THE PROGRESS & FREEDOM FOUNDATION

Privacy Trade-Offs: How Further Regulation Could Diminish Consumer Choice, Raise Prices, Quash Digital Innovation & Curtail Free Speech

Comments of Berin Szoka, Senior Fellow, The Progress & Freedom Foundation, to the FTC Privacy Roundtables (Dec. 7, 2009), Comment, Project No. P095416

In general, we at PFF have argued that any discussion about regulating the collection, sharing, and use of consumer information online must begin by recognizing the following:

- Privacy is "the subjective condition that people experience when they have power to control information about themselves and when they exercise that power consistent with their interests and values."[1]
- As such, privacy is not a monolith but varies from user to user, from application to application and situation to situation.
- *There is no free lunch*: We cannot escape the trade-off between locking down information and the many benefits for consumers of the free flow of information.
- In particular, tailored advertising offers significant benefits to users, including potentially enormous increases in funding for the publishers of ad-supported content and services, improved information about products in general, and lower prices and increased innovation throughout the economy.
- Tailored advertising increases the effectiveness of speech of all kinds, whether the advertiser is "selling" products, services, ideas, political candidates or communities.

With these considerations in mind, policymakers must ask four critical questions:

1. What exactly is the "harm" or market failure that requires government intervention?
2. Are there "less restrictive" alternatives to regulation?
3. Will regulation's costs outweigh its supposed benefits?
4. What is the appropriate legal standard for deciding whether further government intervention is required?

We have addressed these questions in the PFF publications attached below, which I respectfully submit for the Commission's consideration. This executive summary highlights their findings.

Berin Szoka is a Senior Fellow with PFF and the Director of PFF's Center for Internet Freedom. The views expressed here are his own, and are not necessarily the views of the PFF board, other fellows or staff.

1. "Properly defined, privacy is the subjective condition people experience when they have power to control information about themselves." Jim Harper, Cato Institute, *Understanding Privacy – and the Real Threats to It*, Cato Institute Policy Analysis No. 520, Aug. 4, 2004, http://www.cato.org/pub_display.php?pub_id=1652.

- *Online Advertising & User Privacy: Principles to Guide the Debate*, Berin Szoka & Adam Thierer, Progress Snapshot 4.19, Sept. 2008.
- *Targeted Online Advertising: What's the Harm & Where Are We Heading?*, Berin Szoka & Adam Thierer, Progress on Point 16.2, Apr. 2009.
- *Privacy Polls v. Real-World Trade-Offs*, Berin Szoka, Progress Snapshot 5.10, Oct. 2009.
- *The Benefits of Online Advertising & Costs of Privacy Regulation*, Berin Szoka & Mark Adams, PFF Working Paper, Nov. 8, 2009. [2]
- Regulating Online Advertising: What Will it Mean for Consumers, Culture & Journalism?, Berin Szoka, Mark Adams, Howard Beales, Thomas Lenard, Jules Polonetsky, Progress on Point 16.22, Oct. 2009.

I. A Principled Pro-Consumer Alternative to Further Regulation

The "Privacy Wars" that have waged over how government should regulate online collection and use of data might better be referred to as the "Privacy *Proxy* Wars" because the most clearly demonstrated "harm" at issue seems to be from government itself, not the private sector. The Fourth Amendment guarantees that "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated…" Americans have a legitimate expectation that this "security" extends to their digital "papers and effects," yet that expectation is not given effect by current restraints on *government* access to consumer data in American law. Thus, we have proposed the following layered approach to concerns about online privacy, focusing on restraining government access to data, rather than crippling the private sector uses of data that directly benefit consumers:

1. ***Erect*** a higher "Wall of Separation between Web and State" by increasing Americans' protection from government access to their personal data—thus bringing the Fourth Amendment into the Digital Age.
2. ***Educate*** users about privacy risks and data management in general as well as specific practices and policies for safer computing.
3. ***Empower*** users to implement their privacy preferences in specific contexts as easily as possible.
4. ***Enhance*** self-regulation by industry sectors and companies to integrate with user education and empowerment.
5. ***Enforce*** existing laws against unfair and deceptive trade practices as well as state privacy tort laws.

Such a layered approach would not only be a "less restrictive" alternative to increased government regulation, but also potentially more effective in key respects than government data use/collection mandates. In an ideal world, adults would be fully empowered to tailor privacy decisions, like speech decisions, to their own values and preferences ("household standards"). Specifically, in an ideal world, adults (and parents) would have (1) the *information* necessary to make informed decisions and (2) the *tools and methods* necessary to act upon that information. Importantly, those tools and methods would give them the ability to

2. Currently in draft form, pending further research quantifying the benefits of personalized advertising.

block the things they don't like—annoying ads or the collection of data about them, as well as objectionable content.

A wide variety of self-help tools and "technologies of evasion" are readily available to all users and can easily thwart traditional cookie-based tracking, as well as more sophisticated tracking technologies such as packet inspection. While cookie management tools that allow users to delete their cookies have been standard in browsers for some time, the latest generation of browsers incorporates far more advanced control over what kind of cookies browsers will accept from websites in the first place. Furthermore, the extensible nature of modern browsers allows any freelance software developer who sees a way to improve a browser to do so by writing an add-on that "plugs in" to the browser using standard programming interfaces designed by each browser developer. Many such add-ons are wildly popular, but even those users who never install a single one benefit from the acceleration of browser evolution made possible by add-ons. We have documented examples of these tools in an ongoing series of blog posts about "Privacy Solutions," available at www.pff.org/privacy-solutions/.

But a "layered approach" that relies on user empowerment and education need not be perfect to be "good enough," because "privacy" is not an absolute good that trumps all other consumer interests, nor can "community standards" accommodate a diverse citizenry. If we "make the best the enemy of the good" by insisting on perfection, consumers will be made worse off. Advertising is indispensable to the future of online media, but it is also currently inadequate to sustain "Free" culture. The advocates of regulation pay lip-service to the importance of advertising in funding online content and services but don't seem to understand that this *quid pro quo* is a fragile one: Tipping the balance, even slightly, could have major consequences for continued online creativity and innovation. *Something must give because there is no free lunch*.[3]

II. Benefits to Users of Smarter Online Advertising

The attached working paper I co-authored with PFF Visiting Fellow Mark Adams identifies five broad categories of benefits to users from targeted advertising:

1. More relevant, and potentially less annoying/interruptive advertising for consumers;
2. Higher-quality content and services supported by advertising;
3. Better correlation between the production of content and services, and consumer preferences;
4. A more vibrant media and improved political discourse and communities; and
5. Lower prices for consumers and greater innovation throughout the economy.

3. Berin Szoka & Adam Thierer, The Progress & Freedom Foundation, *Targeted Online Advertising: What's the Harm & Where Are We Heading?*, Berin Szoka & Adam Thierer, Progress on Point 16.2, April 2009, www.pff.org/issues-pubs/pops/2009/pop16.2targetonlinead.pdf.

The paper explains how better targeting of advertising delivers these benefits by:

- Increasing the informational value of advertising to consumers;
- Increasing advertising funding for content and services that might not be sustainable on an ad-supported basis with untargeted or less targeted advertising; and
- Reducing the costs of buying and selling ("transaction costs").

In particular, we note that, with behavioral targeting, the value of a site's viewers depends less on the content associated with that site (keywords) and more on the viewers themselves. In this sense, behavioral advertising levels the playing field by allowing websites to sell access to viewers directly, rather than through the keywords associated with the website. Better targeting democratizes the ad-supported economy by empowering consumers to direct advertising revenues to the sites they spend time on. Targeting essentially increases the ability of Internet users to "vote with their clicks" for online content and services just as they "vote with their dollars" every time they make a purchase in the traditional economy.

Data on the precise "delta" between contextual and behavioral advertising is limited, but appears to indicate that behavioral advertising can produce significant increases in revenue for many publishers. In particular, we note the following increased measures of effectiveness

- Increased Click-Through-Rates 94% to 225% and conversion rates up to 3,000% (2005);[4]
- Increased CTR of 670-1000% (2009);[5] and
- Increased conversion rates of 400-900% (2008).[6]

There are a wide range of predictions on the potential value created by behavioral targeting. As with previous innovations in online advertising, it seems likely that the performance of behavioral targeting will improve over time. Professor Tracy Tuten, author of *Advertising 2.0*, predicts that a twelvefold increase in the value of page views, from $10 to $120 per thousand views.[7] Rich Karpinski calculates that Blue Kai, an ad network, is currently selling behaviorally targeted ads a rate of $4-15 per thousand views[8]—a significantly lower rate than Ryan suggests but higher than the current performance of print advertising ($5.50)[9] and several times higher than the average price of non-premium display advertising ($0.60-$1.10).[10] One experiment with re-targeting (showing users ads on one site based on actions taken towards making a

4. Scott Ferber, *Stepping Up Search: How Behavioral Targeting Can Enhance ROI,* MediaPost Publications, Jun 6, 2005, www.mediapost.com/publications/index.cfm?fa=Articles.showArticle&art_aid=30838.

5. Jun Yan, Ning Liu, Gang Wang, Wen Zhang, Yun Jiang & Zheng Chen, *How Much Can Behavioral Targeting Help Online Advertising?*, presented at World Wide Web Conference, Madrid, Spain, April 20–24, 2009, p. 262.

6. Erik Sherman, *Want to Target Online? You Better Build Trust*, Advertising Age, Apr. 14, 2008, http://adage.com/adnetworkexchangeguide/article?article_id=126242.

7. *Id*.

8. Rich Karpinski, *Will Using Behavioral Data Lead to Smarter Ad Buys?*, Advertising Age, April 20, 2009, http://adage.com/adnetworkexchangeguide09/article?article_id=136003 (subscription only).

9. Howard Beales, *Public Goods, Private Information & Anonymous Transactions: Providing a Safe & Interesting Internet*, presentation given at the Law & Economics of Innovation Symposium at George Mason University School of Law, May 7, 2009 (copy on file with authors) at 17 (citing Media Dynamics data from 2008).

