech?*, 76 VA. L. REV. 627 (1990) (giving examples of how editorial and marketing content can overlap).

299. See *supra* notes 143-45 and accompanying text.

300. See BAKER, *supra* note 39, at 83; see also JACOBSON & MAZUR, *supra* note 61, at 226 (arguing that, to reduce commercialism, marketing expenses should not be tax-deductible or advertising budgets that exceed a certain threshold should be taxed); Shiman, *supra* note 60, at 41.

301. See BAKER, *supra* note 39, at 83 (arguing that differential taxes between media may be constitutional).

302. See Pavlov et al., *supra* note 66, at 78.

303. Setting the wrong tax rate could distort decision making. See Robert E. Kraut et al., *Markets for Attention: Will Postage for Email Help?* (Yale Int'l Ctr. for Fin., Working Paper No. 02-28, 2002), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=325961 (discussing problems produced by both fixed- and variable-rate fees on marketing communications); Loder et al., *supra* note 16, § 3.3 (“[An attention tax] eliminates many wasteful messages but also cuts certain messages that are low value to senders and high value to recipients.”).

imposing and collecting the tax would not create significant logistical hassles or enforcement costs.

2. DEREGULATION OF SURREPTITIOUS MONITORING TECHNOLOGIES

As regulators cope with new technologies and try to protect consumer privacy, they are building regulatory structures that pose a grave threat to the development of Coasean filters.³⁰⁴ This is particularly true with efforts to regulate adware and spyware, because Coasean filters share some common attributes with these types of software. Coasean filters would monitor consumer behavior, would use observed data and behavior to select content, and may use conspicuous methods (such as a cell-phone ring or a pop-up notification) to bring that content to the consumer's attention. In this respect, it is hard to distinguish the Coasean filter from adware that displays putatively relevant pop-up ads based on consumer behavior.

However, Coasean filters differ from some current types of adware and spyware in two key respects. First, this Article assumes that consumers will affirmatively adopt and use Coasean filters with adequate notice and consent. Second, the Coasean filter may not need to report data back to its vendor; instead, it could retain all captured data on the device itself.

In general, it seems obvious that consumers should be free to choose technology that improves their ability to manage information. Yet, surprisingly, not everyone believes that consumers should be given this choice.³⁰⁵ Indeed, Utah³⁰⁶ and Alaska³⁰⁷ have adopted anti-adware laws that prohibit client-side software from displaying pop-up ads

304. See Crawford, *supra* note 208, at 1435 (discussing how anti-spyware laws may eventually constrain various beneficial technologies).

305. See, e.g., Barnes, *supra* note 140 (“[T]he ‘spyware bargain’ should be banned as violative of public policy.”).

306. Utah enacted the first state anti-spyware law in the country in March 2004. Nat'l Conference of State Legislatures, 2004 State Legislation Relating to Internet Spyware or Adware, <http://www.ncsl.org/programs/lis/spyware04.htm>. In response to a constitutional challenge, that law was preliminarily enjoined in June 2004. *See* *WhenU.com, Inc. v. Utah*, Civil No. 040907578 (Utah Dist. Ct. June 22, 2004). As a result, Utah amended the law in March 2005, putatively to correct the constitutional defects. *See* H.B. 104, 2005 Leg., Gen. Sess. (Utah 2005) (codified at UTAH CODE ANN. §§ 13-40-101 to -302 (2005)).

307. Act effective Nov. 28, 2005, ch. 97, sec. 3, 2005-2 Alaska Adv. Legis. Serv. 662 (LexisNexis) (codified as amended at ALASKA STAT. §§ 45.45.792, .794, .798 (2005)).

triggered by the consumer's use of a third party trademark or domain name—even if the consumer has fully consented to the software.³⁰⁸

The Utah and Alaska laws appear to make Coasean filters illegal. Because Coasean filters would be monitoring consumer behavior and alerting the consumer (perhaps using pop-up windows) of contextually relevant content, the Utah and Alaska anti-adware laws may force the Coasean filters to change their operations or prevent Coasean filters from developing altogether.