10. *Id*.

purchase on one site but not completed) produced significantly higher returns: "retargeted impressions represented only 7% of all the banner impressions delivered, [but] were responsible for over 50% of the revenue and 25% of the sales generated by the campaign as a whole."[11] Hallerman concludes that "Behavioral targeting is more than hype…. For publishers, it can mean making more money from undersold or unsold ad inventory."[12]

III. The Quid Pro Quo behind "Free"

Traditionally, users "paid" for content by devoting part of their attention to ads, which have long funded the costs of generating content for radio, television, and newspapers (with subscriptions paying only for distribution).[13] The basic reason is simple economics: In competitive markets, prices tend to fall to the marginal cost of production, which quickly converges on zero for information. The Internet has simply borne this theory out in full:

1. Producing the first unit of content (*e.g.*, a news story or video) remains costly, so while the *marginal* cost of every additional unit is essentially zero, *average* cost is not.
2. The failure of micropayments online seems to confirm that, no matter how low the technological transaction costs are, the mental transaction costs involved combined with even tiny payments will exceed the perceived value of most content.
3. The world of media scarcity in which consumers could choose from only a few sources of content (*e.g.*, news, entertainment) has given way to a world of staggering media abundance and the choices of users are no longer constrained by the tyranny of physical limitations like distance and printing costs.
4. Because pure information cannot be copyrighted (and fair use allows significant referencing and quotation), very little content is so unique that users cannot find a ready substitute elsewhere if a site (or even a group of sites) attempted to charge.

Thus, while policymakers should generally avoid preferring one business model over others, they must also recognize that the "economics of bits" will make advertising increasingly indispensable to the future of online content, services, media and culture. For that reason, they should take great care when tinkering with the economic engine that has made America the envy of the digital world as the fountainhead of online innovation and creativity.

IV. Consumer Attitudes & Expectations

While many consumers said, in a recent poll, that they don't want ads, content and news "tailored" to their interests,[14] their actions in the real world speak louder than words: The increased click through rates and conversion rates mentioned above are evidence that

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11. *Id*.

12. David Hallerman, *Behavioral Targeting: Marketing Trends*, eMarketer, June 2008, at 2, http://www.emarketer.com/Reports/All/emarketer_2000487.

13. *See, e.g.*, Walter Mossberg, *Now You See 'Em...*, SmartMoney.com, June 15, 2000, *available at* web.archive.org/web/20061124235126/http://www.smartmoney.com/mossberg/index.cfm?story=20000615.

14. Joseph Turow, Jennifer King, Chris Jay Hoofnagle, Amy Bleakley & Michael Hennessy, *Americans Reject Tailored Advertising and Three Activities That Enable It*, Sept. 2009, http://graphics8.nytimes.com/packages/pdf/business/20090929-Tailored_Advertising.pdf.

consumers do, in fact, value more relevant advertising.[15] Whatever Americans tell pollsters about "tailored" ads, they also complain about irrelevant ads: A previous poll found that 72% of consumers "find online advertising intrusive and annoying when the products and services being advertised are not relevant to [their] wants and needs" and 85% say that less than 25% of the ads they see while browsing online are relevant to their wants and needs.[16]

Until a proper experiment is conducted by trained behavioral economists that includes real-world trade-offs and makes users aware of privacy management tools, all we can say with confidence is the following:

1. Users don't understand exactly how ads are tailored;
2. Users seem to be concerned about "tailoring" or "following" in the abstract;
3. Users are generally unwilling to pay for online content and services; and
4. Better tailoring of ads means more funding for content and services.

Only the layered approach outlined above can address all these concerns: educate users about how online advertising works and how they can implement their own privacy preferences, while constantly striving to further empower users to make privacy management easier.

Policymakers should avoid presuming they can divine the true preferences of users regarding the complex and multi-faceted trade-offs of the real world. Instead of guessing what consumers *might* choose, the FTC and other law enforcement agencies should focus on holding companies to the "expectations" they set in their official privacy policies and other statements about their any use and collection practices. In a sense, this is to approach the problem from the "supply" side rather than the "demand" side: If a browser manufacturer, for example, overstates the privacy protection offered by privacy management tools in the browser (*e.g.*, cookie settings or a private browsing mode), this might well be considered an unfair and deceptive trade practice subject to FTC enforcement. The advantage of this approach is that the FTC can, using its existing authority, play a valuable role in ensuring consistency between theory and practice in what industry actually does— without sending into the intractable morass of subjective user preferences. In other words, the FTC can help give effect to "household standards" without imposing "community standards" for everyone.

V. Underlying Fear of Advertising

On some level, this debate isn't about user privacy at all, but about the common (though baseless) fear of advertising as inherently manipulative and wasteful—essentially: "Since people are stupid, ignorant and/or lazy, they're easy to control and trick with shiny objects, pretty faces, memorable slogans, and catchy jingles." No better response to this sentiment has ever been made than was offered by the ad firm Young & Rubicam in this 1959 magazine ad:

15. *See generally* Berin Szoka, *Privacy Polls v. Real-World Trade-Offs,* The Progress & Freedom Foundation, Progress Snapshot 5.10, Oct. 2009, http://www.pff.org/issues-pubs/ps/2009/ps5.10-privacy-polls-tradeoffs.html.

16. TRUSTe, *2009 Study: Consumer Attitudes About Behavioral Targeting*, March 4, 2009, at 2, 5, *available at* www.truste.com/about/bt_overview.php.

> There is no chestnut more overworked than the critical whinny: "Advertising sells people things they don't need."
>
> We, as one agency, plead guilty. Advertising does sell people things they don't need. Things like television sets, automobiles, catsup, mattresses, cosmetics, ranges, refrigerators, and so on and on.
>
> People don't really need these things. People don't really need art, music, literature, newspapers, historians, wheels, calendars, philosophy, *or, for that matter, critics of advertising, either.*
>
> All people really need is a cave, a piece of meat and, possibly, a fire.
>
> The complex thing we call civilization is made up of luxuries. An eminent philosopher of our time has written that great art is superior to lesser art in the degree that it is "life-enhancing." Perhaps something of the same thing can be claimed for the products that are sold through advertising: *They enhance life, to whatever degree they can*.

VI. Conclusion

If misguided government regulation chokes off the Internet's growth or evolution by starving content and service providers of much-needed advertising revenue, we would be killing the goose that laid the golden eggs. Apart from a hardcore fringe who embrace the Marxist dogma that advertising is inherently deceptive and wasteful, most participants in this debate at least pay lip service to the economic importance of online advertising. One might therefore be lulled into a false sense of complacency that "sensible" regulation (or government-led co-regulation) would surely avoid crippling this dynamo. This widespread assumption calls to mind the famous quip of Chris Patten, last British Governor of Hong Kong, who paraphrased those who dismissed his concerns about the potentially negative effects of a Chinese take-over of the British colony in 1997, as follows: "It is unimaginable that the Chinese would kill such a goose." To this, Patten responded, "Yet we wouldn't need the metaphor of golden eggs and geese if history weren't full of dead geese."[17] The dangers of regulation to the health of the Internet are real, but the ease with which government could disrupt the economic motor of the Internet (advertising) is not widely understood—and therein lies the true danger in this debate.

Depending on how regulation is structured, therefore, it is possible that new privacy mandates would severely curtail the overall quantity of content and services offered--and greatly limit the ability of new providers to enter the market with innovative offerings. Alternatively, or perhaps additionally, companies would change the character of their offerings and water-down sophisticated services that cater to consumer demand; in other words, the quality of service would deteriorate.

17. Tom Plate, *Hong Kong Will Remain Very Much Alone After 1997,* The Standard, Jan. 7, 1996, www.thestandard.com.hk/archive_news_detail.asp?pp_cat=&art_id=20783&sid=&con_type=1&archive_d_str=19960107

Bottom line: ***We live in a world of trade-offs, and regulation is not costless***. Indeed, regulation might best be understood as a giant game of economic whack-a-mole: Attempting to control one of the primary variables of price, quantity, or quality inevitably results in non-optimal adjustments in the other two variables. The absence of price as a variable in the context of "free" (*i.e.*, ad supported) content and services means there is one less variable for the government to control in the first place. Simply stated, stifling the evolution of the online advertising marketplace will likely result in fewer free online services and less content, less high-quality online services and content, or some combination of both.

These observations are even more relevant to the online marketplace, where advertising has been shown to be the only business model with any real staying power. Walled gardens, pay-per-view, micropayments, and subscription-based business models are all languishing. Consequently, the overall health of the Internet economy and the aggregate amount of information and speech that can be supported online are fundamentally tied up with the question of whether we allow the online advertising marketplace to evolve in an efficient, dynamic fashion. Heavy-handed privacy regulation (or European-style "co-regulation," where the government steers and industry simply rows) could, therefore, become the equivalent of a disastrous industrial policy for the Internet that chokes off the resources needed to fuel e-commerce and online free speech going forward.

Related PFF Publications

- *Privacy Solutions*, Ongoing Series, PFF Blog.
- *What Unites Advocates of Speech Controls & Privacy Regulation?*, Adam Thierer & Berin Szoka, Progress on Point 16.19, Aug. 2009.
- *Google's Ad Preference Manager: One Small Step for Google, One Giant Leap for Privacy*, Berin Szoka, Progress Snapshot 5.2, March, 2009.
- *Privacy & Commercial Use of Personal Information*, Thomas Lenard & Paul Rubin, 2002.
- *Freedom of Speech & Information Privacy: The Troubling Implications of a Right to Stop People from Talking About You*, Eugene Volokh, Progress on Point 7.15, Oct. 2000.