Unfortunately, these statutes just may be the leading edge of a seemingly inevitable tsunami of regulations that will block the development of Coasean filters. It appears that, with each new technology-privacy crisis, some opportunistic regulators will try to ban or restrict matchmaking technologies.³⁰⁹

California's reaction to Gmail provides a textbook example of regulator antitechnology opportunism. In 2004, Google announced Gmail, a free e-mail service that uses the contents of a consumer's e-mail to automatically assess the consumer's interests and deliver putatively relevant marketing.³¹⁰ In response, California Senator Liz Figueroa—a self-styled privacy leader³¹¹—proposed a law to prohibit e-mail service providers from monitoring incoming e-mails to determine the receiving consumer's preferences,³¹² even if the receiving consumer consented to such monitoring. Senator Figueroa ultimately dropped the bill,³¹³ but if the anti-Gmail law had been enacted, it would have

308. The Alaska statute is ambiguous on this point, since the statute defines “pop-up advertisement” as “material offering for sale or advertising the availability or quality of a property, good, or service that is displayed on a user's computer screen, without any request or consent of the user, separate from an Internet website that a user intentionally accesses.” ALASKA STAT. § 45.45.798(5) (emphasis added). Arguably, consent to install the software could also constitute consent to receive any software-enabled pop-up advertisements. However, this technical reading is not easily reconciled with the obvious statutory intent.

309. See PRISCILLA M. REGAN, *LEGISLATING PRIVACY* 202-11 (1995) (discussing how regulators become “policy entrepreneurs” on privacy issues).

310. See Google.com, About Gmail, <http://gmail.google.com/gmail/help/about.html#ads> (last visited Nov. 16, 2006). This feature sparked a privacy uproar. See Declan McCullagh, *Gmail and Its Discontents*, CNET NEWS.COM, Apr. 26, 2004, http://news.com.com/2102-1032_3-5199224.html.

311. Figueroa's website touts that she “has established herself as one of the nation's leaders in protecting personal privacy and helping victims of identity theft.” See Senate Democratic Caucus State of California Website, Senator Figueroa's Biography (follow “Senators” hyperlink; then follow “Liz Figueroa” hyperlink; and then follow “Biography” hyperlink) (last visited Oct. 26, 2005).

312. See S.B. 1822, 2003-04 Reg. Sess. (Cal. 2004); *A Move to Block Gmail Service*, WIRED NEWS, Apr. 13, 2004, <http://www.wired.com/news/business/0,1367,63041,00.html>.

313. See *Calif. Bill to Bar E-Mail Scans Withdrawn*, ELEC. COM. & L. REP., Aug. 18, 2004, at 708, 708.

prevented Coasean filters subject to California law from using a consumer's e-mail as a data source about the consumer's preferences. Thus, like the Utah and Alaska anti-adware laws, this law would have hindered or prevented the development of Coasean filters.

Based on ongoing incentives for legislators to rally around the privacy cause, this technological evolution and regulatory retrograde cycle seems destined to play out ad infinitum. Each time it does, it erects more barriers to the emergence of Coasean filters and takes consumers further away from social-welfare-enhancing technology.

Therefore, regulators need to avoid overreacting to new technological developments and remain focused on developing and implementing policy that actually improves social welfare. Specifically, regulators need to stop blocking the collection of personal data used to trigger putatively relevant content. If regulators understood the Coasean filters' potential to solve the thorny marketing problem, regulators may better appreciate the adverse consequences of enacting antitechnology regulation.

C. Coasean Filters and Privacy

1. HOW COASEAN FILTERS ENHANCE PRIVACY

As previously indicated, regulators often attack Coasean-filter-like technology using privacy rhetoric, suggesting that such technology is an "invasion of privacy." This is ironic because Coasean filters should enhance consumer privacy,³¹⁴ not undermine it.