Attached Publications Follow Below

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THE PROGRESS & FREEDOM FOUNDATION

Progress Snapshot

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Online Advertising & User Privacy: Principles to Guide the Debate

by Berin Szoka & Adam Thierer

Since the fall of 2008, a debate has raged in Washington over "targeted online advertising," an ominous-sounding shorthand for the customization of Internet ads to match the interests of users. Not only are these ads more relevant and therefore less annoying to Internet users than untargeted ads, they are more cost-effective to advertisers and more profitable to websites that sell ad space. While such "smarter" online advertising scares some—prompting comparisons to a corporate "Big Brother" spying on Internet users[1]—it is also expected to fuel the rapid growth of Internet advertising revenues from $21.7 billion in 2007 to $50.3 billion in 2011—an annual growth rate of more than 24%.[2] Since this growing revenue stream ultimately funds the free content and services that Internet users increasingly take for granted, policymakers should think very carefully about what's really best for consumers before rushing to regulate an industry that has thrived for over a decade under a layered approach that combines technological "self-help" by privacy-wary consumers, consumer education, industry self-regulation, existing state privacy tort laws, and Federal Trade Commission (FTC) enforcement of corporate privacy policies.

In an upcoming PFF *Special Report*, we will address the many technical, economic, and legal aspects of this complicated policy issue—especially the possibility that regulation may unintentionally thwart market responses to the growing phenomenon of users blocking online ads. We will also issue a three-part challenge to those who call for regulation of online advertising practices:

1. Identify the harm or market failure that requires government intervention.
2. Prove that there is no less restrictive alternative to regulation.
3. Explain how the benefits of regulation outweigh its costs.

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* This Snapshot was last updated in February 2009.

1. Peter Whoriskey, Washington Post, FTC Wants to Know What Big Brother Knows About You, May 22, 2008, at http://www.washingtonpost.com/wp-dyn/content/article/2008/05/21/AR2008052102989.html.

2. Mark Walsh, Online Media Daily, "Study: Internet Ads Will More Than Double By 2011," MediaPost.com, January 21, 2008, at http://mediapost.com/publications/index.cfm?fuseaction=Articles.san&s=74685&Nid=38464&p=472752.

The Online Advertising Market

While there are other forms of targeted advertising based on *who* you are ("demographic") or *where* you are ("locational"), the most important varieties are based on *what* you're searching for, seeing or doing online at any particular moment ("contextual") and the *pattern* of what you're searching for, seeing or doing over time ("behavioral"). The bulk of Internet advertising falls into one or both of these last two categories, with behavioral advertising growing rapidly.

Search engines deliver contextual ads on search results pages based on the search keywords entered by a user, while third-party advertising networks (some of which also run search engines) deliver contextual ads on behalf of website operators who sell ad space to the network, with the ads displayed on each page chosen according to keywords on that page. Contextual advertising is far "smarter" than displaying the same "dumb" untargeted banner ads to every user, because the contextual ad uses keywords to "guess" what the user is interested in based on the context of each page. But the purely contextual ad network doesn't "remember" what the user has looked at in the past, so its insights into what the user would find relevant are very limited, especially for some websites. Online behavioral advertising (OBA) solves this problem and increases the value of advertising space on *all* websites by targeting ads based on a "profile" of the user created by tracking websites the user has visited—as well as limiting the number of times a user is shown a particular ad.

The Perceived Harm Driving Calls for Regulation

For a decade, the basic technology behind OBA has changed little: When a user visits the typical webpage, he or she downloads not only the webpage contents but also a small piece of code that allows the website to distinguish that user's browser from other browsers (a "cookie")—without personally identifying the user. Some cookies are required to make sites work properly ("site cookies") while others ("tracking cookies") are used by the third-party ad network in which that site participates to recognize that browser across multiple sites participating in the ad network, and thus create a "profile" of what the user might be interested in. Even though such profiles themselves are anonymous, many privacy advocates have pointed to four reasons why online profiling is becoming "too invasive:" (i) it is sometimes possible to infer the actual identity of the user; (ii) though all browsers allow users to opt-out of tracking by "cleaning out" their tracking cookies, a website may be able to restore deleted tracking cookies through the use of cookie alternatives such as "Flash cookies"; (iii) certain vulnerabilities in current browser design make it theoretically possible to "sniff" a user's browsing history, cache or bookmarks; and (iv) the use of "packet inspection" by Internet Service Providers (ISPs) (instead of the use of cookies) to track online browsing amounts to illegal wiretapping.

The other concerns expressed by the advocates of regulation vary significantly. Some fear that browsing profiles could be captured by hackers, somehow associated with personally identifying information, and used for identity theft. These advocates demand limits on data retention as well as data security mandates. Others demand that users have access to their own profiles—a goal inherently in tension with data security. Most share a vague queasiness

about “being tracked” and about advertising in general, while downplaying the effectiveness of self-regulation or user self-help.

Perhaps most legitimately, others fear that the *real* “Big Brother”—government—will gain access to a “honey pot" of surveillance data that might be associated with individual users. A variety of solutions have been proposed to what is, for the most part, a poorly defined problem, including: a government-run “Do Not Track” registry to make it easier for users to block tracking cookies; mandating opt-in for some or all forms of profiling; and banning completely the collection of tracking data about sensitive subjects, cross-referencing of data sets, and use of packet inspection data for OBA.

The Less Restrictive Means: A Layered Approach

But how should policymakers decide which, if any, of these interventions are really necessary—or would even be effective? Ironically, those who demand immediate OBA regulation to protect user privacy are often the first to insist on less burdensome approaches whenever a policy “problem” involves purely noncommercial speech. For example, emphasizing personal and parental responsibility is often favored as the more sensible approach to dealing with free speech and child protection concerns. But, as Chapman University Law Professor Tom Bell has asked, why not apply the same standard across the board?[3] Why not expect those especially privacy-sensitive users who object to OBA to *do* something about it? To the extent effective self-help privacy tools exist, they provide a means of solving policy problems that is not only “less restrictive” than government regulation but generally more *effective* and customizable as well. Why settle for one-size-fits-all solutions of incomplete effectiveness when users can quite easily and effectively manage their own privacy? Indeed, those who advocate personal responsibility and industry self-regulatory approaches to free speech and child protection issues should be advancing the same position with regards to privacy.

Fortunately, a wide variety of self-help tools and “technologies of evasion” are readily available to all users and can easily thwart traditional cookie-based tracking, as well as more sophisticated tracking technologies such as packet inspection. While cookie management tools that allow users to delete their cookies have been standard in browsers for some time, the latest generation of browsers incorporates far more advanced control over what kind of cookies browsers will accept from websites in the first place. Furthermore, the extensible nature of modern browsers allows any freelance software developer who sees a way to improve a browser to do so by writing an add-on that "plugs in" to the browser using standard programming interfaces designed by each browser developer. Many such add-ons are wildly popular, but even those users who never install a single one benefit from the acceleration of browser evolution made possible by add-ons. We will be documenting examples of these tools in our upcoming *Special Report* and in an ongoing series of blog essays.

3. Tom W. Bell, "Internet Privacy and Self-Regulation: Lessons from the Porn Wars," Cato Institute Briefing Paper No. 65, August 9, 2001, http://www.cato.org/pub_display.php?pub_id=1504.

The Benefits of Smarter Advertising

The "free" Internet economy is based on a simple value exchange: Users get access to an ever-expanding collection of content and services at no cost from websites that are able to generate revenue from "eyeballs" on their pages by selling space on their sites to advertisers, usually through ad networks. The smarter that advertising, the more free content and services it can support. This is the same value exchange that has supported free, over-the-air television and radio content for decades. The only difference is technological: Because websites can connect directly with the user, they need not rely on crude profiling tools such as Nielsen ratings.

There are larger economic benefits of smarter online advertising. First, it makes the overall economy more open and competitive by allowing small market entrants to reach consumers with messages about their products. Second, those who attack the use of packet inspection by ISPs for OBA fail to see that it is precisely the kind of "game-changer" that could disrupt Google's currently dominant market position. Third, the involvement of ISPs in OBA could help defer broadband costs: Even if OBA revenue does not completely subsidize monthly service costs, smarter advertising could at least keep prices in check and potentially lower them significantly going forward.

But smarter advertising isn't just about selling products or services. It is ultimately about making *all* kinds of speech more cost-effective. The ability to "target" listeners more narrowly also increases the ability of political and other not-for-profit speakers to communicate their messages. In short, smarter advertising means more voices, more choices, and more speech. The line between "advertising" and "content" is already blurring rapidly, as the technologies used to customize advertising are also used to customize webpages and ad networks themselves are used to deliver content.

The Larger Implications of Potential Regulation

As if reducing the advertising revenue generated by each web ad didn't do enough to reduce the total amount of funding for free web content and services, government regulation of targeted online advertising could reduce advertising revenues even further by aggravating the problem of ad blocking in two ways. First, the less relevant ads are, the more annoying users will find them, and the more likely users are to try to block them. Increased relevance is perhaps the most important remedy for ad blocking and the best way to maintain the implicit value exchange that currently supports free Internet content and services

Second, regulation could short-circuit the eternal battle of technological one-upmanship between online advertisers and those users who rely on the technologies of evasion to "opt-out" of seeing ads or being tracked. Such privacy-conscious users are "free-riding" off of those users who don't opt-out, since (at present) they generally don't lose access to the free content and services supported by the targeted advertisements that other users *do* see. The user who blocks tracking, but not ads, is still free-riding off those users who don't opt-out of tracking. On a large enough scale, such self-help has the potential to disrupt the value exchange of the Internet, just as automatic commercial-skipping has already disrupted the value exchange of television. As with all "Spy vs. Spy" battles, this long-term trend is inevitable: As more

sophisticated technologies of evasion are incorporated seamlessly into browsers and can be used without significantly degrading the browsing experience, their use will become increasingly mainstream. But ultimately, just as with television commercial-skipping, market forces can and will, if permitted, respond through technological means and the development of new business models. Today's implicit *quid pro quo* may become, of necessity, explicit: Websites and ad networks will have to find increasingly creative ways to grant access to certain content and services for users who do *not* block ads or the tracking that makes ad space more valuable. Policymakers should take care not to ban such technologies or cripple such business models (*e.g.*, through requiring opt-in), which may rely on more sophisticated forms of targeting such as the use of packet inspection data.