Many consumers worry about having their behavior monitored and their data collected.³¹⁵ These concerns are largely justifiable, since consumers can suffer a number of adverse consequences when third parties collect their personal and private data.

First, unexpected disclosure or misuse of consumer data can be highly problematic,³¹⁶ and consumers cannot effectively control how third parties use or disclose their data. It is difficult or impossible for consumers to monitor the third party's behavior, enforcement actions may be cost-prohibitive, and any remedies for the third party's breach

314. The term "privacy" is inherently ambiguous and lacks a single meaning, but Coasean filters may enhance privacy based on any standard meaning of that term.

315. "Consumers don't want to be tracked online. Only 20% . . . would let a marketer share information in order to track their buying behavior and project future buying decisions." PONEMON, *supra* note 14, at 1.

316. See DANIEL J. SOLOVE, *THE DIGITAL PERSON* 1-7 (2004).

may not be meaningful.³¹⁷ Second, marketers can use consumer data in ways that may be adverse to the consumer, such as price discriminating to convert consumer surplus into producer surplus³¹⁸ or manipulatively increasing the consumer's demand for the marketer's product.³¹⁹ Third, to the extent third parties each build their own proprietary and unconnected databases, consumers must redundantly communicate their personal data to each party, which is initially costly and makes it difficult to keep each database accurate and up-to-date. These costs also increase barriers to the entry for new competitors, since consumers have to redisclose data to the new competitor.

Coasean filters would avoid some of these concerns. Architecturally, the Coasean filter could store the consumer's dataset on the device itself rather than in central third-party-operated repositories. Thus, the data remains within the consumer's control, giving consumers the benefit of personalized content without the risks associated with third-party possession of the personalization data.³²⁰

317. See, e.g., *In re JetBlue Airways Corp. Privacy Litig.*, 379 F. Supp. 2d 299, 326 (E.D.N.Y. 2005) (holding that consumers may not have a breach of contract action for a privacy policy breach because they lack actual damages); *Bell v. Axiom Corp.*, No. 4:06CV00485-WRW, 2006 WL 2850042 (E.D. Ark. Oct. 3, 2006) (holding that consumers did not have standing to sue for a security breach that exposed their data because they lacked an actual injury); *Key v. DSW, Inc.*, No. 2:06-CV-459, 2006 WL 2794930 (S.D. Ohio Sept. 27, 2006) (holding that a heightened fear of identity theft was not an injury that supported standing).

318. See Yuxin Chen et al., *Individual Marketing With Imperfect Targetability*, 20 MKTG. SCI. 23, 29 (2001) (discussing how competing firms can profit if one or more of them can price-discriminate effectively against loyal customers); Andrew Odlyzko, *Privacy, Economics, and Price Discrimination on the Internet*, in ECONOMICS OF INFORMATION SECURITY 187, 188 (L. Jean Camp & Stephen Lewis eds., 2004) (“[T]he powerful movement to reduce privacy that is coming from the private sector is motivated by incentives to price discriminate”); Curtis R. Taylor, *Private Demands and Demands for Privacy: Dynamic Pricing and the Market for Customer Information* (Duke Econs. Working Paper No. 0202, 2002), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=307421.

319. See Tal Z. Zarsky, *Online Privacy, Tailoring, and Persuasion*, in PRIVACY AND TECHNOLOGIES OF IDENTITY: A CROSS-DISCIPLINARY CONVERSATION 209, 217-18 (Katherine J. Strandburg & Daniela Stan Raicu eds., 2006) (contending that marketers may learn of idiosyncratic personality affectations and use those affectations to deliver marketing that has maximum effect on consumer desires).