As users face an increasingly clear choice between (i) getting content and services for free supported by behavioral advertising and (ii) paying to receive those same services and content without tracking or even without ads altogether, policymakers will finally see whether users are really as bothered by profiling as the advocates of OBA regulation insist. Given the ongoing and widespread replacement of fee- or subscription-supported web business models with ad-supported models, it seems likely that the vast majority of consumers will continue to choose ad-supported models, including profiling.

Conclusion

The questions raised above—about the harm that supposedly requires intervention, the availability of less restrictive means, and the cost/benefit analysis of regulation—are vital considerations for the future of the Internet. Indeed, if smarter online advertising will not fund the Internet's future, what will? As both the desire for "free" services and content and the need for bandwidth expand, OBA has the potential to offer important new revenue sources that can help support the entire ecosystem of online content creation and service innovation, while also providing a new source of funding for Internet infrastructure and making ads less annoying and more informative. That would certainly seem preferable to increased user fees or other "pay-per-view" pricing models for Internet content and services.

But looming legislative and regulatory action could stop all of that by replacing the current regime—in which the FTC merely enforces industry self-regulatory policies—with one in which the government preemptively dictates how data may be collected and used. The more enlightened approach is a "layered" approach to privacy protection that combines industry self-regulation, enforcement of industry-established privacy policies, consumer education, and user "self-help" solutions. These and other issues will be addressed in greater detail in our upcoming PFF *Special Report*.

Related PFF Publications

- *Targeted Online Advertising: So What's the Harm & Where Are We Heading?*, by Berin Szoka & Adam Thierer, Progress on Point 16.2, February 2009.
- *Parental Controls and Online Child Protection: A Survey of Tools and Methods*, Adam Thierer, The Progress & Freedom Foundation *Special Report*, Version 3.1, Fall 2008.
- *Privacy Solutions*, Berin Szoka, Adam Thierer & Adam Marcus, Ongoing Blog Series.
- *Privacy and the Commercial Use of Personal Information: The Case of Customer Proprietary Network Information*, Thomas Lenard & Paul Rubin, *Progress on Point 14.15*, The Progress & Freedom Foundation, Aug. 2007.
- *Freedom of Speech and Information Privacy: The Troubling Implications of a Right to Stop People from Talking About You*, Eugene Volokh, *Progress on Point* 7.15, Progress & Freedom Foundation, Oct. 2000,
- *An Examination of the Google-DoubleClick Merger and the Online Advertising Industry: What Are the Risks For Competition and Privacy*, Thomas Lenard, Testimony before the Subcommittee on Antitrust, Competition Policy and Consumer Rights Committee on the Judiciary, U.S. Senate, Sept. 27, 2007.
- *Writ of Certiorari of PFF*, Amicus Brief, U.S. Supreme Court in the matter of *Trans Union v. FTC*, by Randy May, Feb. 22, 2002.

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Progress on Point

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Targeted Online Advertising: What's the Harm & Where Are We Heading?

by Berin Szoka & Adam Thierer

The Federal Trade Commission (FTC) has finally released its revised "Self-Regulatory Principles for Online Behavioral Advertising"[1] (OBA) after proposing a draft of those principles back in December 2007. The FTC deserves credit for resisting calls to abandon self-regulation, and for its thoughtful consideration of the danger in stifling advertising—the economic engine that has supported a flowering of creative expression and innovation online content and services. But we continue to have our doubts about the FTC's approach, however-well intentioned:

1. Where is this approach heading? Will a good faith effort to suggest best practices eventually morph into outright government regulation of the online advertising marketplace?
2. What, *concretely*, is the harm we're trying to address? We have asked this question several times before and have yet to see a compelling answer.[2]
3. What will creeping "co-regulation" mean for the future of "free" Internet services? Is the mother's milk of the Internet—advertising—about to be choked off by onerous privacy mandates?

Is this Really Self-Regulation?

The FTC recognizes the cardinal virtue of industry self-regulation over command-and-control varieties of government regulation: "it provides the necessary flexibility to address evolving online business models."[3] Yet every new FTC report or event seems to move us closer towards the European model of "co-regulation," where the government steers and industry simply rows. So, what does "self-regulation" really mean here?

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1. Federal Trade Commission Staff Report, *Self-Regulatory Principles For Online Behavioral Advertising: Tracking, Targeting, and Technology*, February 2009, ("FTC Staff Report") http://ftc.gov/os/2009/02/P085400behavareport.pdf

2. Berin Szoka & Adam Thierer, *Online Advertising & User Privacy: Principles to Guide the Debate*, Progress Snapshot 4.19. Sept. 2008, http://www.pff.org/issues-pubs/ps/2008/ps4.19onlinetargeting.html

3. FTC Staff Report at 11.

FTC Commissioner Jon Leibowitz correctly declares that the agency has the authority to—and should—enforce privacy policies. But he also asserts that the FTC also has the authority to "go after" companies that fail to "implement reasonable security for and limit their retention of sensitive consumer data."[4] Thus, when he states his view of the FTC's self regulatory principles as a "sound *baseline* for further self-regulatory efforts,"[5] it sounds like he envisions someday enforcing these principles directly—just as the FCC has seemingly turned its 2005 Internet Policy Statement of net neutrality "principles" into enforceable mandates.[6] That certainly doesn't *sound* like "self-regulation."

Some commenters expressed concern that "self-regulation at the behest of a governmental entity such as the FTC cannot truly be self-regulatory," and asked how FTC regulation, however disguised, can be reconciled with the First Amendment rights of website operators as well as advertisers (both commercial and otherwise).[7] The FTC responded simply that the agency has "studied the effectiveness of, and made suggestions for improving self-regulatory schemes, and that such efforts do not implicate the First Amendment"—citing its efforts to test industry self-regulation against the sale of violent video games to minors.[8] But the reference to the FTC's ongoing reports on the *Marketing of Violent Entertainment to Children* is not an accurate comparison because those FTC reports do *not* outline detailed regulatory alternatives to existing voluntary industry self-regulatory ratings enforcement systems. Rather than threatening to impose a mandatory universal ratings system in the place of voluntary industry ratings systems, the FTC uses those reports to test the efficacy of industry ratings systems. By contrast, the FTC's reports on online advertising seem to be inching closer to a formal blueprint for how the industry must do business going forward.

Similarly, FTC Commissioner Pamela Jones Harbour recognizes that companies are increasingly competing with each other to develop "pro-consumer privacy tools" and policies such as shorter data retention periods.[9] Yet, she says she cannot "fully support a self-regulatory approach to behavioral advertising" because it "has not yet been proven sufficient to fully protect the interests of consumers with respect to behavioral advertising specifically, or privacy generally."[10] She also speaks of the need "to rein in unbridled optimism"—implying that faith

4. Concurring Statement of Commissioner Jon Leibowitz at 1 (Leibowitz Statement), *available at* http://ftc.gov/os/2009/02/P085400behavadleibowitz.pdf.

5. *Id*. (emphasis added).

6. Barbara Esbin, *The Law is Whatever the Nobles Do: Undue Process at the FCC,* Progress & Freedom Foundation, Progress on Point 15.12, www.pff.org/issues-pubs/pops/2008/pop15.12undueprocess.pdf.

7. FTC Staff Report at 18 & n.44.

8. *Id.*

9. Concurring Statement of Commissioner Pamela Jones Harbour at 8, (Harbour Statement), *available at* http://ftc.gov/os/2009/02/P085400behavadharbour.pdf.

10. *Id.* at 2.

in self-regulation is naïve.[11] And Commissioner Leibowitz ominously declares, "A day of reckoning may be approaching."[12]

Thus, while both Commissioners are willing to tolerate continued reliance on self-regulation, at least for a time, it seems clear that they remain open to an expanded role for the FTC on this front and both call for national privacy legislation that includes new regulatory mandates and additional FTC oversight of online advertising.

But What's the Harm, Anyway?

The FTC Report declares that "the central goal of the Principles is to minimize potential misuses of data, including uses of data that could cause harm or are contrary to consumer expectations."[13] But by what means could the FTC possibly divine the expectations of consumers in the aggregate? Consumers vary widely in their attitudes towards the inherently nebulous concept of privacy, as Cato Institute scholar Jim Harper has demonstrated:

> Privacy is a state of affairs or condition having to do with the amount of personal information about individuals that is known to others. People maintain privacy by controlling who receives information about them and on what terms. Privacy is the subjective condition that people experience when they have power to control information about themselves and when they exercise that power consistent with their interests and values….
>
> An important conclusion flows from the observation that privacy is a subjective condition: government regulation in the name of privacy is based only on politicians' and bureaucrats' guesses about what "privacy" should look like.[14]

Measuring expectations for *all* consumers becomes even harder when taken out of the philosophical and abstract—"What practices would websites ideally follow?"—and put into the practical and concrete—"What would an individual user actually expect when exchanging their data for free content and services?"

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11. *Id.* at 12.

12. Leibowitz Statement at 2.

13. FTC Staff Report at 31 n. 62.

14. "Properly defined, privacy is the subjective condition people experience when they have power to control information about themselves." Jim Harper, *Understanding Privacy – and the Real Threats to It*, Cato Institute Policy Analysis No. 520, Aug. 4, 2004, www.cato.org/pub_display.php?pub_id=1652. "Debates about online privacy often seem to assume relatively homogeneous privacy preferences among Internet users. But the reality is that users vary widely, with many people demonstrating that they just don't care who sees what they do, post or say online. Attitudes vary from application to application, of course, but that's precisely the point: While many reflexively talk about the 'importance of privacy' as if a monolith of users held a single opinion, no clear consensus exists for all users, all applications and all situations." Berin Szoka, *A Wide Diversity of Consumer Attitudes about Online Privacy*, PFF Blog, Oct. 30, 2008, http://blog.pff.org/archives/2008/10/a_wide_diversit.html

The FTC is on much firmer ground—from legal, constitutional and policy perspectives—when the agency focuses on protecting consumers from concrete harms and truly deceptive practices. Regrettably, the FTC staff report says little about what the harm of OBA really is. The agency cites concerns about "the invisibility of the practice" (again, a matter of consumer expectations) and "the risk that sensitive data, once collected, could fall into the wrong hands."[15] The latter certainly sounds scary, but what does it really mean? This is reminiscent of the many boogeyman scenarios set forth in debates over online child safety and the supposed impact of media on children: There's always something nefarious supposedly lurking out there that necessitates preemptive government intervention, even though those fears typically prove almost entirely chimerical.[16] The FTC is not talking here about harm from targeted advertising—as distinct from, say, the case of deceptive marketing to children, who fall prey to scams far more easily than adults.

Instead, the FTC is jumping to possible "secondary uses" of data collected for OBA purposes but used for something else, such as "selling personally identifiable behavioral data, linking click stream data to [personally identifiable information (PII)] from other sources, or using behavioral data to make credit or insurance decisions."[17] The FTC itself notes that "such uses do not appear to be well-documented."[18] But are these concerns what is really driving the FTC's efforts—and those who would support overt regulatory mandates? If so, why are *conjectural* concerns about the *use* of data driving restrictions about how data is *collected* for the purpose of delivering more relevant advertising to consumers (something that has not been shown to cause real harm)?

Commissioner Harbour makes an attempt to offer some detail about what "harm" might entail:

> Already, it is possible to assemble a "digital dossier" that captures an individual's interests and habits, runs them through a predictive model, and determines what that person likely will do in the future. Car registrations are data-mined to target potential voters. In the credit industry, behavioral scoring is used to justify lowering the credit limits of "at risk" card users. At the mall, cameras embedded in advertising kiosks identify viewers' faces to deliver target ads.
>
> It requires little stretching of the imagination to envision how firms may use data to make decisions that will have tangible effects on consumers' lives. There may be a "tipping point" – a point where consumers become sufficiently concerned about the collection and use of their personal information that they want to exercise greater control over it, but where any such attempt to exercise control becomes futile because so much of their digital life already has been exposed.

15. FTC Staff Report at 32 n. 62.

16. Adam Thierer, *Technopanics and the Great Social Networking Scare*, PFF Blog, July 10, 2008, http://blog.pff.org/archives/2008/07/technopanics_an.html.

17. *Id.* at 45.

18. *Id.*

Again, these concerns are largely conjectural or addressable in ways. Indeed, the best guard against her "tipping point" scenario is the increasingly tight limits on the duration of data retention she herself praises industry for adopting under competitive pressure. But most of the supposed harms she cites aren't really harms at all. Behavioral scoring in the credit industry is a sensible way to minimize actual risk to lenders and the shareholders in those companies. To deny all behavior scoring of "at risk" card users would be to invite the onset of a massive financial moral hazard—a danger regulators should appreciate now more than ever in light of recent macroeconomic events. Moreover, the *Minority Report*-like scenario involving cameras in advertising kiosks to display tailored ads strikes some of us a perfectly sensible, if still-remote, evolution away from the world completely untargeted billboard advertising (the traditional media equivalent of e-mail spam). Again, how is a consumer actually *harmed* by such innovations? Is it because they might be tempted to buy more products? If so, that's not a "harm" the government need concern itself with.

The FTC's two most valid concerns focus on the collection of extremely sensitive information and ensuring that consumers are notified of changes to privacy policies. Indeed, the leading industry self-regulatory effort, the Network Advertising Initiative, already requires opt-in consent for the use of the most sensitive forms of information.[19] Beyond that relatively small subset of information, however, the burden of proof remains on the FTC to show how *concrete, not conjectural* harms would flow from efforts to create more targeted forms of advertising. And, as discussed next, the agency must conduct a true cost-benefit analysis that takes into account that many new innovations and consumer benefits that would flow from more targeted advertising techniques.

The *Quid Pro Quo* of Targeted Advertising for Content & Services

So, if no real harm has been shown, why does the government need to get involved? The advocates of regulation pay lip service to the importance of advertising in funding online content and services but don't seem to understand that this *quid pro quo* is a fragile one: Tipping the balance, even slightly, could have major consequences for continued online creativity and innovation.[20]

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19. Network Advertising Initiative, *2008 NAI Principles*, www.networkadvertising.org/networks/2008%20NAI%20Principles_final%20for%20Website.pdf. The NAI Principles define "sensitive consumer information" to include:
    - "Social Security Numbers or other Government-issued identifiers Insurance plan numbers
    - "Financial account numbers
    - "Information that describes the precise real-time geographic
    - "location of an individual derived through location-based services …
    - "Precise information about past, present, or potential future health or medical conditions or treatments, including genetic, genomic, and family medical history." *Id*. at 6.

20. This is also true in a macro sense in that regulation of the online advertising marketplace could curtail opportunities for competitive entry by smaller firms since "advertising typically benefits new entrants and small firms more than it does large, established firms." Thomas Lenard & Paul Rubin, *Privacy and the Commercial Use of Personal Information* at xxii (2002), http://pff.org/issues-pubs/pops/pop14.15lenardrubinCPNIprivacy.pdf

Commission Harbour talks about companies competing on privacy as a "non-price dimension"—and that is clearly a positive thing. In traditional economics, there are three primary variables that are considered when discussing industry competition and efforts to regulate market structures: price, quantity, and quality. But in the context of the Internet, where digital economics have relentlessly driven prices down to zero, and where advertising support has become the only viable business model for most providers of content and services,[21] the price variable has largely been removed from the picture. This means—unless industry could somehow find a way to make pay-per-use, pay-per-view, or subscription-based models work in the future—that regulation of online advertising would have its most dramatic impact on the quantity and quality of content and services provided.

Depending on how regulation is structured, therefore, it is possible that new privacy mandates would severely curtail the overall *quantity* of content and services offered—and greatly limit the ability of new providers to enter the market with innovative offerings. Alternatively, or perhaps additionally, companies would change the character of their offerings and water-down sophisticated services that cater to consumer demand; in other words, the *quality* of service would deteriorate.

Bottom line: *Something must give because there is no free lunch.*[22] Regulation is a giant game of economic whack-a-mole: Attempting to control one of the primary variables of price, quantity, or quality inevitably results in non-optimal adjustments in the other two variables. The absence of price as a variable in this context means there is one less variable for the government to control in the first place. Simply stated, stifling the evolution of the online advertising marketplace will likely result in fewer free online services and less content, less high-quality online services and content, or some combination of both.

User Empowerment as a Supplement to Self-Regulation

As we have emphasized, self-regulation, to be effective, must be part of a layered approach that includes user education and empowerment through the development of tools and methods by which users can take privacy into their own hands.[23]

The FTC report, however, says essentially nothing about this. Commissioner Harbour asks the right question—"given the current state of technology, are consumers able to exercise

21. *See, e.g.,* Chris Anderson, *Free! Why $0.00 Is the Future of Business*, Wired Magazine, Feb. 25, 2008, www.wired.com/techbiz/it/magazine/16-03/ff_free.

22. "Privacy is both an individual and a social good. Still, the no-free-lunch principle holds true. Legislating privacy comes at a cost: more notices and forms, higher prices, fewer free services, less convenience, and, often, less security. More broadly, if less tangibly, laws regulating privacy chill the creation of beneficial collective goods and erode social values. … Such regulation would likely increase both direct and indirect costs to the individual consumer, reduce consumer choice, and inhibit the growing trend of personalization and tailoring of goods and services." Kent Walker, *The Costs of Privacy*, Harvard Journal of Law & Public Policy, Vol. 25, Fall 2001, pp. 87-91.

23. Szoka & Thierer, *supra* note 2, at 2. *See also* Tom W. Bell, *Internet Privacy and Self-Regulation: Lessons from the Porn Wars*, Cato Institute Briefing Paper No. 65, Aug. 9, 2001, www.cato.org/pub_display.php?pub_id=1504.

meaningful privacy choices?"[24]—but discounts the effectiveness of current tools, focusing on the concept of opt-out cookies.

Perhaps the closest the FTC gets to articulating a potential harm that could flow from showing users targeted advertising (rather than from "secondary uses" of targeting data) is its example in which "delivery of advertising associated with that user's searches to the shared computer, even if the advertising does not identify the user, could reveal private information to another user of the same computer."[25] But a wide range of tools exist that would easily allow users to avoid this problem—including the "private browsing" or "incognito" modes now trumpeted as standard features by the leading browser manufacturers.[26] Especially privacy-sensitive users can choose from a wide-range of browser plug-ins that give them even more control over their privacy. For example, almost 42 million people (roughly a half million every week) have downloaded the Adblock Plus add-on for the Firefox web browser, which lets users block online ads entirely.[27] The same total number (a quarter million a week) have downloaded the NoScript plug-in, which blocks the invisible third-party code on websites used to load cookies.[28]

Yet, again, the FTC says nothing about these "self-help" options, and seems to assume that consumers are utterly helpless. Why is it that the FTC and so-called privacy advocates aren't doing more to highlight existing self-help tools or working to encourage the development of additional—and more robust—tools?

Moreover, there are many indirect pressures and reputational incentives that provide an important check on the behavior of firms and the privacy policies they craft.[29] Just as the Internet increases the ways advertisers can reach audiences, it increases the power audiences have to influence advertisers. For example, when Facebook introduced its Beacon program in 2007, which shared users' online purchases with their friends without sufficient warning about how the program worked and the ability to opt-out of the program, the response was swift and

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24. Harbour Statement, at 2.