320. See PONEMON INST., *supra* note 2 (reporting that consumers want targeted ads without revealing personally identifiable information to marketers); Pamela Paul, *Mixed Signals*, AM. DEMOGRAPHICS, July 2001, at 44, 46 (“On the one hand, consumers want companies to read their minds and give them what they want On the other hand, that means companies have to collect information, data mine, and create profiles, which makes consumers feel that like they’re being tracked and exploited.” (quoting DeeVee Devarakonda, Chief Marketing Officer of Quero, an e-marketing firm)).

Despite this, Coasean filters may be designed to report some data back to a central server. For example, to make inferences about a consumer's latent preferences, a filter will need to know that other consumers who like *X* and *Y* also like *Z*. Thus, a Coasean-filter provider likely would want all of its filters reporting back some data about consumer behaviors so that the provider could make network-wide inferences.³²¹ However, this feature could be designed to be nonidentifiable, so the filter provider would not necessarily need to obtain targetable personal details. Further, any such feature would require consumer consent.³²²

2. COASEAN FILTER DATASETS AS TARGETS

Each consumer's dataset would have extraordinary value as a comprehensive representation of that individual's life and preferences, so it would be an irresistible target to criminal hackers and other bad actors who would want the data for illegal purposes, such as identity theft. To protect the dataset, the Coasean filter would encrypt the data, but encryption is never 100 percent hack-proof.³²³ Fortunately, the risks of improper cracking of encrypted personal data are already well-addressed by the law.³²⁴

Private and government actors also would want the dataset and could try to get it through criminal investigations or civil discovery.³²⁵ This back-door method of accessing a consumer's highly sensitive data

321. See Walker, *supra* note 205, at 92-96 (describing the network benefits of aggregated behavioral information).

322. See, e.g., Computer Fraud & Abuse Act, 18 U.S.C. § 1030(a)(2) (2000) (restricting the disclosure of data from a user's computer "without authorization").

323. Any encryption algorithm that relies on computational difficulty for protection may be ultimately broken. See Grant Buckler, *Data Encryption About to Make Quantum Leap*, GLOBE & MAIL (Toronto, Can.), Sept. 22, 2005, at B14. However, new technology called quantum encryption may be unbreakable. See *id.*

324. The Computer Fraud & Abuse Act, 18 U.S.C. § 1030, is the most obvious such law, but other laws that may apply include the Electronic Communications Privacy Act, 18 U.S.C. § 2701, the Digital Millennium Copyright Act, 17 U.S.C. § 1201 (2000), the Economic Espionage Act, 18 U.S.C. §§ 1831-39, and many state laws (such as CAL. PENAL CODE § 502(c)(2) (Deering 2006)).

325. For example, in early 2006, the U.S. Justice Department requested huge quantities of search records from Google and other search engines in an effort to validate the Child Online Protection Act. See *Gonzales v. Google Inc.*, 234 F.R.D. 674, 678 (N.D. Cal. 2006). See generally Elinor Mills, *Google Balances Privacy, Reach*, CNET NEWS.COM, July 14, 2005, <http://news.com.com/2102-1032-3-5787483.html>; Anick Jesdanun, *Google's Growth Prompts Privacy Concerns*, USA TODAY, July 18, 2005, http://www.usatoday.com/tech/news/internetprivacy/2005-07-18-google-privacy_x.htm.

may have the inhibiting effects of actual or threatened panopticism.³²⁶ To work, the Coasean filter would need a comprehensive and accurate dataset. Consumer concerns about the subsequent possibility of government or private-litigant access to the dataset may lead consumers to hide data from or deliberately misreport data to the filter. In either case, degraded datasets would undermine the Coasean filter's efficacy. In the extreme case, consumer fears could negate the Coasean filter as a viable option to improve social welfare.

To preserve the Coasean filters' viability, their datasets would need strict legal protection from access by the government or private litigants, in addition to the protection offered from encryption.³²⁷ Preferably, there would be no circumstance in which consumers are forced to disclose their datasets—not even with a search warrant or court order. To accomplish this, the courts could recognize a consumer-Coasean-filter privilege analogous to the attorney-client privilege,³²⁸ for the same reason that the courts protect attorney-client communications³²⁹—the Coasean filter cannot help the consumer make good exchange decisions unless the consumer fully and truthfully communicates with the Coasean filter.