25. FTC Staff Report at 23.

26. Adam Thierer & Berin Szoka, "Privacy Solution Series: Part 1 – Introduction," *PFF Blog*, September, 5, 2008, http://blog.pff.org/archives/2008/09/privacy_solutio.html

27. *See* https://addons.mozilla.org/en-US/firefox/addon/1865. Also see: Adam Thierer & Berin Szoka, "Privacy Solution Series: Part 2 -- Adblock Plus, *PFF Blog,* September 8, 2008, http://blog.pff.org/archives/2008/09/privacy_solutio_1.html

28. *See* https://addons.mozilla.org/en-US/firefox/addon/722

29. "Thus, when businesses use information in ways that consumers do not like, consumers quickly learn about it, and the firms are forced to stop. Such reputational penalties may be among the strongest protections available to consumers. They send powerful messages to firms that they will incur losses if their information management policies are not to their customers' liking. Firms, therefore, have a strong incentive to avoid undertaking policies that run the risk of offending their customers. The Internet speeds up collection of information about consumers, but it also enables consumers to more easily obtain information about firms' activities on the Web." Thomas Lenard and Paul Rubin, *Privacy and the Commercial Use of Personal Information* (Washington, D.C.: The Progress & Freedom Foundation, 2002), p. xvii, http://pff.org/issues-pubs/pops/pop14.15lenardrubinCPNIprivacy.pdf

effective: Users "collectively raised their voices" and "the privacy pendulum [swung] back into equilibrium." [30] Within two weeks of the Beacon program being first deployed, Facebook had created an opt-out procedure.[31]

Conclusion

We stand at an important crossroads in the debate over the online marketplace and the future of a "free and open" Internet. Many of those who celebrate that goal focus on concepts like "net neutrality" at the distribution layer, but what really keeps the Internet so "free and open" is the economic engine of online advertising at the applications and content layers. If misguided government regulation chokes off the Internet's growth or evolution, we would be killing the goose that laid the golden eggs.

Apart from a hardcore fringe who embrace the Marxist dogma that advertising is inherently deceptive and wasteful, most participants in this debate at least pay lip service to the economic importance of online advertising. One might therefore be lulled into a false sense of complacency that "sensible" regulation (or government-led co-regulation) would surely avoid crippling this dynamo. This widespread assumption calls to mind the famous quip of Chris Patten, last British Governor of Hong Kong, who paraphrased those who dismissed his concerns about the potentially negative effects of a Chinese take-over of the British colony in 1997, as follows: "It is unimaginable that the Chinese would kill such a goose." To this, Patten responded, "Yet we wouldn't need the metaphor of golden eggs and geese if history weren't full of dead geese."[32] The dangers of regulation to the health of the Internet are real, but the ease with which government could disrupt the economic motor of the Internet (advertising) is not widely understood—and therein lies the true danger in this debate.

Even less appreciated is the connection among online advertising, the marketplace for online information, and vibrant freedom of speech and expression. Every Web 2.0 website, discussion board, social networking site, user-generated content community, free e-mail or blogging service, and so on, owes its very existence to the mother's milk of the Internet innovation—online advertising. The Internet has given every man, woman, and child a soapbox to stand on to preach to the world and to communicate with the masses and close friends alike—but that soapbox is funded by ad dollars. This is the "long tail" of Internet publishing and creativity.[33]

Importantly, advertising itself is an important type of speech that communicates relevant information to consumers. As Nobel laureate economist George Stigler pointed out in his now

30. Comments of the Interactive Advertising Bureau on Online Behavioral Advertising Proposed Principles, at 4, April 11, 2008, www.ftc.gov/os/comments/behavioraladprinciples/080411interactiveadbureau.pdf

31. *Id*.

32. Tom Plate, "Hong Kong 'Will Remain Very Much Alone' After 1997," *The Standard*, Jan. 7, 1996, http://www.thestandard.com.hk/archive_news_detail.asp?pp_cat=&art_id=20783&sid=&con_type=1&archive_d_str=19960107

33. *See* Randall Rothenberg, "Small Publishers Unite! You Have Nothing to Save but Your Business," *IAB Blog*, June 26, 2008, http://www.iab.net/iablog/2008/06/small-publishers-unite-you-hav.html

legendary 1961 article on the economics of information, advertising is "an immensely powerful instrument for the elimination of ignorance."[34] And as advertising expert John E. Calfee has argued, "advertising has an unsuspected power to improve consumer welfare" since it "is an efficient and sometimes irreplaceable mechanism for bringing consumers information that would otherwise languish on the sidelines."[35] More importantly, Calfee argues:

> Advertising's promise of more and better information also generates ripple effects in the market. These include enhanced incentives to create new information and develop better products. Theoretical and empirical research has demonstrated what generations of astute observers had known intuitively, that markets with advertising are far superior to markets without advertising.[36]

These observations are even more relevant to the online marketplace, where advertising has been shown to be the only business model with any real staying power. Walled gardens, pay-per-view, micropayments, and subscription-based business models are all languishing. Consequently, *the overall health of the Internet economy and the aggregate amount of information and speech that can be supported online are fundamentally tied up with the question of whether we allow the online advertising marketplace to evolve in an efficient, dynamic fashion*. Heavy-handed privacy regulation (or co-regulation) could, therefore, become the equivalent of a disastrous industrial policy for the Internet that chokes off the resources needed to fuel e-commerce and online free speech going forward.

At the same time, however, some consumers are concerned about how information about them might be used to create more tailored online advertising messages. The ideal state of affairs would be to create a system of tools and data disclosure practices that would empower each user to implement their personal privacy preferences while also recognizing the freedom of those who rely on advertising revenues to "condition the use of their products and services on disclosure of information"[37]—not to mention the viewing of ads!

Self-regulatory efforts can be refined, especially through technological innovation to better satisfy the concerns of policymakers, privacy advocates, and average consumers. For example, if websites and ad networks participating in a self-regulatory framework supplemented their current "natural language" privacy policies with equivalent "machine-readable" code, that data could be "read" by browser tools that would implement pre-specified user preferences by blocking the collection of information depending on whether the privacy policies of certain websites or ad networks met the user's preferences about data-use.[38] Such robust and

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34. George Stigler, "The Economics of Information," *Journal of Political Economy,* Vol. 69, No. 3, June 1961, pp. 213.

35. John E. Calfee, *Fear of Persuasion: A New Perspective on Advertising and Regulation* (Monnaz, Switzerland: Agora Association, 1997), p. 96.

36. *Id.*

37. Harbour Statement at 8.

38. Such a protocol for machine readable privacy code already exists: the Platform for Privacy Preferences (P3P) project. See http://www.w3.org/P3P/

granular disclosure, if implemented for behavioral advertising, would exceed the wildest dreams of those who argue that users currently do not read privacy policies—without disrupting the browsing experience or cluttering websites. But this system would only work if users had to make *real* choices about "pay[ing] for 'free' content and services by disclosing their personal information."[39]

Truly privacy sensitive users should be free to opt out of whatever tracking they find objectionable—but not without a cost: The less data they agree to share, the less content and services they can fairly expect to receive for free. Concretely, this means that they might not be able to access certain sites, content, or functionality without watching extra (untargeted ads), or paying for that content or service (assuming such a micropayment model can be worked out). Of course, there will always be ways to "cheat" in such a system, but Commissioner Harbour is exactly right on one point: Each content creator and service provider must be "free to strike whatever balance it deems appropriate."[40] This freedom is vital to the Internet's future because the easier we make it for some users to get "something for nothing," the smaller will be the economic base for the content and services everyone else takes for granted. Again, there is no free lunch.

Related PFF Publications

- *Online Advertising & User Privacy: Principles to Guide the Debate*, Berin Szoka & Adam Thierer, Progress Snapshot 4.19, September 2008.
- *Parental Controls and Online Child Protection: A Survey of Tools and Methods*, Adam Thierer, *Special Report*, Version 3.1, Fall 2008.
- *Privacy Solutions*, Adam Thierer & Berin Szoka, Ongoing Series, PFF Blog.
- *Freedom of Speech & Information Privacy: The Troubling Implications of a Right to Stop People from Talking About You*, Eugene Volokh, Progress on Point 7.15, Oct. 2000.
- *Writ of Certiorari of PFF*, Amicus Brief, U.S. Supreme Court in the matter of *Trans Union v. FTC*, by Randy May, February 22, 2002.
- *Privacy and the Commercial Use of Personal Information*, Thomas Lenard & Paul Rubin, 2002.

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39. Harbour Statement at 1.
40. Harbour Statement at 8.

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Privacy Polls v. Real-World Trade-Offs

by Berin Szoka

A recent telephone poll conducted by professors at Berkeley and the University of Pennsylvania concluded, "Contrary to what many marketers claim, most adult Americans (66%) do not want marketers to tailor advertisements to their interest."[1] The study's authors claim that their poll is the "the first nationally representative telephone (wireline and cell phone) survey to explore Americans' opinions about behavioral targeting by marketers." They also assert that the poll indicates that "if Americans could vote on behavioral targeting today, they would shut it down." Advocates of regulating online data collection have trumpeted this poll as evidence consumers demand legislation to protect their privacy. "This research gives the F.T.C. and Congress a political green light to go ahead and enact effective, but reasonable, rules and policies," declared Jeff Chester, a leading critic of online advertising.[2]

But what is most surprising about this poll is not that 66% of users said they do not want tailored online ads, but that 34% of users said they did! The key, initial question of "whether or not you want the websites you visit to show you ads that are tailored to your interests," presents no trade-off. The fact that *any* users said "yes" indicates that many users paused to do the rough mental math about the unarticulated trade-off between the benefits of receiving tailored ads and the costs of that tailoring.

The methodology of opinion polls necessarily affects respondents' mental calculations, rendering polls not just easily manipulated, but inherently unreliable as indicators of real preferences. Every poll reflects the bias of its authors to some degree by the way questions are worded, the order in which they are asked, the sample surveyed, *etc*.[3] The easiest way to bias the results of a poll is to omit any mention of the trade-offs at issue. This poll simply buried the issue of trade-offs in a heavily loaded follow-up question: After telling respondents that

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1. Joseph Turow, Jennifer King, Chris Jay Hoofnagle, Amy Bleakley & Michael Hennessy, *Americans Reject Tailored Advertising and Three Activities That Enable It*, Sept. 2009, http://graphics8.nytimes.com/packages/pdf/business/20090929-Tailored_Advertising.pdf.

2. Stephanie Clifford, *Two-Thirds of Americans Object to Online Tracking*, New York Times, Sept. 29, 2009, www.nytimes.com/2009/09/30/business/media/30adco.html.

3. *See generally* Jim Harper & Solveig Singleton, *With A Grain of Salt: What Consumer Privacy Surveys Don't Tell Us*, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=299930.

marketers "often use technologies to follow the websites you visit and the content you look at in order to better customize ads," the interviewer asked whether the respondent would allow advertisers to "follow [them] online in an anonymous way in exchange for free content." Only 10% of users said they would allow this voluntary exchange.

What does this tell us about whether, and how, government should further regulate online advertising? Precious little: Not only does this poll overstate the costs of targeted advertising, understate its benefits, and ignore the tools available to users to address their privacy concerns but, like any opinion poll, this one tells us more about the psychology of decision-making under the artificial uncertainty of polls than about the choices users would actually make in the real world.

User Uncertainty About Concepts Like "Tailoring" and "Following"

Even the word "tailoring"—though benign compared to other words the study's authors could have used (*e.g.*, "track," "monitor," "record")—is so vague as to leave respondents wondering what it really entails. One can only speculate as to what users thought the word meant (since the poll did not ask), but it seems likely that some of these scarier words probably flashed through the minds of respondents in the instant before they answered the question. Indeed, the word "tailoring" conflates both the costs and benefits of personalized advertising in a single, vague word. Given this ambiguity, it's hardly surprising that most users would say "no"—not just to receiving tailored advertising (66%), but also to receiving tailored discounts (49%) and news (57%). If users had been asked about receiving "relevant" (rather than "tailored") ads, the responses probably would have turned out somewhat differently—just as an additional 17% of users agreed to receiving tailored "discounts," whose value to users is more readily apparent: saving money on potential purchases.

The second set of questions asked users whether it "Would be OK… if these ads [discounts/news] were tailored for you based on following what you do on the website you are visiting… [24% said yes] OTHER websites you have visited… [34% said yes] and OFFLINE—for example, in stores? [25% said yes]." Again, the term "follow" was not defined. A third set of questions explained to respondents that marketers "often use technologies to follow the websites you visit and the content you look at in order to better customize ads." The interviewer then asked whether the respondent would "definitely allow, probably allow, probably NOT allow, or definitely not allow advertisers" to "follow you online in an anonymous way in exchange for free content"—and only 10% of users said yes. Thus, it appears that users are *more*, not less, hostile to tailored advertising when reminded of the trade-offs involved (35% yes in the first set of questions, 10% yes in the third). What explains this paradox?

The most obvious explanation is that, by the time the respondent got to the critical question about "allowing" tailored advertising, they had heard the word "follow" at least five times: once in each of the three questions about whether tailoring was OK, once in the introduction about how marketers customize ads and once in the question itself—each time increasing uncertainty as to how "tailoring" really works and more than negating any suggestion of "anonymity." Furthermore, asking users whether something should be "allowed" implies that there are

undisclosed reasons why it should not be. This much is simple psychology—obvious to anyone who wanted to craft a poll that would support a particular regulatory agenda.

But behavioral economics research tells us something even more profound about the way our brains work: human beings hate making choices, and loathe uncertainty even more. Indeed, such "mental accounting" or "mental transaction" costs appear to be the primary reason why, after a decade of efforts to develop a micropayments system that can fund online content and services, no such system has emerged[4]—and thus why Internet publishers instead rely primarily on advertising revenues ($23.5 billion in 2008) to fund "free" offerings for consumers.[5] In this case, merely forcing consumers to consider the costs of "tailoring" and being "followed," and decide whether these things are "OK" or should even be "allowed" strongly tips the scales in favor of the outcome desired by the study's authors because these considerations and decisions are significant psychological costs in themselves, which likely outweigh the diffuse benefits of tailored advertising, which users simply do not appreciate.

Indeed, the scale tips so strongly that the study suggests that 73% of Americans object to having ads tailored based on "what you do on the website you are visiting." Would not this objection apply to purely contextual advertising "tailored" to the keywords entered by a user in a search engine or to the keywords that appear on a particular page to which a user has navigated within a site? If so, this study isn't just about the bogeyman of "behavioral" advertising, but about essentially *all* online advertising, which is to some degree "tailored." Indeed, must lawmakers protect us from the tailoring of news (71%) and discounts (62%) within websites? Or, if data collection is the real harm to consumers, what about the fact that hundreds of millions of people happily share far more personal information every day on social networks or using grocery discount cards? Opinion polls simply cannot answer these questions.

The Direct Benefit of Tailored Ads: Relevance

Whatever Americans tell pollsters about "tailored" ads, they also complain about irrelevant ads: A previous poll found that 72% of consumers "find online advertising intrusive and annoying when the products and services being advertised are not relevant to [their] wants and needs" and 85% say that less than 25% of the ads they see while browsing online are relevant to their wants and needs.[6] Real-world experiments confirm that users reveal a clear preference for more relevant advertising. In a 2004 experiment, click-through rates (CTR) for behaviorally targeted ads were between 94% and 225% higher than for contextually targeted ads.[7] A 2009 study found that the difference could be between 670% and 1000% percent, depending on how

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4. *See generally* Nick Szabo, *Micropayments and Mental Transaction Costs*, working paper *available at* http://szabo.best.vwh.net/berlinmentalmicro.pdf.

5. Interactive Advertising Bureau, *Internet Advertising Revenue Report*, Oct. 5, 2009, www.iab.net/media/file/IAB-Ad-Revenue-Six-month-2009.pdf.

6. TRUSTe, *2009 Study: Consumer Attitudes About Behavioral Targeting*, March 4, 2009, at 2, 5, *available at* www.truste.com/about/bt_overview.php.

7. Scott Ferber, *Stepping Up Search: How Behavioral Targeting Can Enhance ROI*, MediaPost Publications, Jun 6, 2005, www.mediapost.com/publications/index.cfm?fa=Articles.showArticle&art_aid=30838.

well-tailored the ads were.[8] In other words, users in the real world were *two to eleven times* more likely to click on highly-tailored ads. Truly, actions speak louder than words: Users clearly "vote with their clicks" for ads they find relevant—*i.e.*, they vote for "tailoring."

Further reinforcing this conclusion is the fact that better tailoring increases not only click-through rates but also "conversion rates"—the percentage of users who actually complete the action desired by the advertiser, whether that be making a purchase or signing up for a list. A 2008 experiment found increased conversion rates of 400-900% (2008).[9] This indicates that relevant ads really do help consumers find things they like—and that they like the fruits of tailoring, however they respond when asked about "tailoring" as an abstract concept that conflates costs ("*How* are they following me?") and benefits ("What's in it for me?").

The Indirect Benefit of Tailored Ads: Free Content & Services

Even less apparent to poll respondents than the direct benefit of tailoring (increased relevance) are the indirect benefits: In particular, greater relevance to the user means more effective communication for the advertiser, and increased ad revenue for most online publishers per ad on their sites. Thus, there exists a clear *quid pro quo*: in effect, users "pay" for content and services by sharing information about their interests. Even more fundamentally, users "pay" for content by seeing ads. But both *quid pro quos* are implicit: Users can simply choose not to "pay" by using readily available tools in their browser to blocking ads and/or tracking. In essence, today's system allows users who don't like ads—tailored or otherwise—to opt out at little or no cost, much as if they simply decided not to pay for a product they bought at their local grocery store.

This creates a serious dilemma, given that advertising increasingly stands alone as the lifeblood of online content and services.[10] Indeed, ads have long funded the costs of generating content for radio, television, and newspapers (with subscriptions paying only for distribution).[11] The basic reason is simple economics: In competitive markets, prices tend to fall to the marginal cost of production. The Internet has simply borne this theory out in full:

1. Producing the first unit of content (*e.g.*, a news story or video) remains costly, so while the *marginal* cost of every additional unit is essentially zero, *average* cost is not.
2. The failure of micropayments online seems to confirm that, no matter how low the technological transaction costs are, the mental transaction costs involved combined with even tiny payments will exceed the perceived value of most content.

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8. Jun Yan, Ning Liu, Gang Wang, Wen Zhang, Yun Jiang & Zheng Chen, *How Much Can Behavioral Targeting Help Online Advertising?*, paper delivered at the 18th International World Wide Web Conference, April 20–24, 2009, Madrid, Spain, at 262, available at www2009.eprints.org/27/1/p261.pdf.

9. Erik Sherman, *Want to Target Online? You Better Build Trust*, Advertising Age, Apr. 14, 2008, http://adage.com/adnetworkexchangeguide/article?article_id=126242.

10. *See generally* Berin Szoka & Adam Thierer, *Online Advertising & User Privacy: Principles to Guide the Debate*, Progress Snapshot 4.19. Sept. 2008, www.pff.org/issues-pubs/ps/2008/ps4.19onlinetargeting.html.

11. *See, e.g.*, Walter Mossberg, *Now You See 'Em...*, SmartMoney.com, June 15, 2000, *available at* web.archive.org/web/20061124235126/http://www.smartmoney.com/mossberg/index.cfm?story=20000615.

3. The world of media scarcity in which consumers could choose from only a few sources of content (*e.g.*, news, entertainment) has given way to a world of staggering media abundance and the choices of users are no longer constrained by the tyranny of physical limitations like distance and printing costs.
4. Because pure information cannot be copyrighted (and fair use allows significant referencing and quotation), very little content is so unique that users cannot find a ready substitute elsewhere if a site (or even cartel of sites) attempted to charge.