Admittedly, this hard-line stance may be unrealistic given the prevailing antiterrorism ethos. As a result, if dataset disclosure can be compelled, it should be based on judicial oversight and well-articulated compelling needs.³³⁰ Additionally, such compelled disclosure should remain sensitive to the effects of disclosure on consumers' willingness to continue using their filters.

326. See, e.g., Cohen, *supra* note 119, at 1425-26.

327. See Brad Templeton, Privacy Subtleties of GMail, <http://www.templetons.com/brad/gmail.html> (last visited Oct. 26, 2005) (advocating for limits on government surveillance of Google and its Gmail offering, including stronger protection laws and encryption).

328. The attorney-client privilege applies to “(1) a communication (2) made between privileged persons (3) in confidence [and] (4) for the purpose of obtaining or providing legal assistance for the client.” RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS § 68 (1998). Although exclusions qualify each of the four factors, communications squarely within the privilege are effectively immune from mandated disclosure. *Id.* at cmt. a.

329. See, e.g., *Upjohn Co. v. United States*, 449 U.S. 383, 391 (1981) (citing the MODEL CODE OF PROF'L RESPONSIBILITY, EC 4-1 (1980) (“[The attorney-client privilege] facilitates the full development of facts essential to proper representation of the client [and] also encourages laymen to seek early legal assistance.”)).

330. See, e.g., 18 U.S.C. § 2710(b) (2000) (providing standards for disclosure of video-store rental records).

3. COASEAN FILTER PROVIDERS AND CONSUMER TRUST

Regardless of Coasean filters' theoretical appeal, the filter provider's identity and motivation would determine consumers' willingness to adopt the technology. If the Coasean-filter provider were a for-profit or nonprofit organization, the provider could generate revenues from marketers, consumers, third-party payors like government subsidies, or some combination of these players. If marketers paid providers, inevitably providers would tie placement in the Coasean filter's displays to the marketers' payments. In other words, the more a marketer paid, the better promotion it would receive.³³¹ Such data skews would undermine the filter's credibility and utility, ultimately ensuring that it would fail in the marketplace.

To generate revenues from consumers, providers would need to convince consumers of the filters' value and get them to change their behavior by mediating communications through the filter. As evidenced by the general marketplace failures of infomediaries and attention markets, this is not a trivial task. First, consumers need to believe that the marketing and attention-management problems are worth paying to fix. Second, consumers need to believe that the specific provider will fix these problems. Finally, consumers need to trust the provider to advance their interests ahead of others,³³² and this trust may be difficult to earn and easy to lose.

Alternatively, because Coasean filters would have some public-good attributes, the government may need to supply Coasean filters either directly or by subsidizing private parties. Yet, consumers may not trust the government any more than they trust private actors.³³³ Given the long history of the government monitoring its citizens' behavior, there may be an unavoidable temptation for the government to build or mandate back-door monitoring tools into the filters. With this implicit threat, consumers may be reluctant to adopt government-sponsored filters.

331. Despite the celebrated division between publisher and broadcaster advertising and journalism departments, publishers and broadcasters regularly compromise those principles in response to advertiser requests or pressures. See BAKER, *supra* note 39, at 83; Sara Ivry, *Marketers Say They Pay for Play in News Media*, N.Y. TIMES, June 26, 2006, at C5 (indicating that nearly half of marketing executives say they pay for editorial placement).

332. See HAGEL & SINGER, *supra* note 66, at 113.

333. See, e.g., ASNE FREEDOM OF INFO. COMM. & FIRST AMENDMENT CTR., FREEDOM OF INFORMATION IN THE DIGITAL AGE (2001), <http://www.freedomforum.org/publications/first/foi/foiinthedigitalage.pdf> (reporting that consumers were equally concerned about privacy invasions by government and private actors).

Clearly, each of these options raises trust issues which must be resolved before the Coasean filters could find marketplace adoption. However, as the rising volumes of electronic messages force consumers to seek technological solutions, this consumer demand would create an enormous payoff for a successful provider who could earn consumers' trust. Yet, this marketplace demand would work only if it were not inhibited by regulation.

D. Coasean Filters and the Political Process

The term "deliberative democracy" refers to a decision-making process in which citizens collaboratively exchange and evaluate information to reach a decision.³³⁴ This process requires citizens to be exposed to multiple viewpoints.³³⁵ Superficially, Coasean filters would conflict with deliberative democracy. Where deliberative democracy expects citizens to encounter and consider contrary points of view, Coasean filters would control data flows to reflect the consumer's preferences. This filtration and solicitation process may skew the consumer's view of the world, reinforcing the consumer's existing preferences while simultaneously preventing the consumer's exposure to conflicting views. Any resulting world-view distortion may interfere with democracy's operation.

This view of deliberative democracy celebrates the serendipitous exposure to dissenting and conflicting views,³³⁶ and, as a result, some advocates favor mandating exposure to these views.³³⁷ Unfortunately, these arguments are deeply flawed as they focus on the benefits of supplying political information without considering consumer demand for that information. Serendipitously exposed content helps the democratic process only when consumers actually pay attention to it, but consumers cannot be forced to care about content they are forced to see. Instead, consumers ignore or avoid content that generates negative NPU, so to the consumer, this unwanted content is just another form of spam that needs to be avoided. In extreme cases, too much negative NPU content in a particular medium can cause consumers to abandon

334. See generally DELIBERATIVE DEMOCRACY (Jon Elster ed., 1998). Unfortunately, there is no single definition of the term "deliberative democracy." See *id.* at 8.

335. See CASS SUNSTEIN, REPUBLIC.COM 26 (2001); Note, *supra* note 169, at 1314-15.

336. See Note, *supra* note 169, at 1320 n.33 ("[U]nsolicited communications have First Amendment value whether or not persons want to receive them.").

337. See SUNSTEIN, *supra* note 335, at 183.

the medium entirely.³³⁸ As a result, it is generally counterproductive to mandate consumer exposure to negative NPU content.

While Coasean filters would generally prevent these negative NPU exposures, they nevertheless may unexpectedly enhance deliberative democracy. The problem is that consumers are suffering from information overload,³³⁹ especially from receiving too much undesired content, while not receiving enough desired content. To cope with information overload, consumers limit the data sources they monitor.³⁴⁰ However, by costlessly controlling data flows to reduce unwanted content, Coasean filters would enable consumers to monitor more content sources³⁴¹ with heterogeneous perspectives.³⁴² Further, by reducing the data clutter, Coasean filters would increase consumers' ability to actually reflect on and deliberate the data they receive.³⁴³

In addition, Coasean filters would not extinguish serendipitous exposures to unrequested content because they would proactively generate content catering to consumers' latent interests.³⁴⁴ As a result, they should regularly expose consumers to new, unexpected, and unrequested content that the consumer may not have otherwise considered.³⁴⁵

338. See Shiman, *supra* note 9, at 322.

339. See DAVID SHENK, DATA SMOG: SURVIVING THE INFORMATION GLUT 30 (1997); RICHARD SAUL WURMAN, INFORMATION ANXIETY 307 (1989).

340. See Z.J. Lipowski, *Sensory and Information Inputs Overload: Behavioral Effects*, 16 COMPREHENSIVE PSYCHIATRY 199, 218-19 (1975) (describing how individuals reduce information exposures to their preferred baseline).

341. Good content-filtering tools may empower consumers to consume more content from a greater number of sources. See Anick Jesdanun, *Online News Consumers Become Own Editors*, FORBES, July 24, 2005 (giving an example of a consumer who, using website monitoring technology called RSS, went from monitoring about twenty-five news sites to 200).

342. There is some evidence that consumers do not use the Internet simply to reinforce existing views. See JOHN HARRIGAN ET AL., PEW INTERNET & AM. LIFE PROJECT, THE INTERNET AND DEMOCRATIC DEBATE, at ii (2004), available at http://www.pewinternet.org/pdfs/PIP_Political_Info_Report.pdf (“[I]nternet users are not limiting their information exposure to views that buttress their opinions.”); Jesdanun, *supra* note 325 (“Rarely do [online news consumers] depend on a single news organization’s vision of the day’s top stories.”).

343. See SCHWARTZ, *supra* note 110, at 199-200.

344. For example, in *Republic.com*, Sunstein focuses on Professor Nicholas Negroponte’s description of a “Daily Me” hyperpersonalized filter. See, e.g., SUNSTEIN, *supra* note 335, at 3, 12, 44. However, Negroponte also described a “Daily Us” filter that would display collaborative or community-recommended content that would result in the “serendipitous” content exposures sought by the deliberative-democracy advocates. NEGROPONTE, *supra* note 31, at 154.

345. See Pham & Healey, *supra* note 277 (discussing how Internet recommendation engines can sometimes expose consumers to products they would not have seen otherwise).

Finally, Coasean filters may facilitate democracy by improving the flow of marketing content. This may appear ironic due to the widespread perception that marketing content has less social value than pure political speech.³⁴⁶ However, the government and regulators spend a significant portion of their resources regulating marketplaces by prohibiting the entrance of products and services; controlling the manufacture, distribution, or labeling of products; and overseeing marketplace participants.³⁴⁷ Therefore, consumers cannot act as well-educated citizens without understanding the marketplace effects of government action. By educating consumers about the marketplace, marketing satisfies a precondition of deliberative democracy.³⁴⁸ Coasean filters would help this process by deregulating and increasing consumer access to this vital content.

VII. CONCLUSION

In a perfect world, everyone would possess a magic relevancy wand that would automatically ensure that they get only the marketing they want. Unfortunately, current marketing-control tools—like regulation, marketplace options, and technology—do a poor job of facilitating marketer-consumer matchmaking. Coasean filters would vastly improve upon the current marketing-regulation approaches. Instead of a doomed effort to suppress content on a medium-by-medium basis using blunt regulatory filters, consumers would get the content they want, and consumer and social welfare would benefit as well.

As a result, if it were solely up to market forces, Coasean filters would become integral to our information economy.³⁴⁹ However, regulators are not allowing this technology to evolve. Instead, in an overreaction to adware and spyware technology, regulators are building

346. *See* Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n, 447 U.S. 557, 573 (1980) (Blackmun, J., concurring) (subjecting commercial speech to intermediate scrutiny instead of strict scrutiny). *But see* 44 Liquormart, Inc. v. Rhode Island, 517 U.S. 484, 522 (1996) (Thomas, J., concurring) (“I do not see a philosophical or historical basis for asserting that ‘commercial’ speech is of ‘lower value’ than ‘noncommercial’ speech.”). *See generally* O. Lee Reed, *Is Commercial Speech Really Less Valuable Than Political Speech? On Replacing Values and Categories in First Amendment Jurisprudence*, 34 AM. BUS. L.J. 1, 3, 37 (1996) (discussing the view that commercial and political speech should be valued equally).

347. In this respect, consider the large government agencies that oversee massive and diverse sectors of our economy like transportation, telecommunications and broadcasting, and medical devices and pharmaceuticals.

348. *See* Smolowe, *supra* note 54, at 65 (“Advocates argue that direct mail actually fosters democracy.”).

349. *Cf.* Freedman, *supra* note 272 (explaining the inevitability of search-engine collection of a large amount of personal data to filter more intelligently).

an anti-Coasean-filter regulatory thicket. This thicket—not the marketing that it putatively tries to abate—represents one of the biggest threats to long-term improvements in social welfare.