These forces have given birth to the world of "Free," where few (if any) users will pay for something they can get for nothing.[12] While there are a number of ways to fund content and services, advertising is far and away the leading business model for the new economy: Indeed, overall advertising market is expected nearly to double its share of total U.S. ad spending from 8.7% in 2008 ($23.4 billion) to 15.2% ($37.2 billion).[13] But with 44% of advertising revenue going to search engines (which show highly "tailored" ads simply based on search terms), hundreds of thousands of publishers—from the mightiest to the tiniest—rely on $7.6 billion (33% of the total) in "display" ad revenue. Yet this base is tiny: Most websites earn a fraction of the revenue generated by offline ads: roughly $0.60 to $1.10 per thousand impressions (CPM) online versus average CPMs of $4.54 (radio) to $10.25 (broadcast). This unprofitability of online advertising, and the fact that certain kinds of online content (*e.g.*, video and online services) does not provide the textual keywords necessary for basic contextual targeting is driving publishers to ad networks that offer behavioral targeting, which is expected to grow from $525 million in 2007 to $4.4 billion in 2012—when it will represent 25% of all display ad spending.[14]

In short, advertising is indispensable to the future of online media, but it is also currently inadequate to sustain "Free" culture. As Adam Thierer and I warned earlier this year: "The advocates of regulation pay lip service to the importance of advertising in funding online content and services but don't seem to understand that this *quid pro quo* is a fragile one: Tipping the balance, even slightly, could have major consequences for continued online creativity and innovation… *Something must give because there is no free lunch*."[15] In 2001, long before Google mattered and before he worked for them, Kent Walker (now Google's general counsel) put it best in a seminal law review article:

> Privacy is both an individual and a social good. Still, the no-free-lunch principle holds true. Legislating privacy comes at a cost: more notices and forms, higher prices, fewer free services, less convenience, and, often, less security. More broadly, if less tangibly, laws regulating privacy chill the creation of beneficial

12. Chris Anderson, *Free: The Future of a Radical Price*, 2009; *see also* Chris Anderson, *Free! Why $0.00 Is the Future of Business*, Wired Magazine, Feb. 25, 2008, www.wired.com/techbiz/it/magazine/16-03/ff_free.

13. David Hallerman, *US Advertising Spending: The New Reality*, eMarketer, April 2009, at 5 and 7 www.emarketer.com/Reports/All/Emarketer_2000576.aspx.

14. *Id*. at 5.

15. Berin Szoka & Adam Thierer, *Targeted Online Advertising: What's the Harm & Where Are We Heading?*, Berin Szoka & Adam Thierer, Progress on Point 16.2, April 2009, www.pff.org/issues-pubs/pops/2009/pop16.2targetonlinead.pdf.

> collective goods and erode social values… Such regulation would likely increase both direct and indirect costs to the individual consumer, reduce consumer choice, and inhibit the growing trend of personalization and tailoring of goods and services.[16]

Thus, as Jim Harper and Solveig Singleton concluded in their 2001 paper *With a Grain of Salt: What Privacy Surveys Don't Tell Us*:

> privacy surveys in particular… suffer from the "talk is cheap" problem. It costs a consumer nothing to express a desire for federal law to protect privacy. But if such law became a reality, it will cost the economy as a whole, and consumers in particular, significant amounts that surveys do not and cannot reveal.[17]

We Need a Behavioral Economics Experiment, Not Just Another Poll

The Berkeley-Penn poll could certainly have done more to present these trade-offs to respondents and less to color their responses by inflating mental transaction costs. But even the most "fair" poll cannot meaningfully simulate the trade-offs inherent in the real world. If we really want to know *how much* subjective value consumers place on a particular aspect of their privacy, we must look to the preferences they *reveal* in the process of making real choices.

Of course, the best experiment is the one being conducted in the real world every day. No laboratory experiment can ever fully replicate all of the conditions of the real world, but a behavioral economics experiment could tell us more about the revealed preferences of Internet users than any poll. Unlike the real world, an economist could vary certain conditions in a lab experiment to tell us how various changes to current industry practice, user empowerment, or user education might actually affect real consumer choices. At a minimum, any experiment would require the following to inform policymaking about online advertising and privacy.

First, the experiment should vary the mechanisms by which notice is provided to users as to how tailoring works (*e.g.*, placement, interface, wording) and what those notices actually say.

Second, test subjects must make real choices in real use of the Internet with trade-offs in real money and their own time between either paying for access to a particular site or getting access for free in exchange for receiving tailored ads based on at least the three variables presented as questions in the Berkeley-Penn study: (i) users' browsing activity on that site; (ii) their browsing activity on other sites; and (iii) offline activity or demographic information.

The second variable is critical because it addresses the value created by behaviorally tailored ads, which could be wiped out by regulation. Search engines are able to sell highly effective advertising based solely on information provided directly to the site (search keywords, which are highly indicative of user interest), and some sites can sell lucrative advertising based on purely contextual targeting because their content contains keywords that advertisers value highly (*e.g.*, a site for digital camera enthusiasts). But the vast majority of websites, and

16. Kent Walker, *The Costs of Privacy*, Harvard Journal of Law & Public Policy, Vol. 25, Fall 2001, at 87-91.
17. *See supra* note 3.

especially non-commercial websites, would produce little ad revenue if advertisers could only guess at the likely interests of visitors based on the keywords on that site. This, in a nutshell, is why so many sites stand to gain so much from behavioral targeting—particularly in the Internet's "Long Tail."[18] To be useful, an experiment must reflect this dynamic.

In the real world, of course, it might be possible for the user to opt-out of tracking without losing access to content because today's *quid pro quo* is implicit and most sites operate on a "No Cost Opt-Out" basis for tracking and even seeing ads. But in order to tell us how much consumers really care about tracking, the experiment must place some value on access to content that is supported by free content and services.

Third, the experiment must examine the extent to which user empowerment affects user choice: If some users are uncomfortable with having their browsing activity tracked, is it because they are concerned about *all* tracking or only tracking of certain sensitive activities, such as researching medical issues or—everyone's favorite—viewing pornography? How does the availability of privacy management tools change user choices about ad-tailoring?[19] Do Americans really want tailoring banned, or do they just want the ability to exercise easy choice about when they want to participate? How would those choices change when they come at a cost (*e.g.*, seeing more ads) and privacy-sensitive users cannot simply free-ride off the value created by users who *don't* opt-out of targeted advertising (and also don't block ads)?

Such an experiment would, by its very nature, be imperfect—but far *less* imperfect than any poll about opinions on privacy. Until a proper experiment is conducted by trained behavioral economists, all we can say with confidence is the following:

1. Users don't understand exactly how ads are tailored;
2. Users seem to be concerned about "tailoring" or "following" in the abstract;
3. Users are generally unwilling to pay for online content and services; and
4. Better tailoring of ads means more funding for content and services.

There is only one approach that can address all these concerns: educate users about how online advertising works and how they can implement their own privacy preferences, while constantly striving to further empower users to make privacy management easier.

18. *See generally* Chris Anderson, *The Long Tail: Why the Future of Business is Selling Less of More*, 2006.

19. Adam Thierer, Berin Szoka, Adam Marcus & Eric Beach, *Privacy Solutions*, Ongoing Series, PFF Blog, http://blog.pff.org/archives/ongoing_series/privacy_solutions/.

Related PFF Publications

- *Targeted Online Advertising: What's the Harm & Where Are We Heading?*, Berin Szoka & Adam Thierer, Progress on Point 16.2, April 2009.
- *Online Advertising & User Privacy: Principles to Guide the Debate*, Berin Szoka & Adam Thierer, Progress Snapshot 4.19, Sept. 2008.
- *Behavioral Advertising Industry Practices Hearing: Some Issues that Need to be Discussed*, Berin Szoka & Adam Thierer, PFF Blog, June 18, 2009.
- Google's Ad Preference Manager: One Small Step for Google, One Giant Leap for Privacy, Berin Szoka, Progress Snapshot 5.2, March 2009.
- *Privacy Solutions*, Ongoing Series, PFF Blog.
- *Freedom of Speech & Information Privacy: The Troubling Implications of a Right to Stop People from Talking About You*, Eugene Volokh, Progress on Point 7.15, Oct. 2000.
- *Privacy & Commercial Use of Personal Information*, Thomas Lenard & Paul Rubin, 2002.

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THE PROGRESS & FREEDOM FOUNDATION

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The Benefits of Online Advertising & Costs of Privacy Regulation

by Berin Szoka & Mark Adams*

"Advertising is the mother's milk of all the mass media."
- Wall Street Journal technology columnist Walt Mossberg

"Half the money I spend on advertising is wasted; the trouble is I don't know which half."
- John C. Wanamaker, "father of modern advertising" (1838-1922)

Contents

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I. Introduction

Congress appears more likely than at any point in the last decade to pass legislation further regulating the collection and use of consumer data on the Internet as well as on other interactive media, such as mobile phones and cable television. While such data can significantly improve the relevancy of advertising to consumers' interests, advocates of data regulation argue that such data collection and use violates users' privacy. Moreover, some critics argue that targeted advertising is inherently invasive or manipulative. Unfortunately, as political support grows in Washington for "baseline federal privacy regulation,"[1] what leading online advertising analyst David Hallerman has called a "perfect storm" of "[c]oncurrent economic, societal and technological trends" threatens to ravage advertising and ad-supported media.[2] In short, regulation may restrict the evolution of online advertising at a crucial time in its development, stymieing the transition of traditional media to the digital age and the growth of new online content and services.

The importance of Internet advertising goes far beyond corporate bottom lines. While advertising is itself an important channel for non-commercial speech, it has also long been the "mother's milk" of media in America, funding the speech of others since the birth of ad-supported newspapers in the colonial era.[3] Like print, radio and television ads, Internet advertising supports a wide array of online media, but unlike traditional media the Internet allows anyone who can set up a website to earn ad revenue—if they can draw traffic. Thus, advertising supports not only traditional content publishers, but also a staggering "long tail" of millions of publishers of niche and minority-oriented text, audio and video content, and a wide variety of Internet services, including software that was traditionally sold at high prices.[4]

Hallerman notes that total U.S. advertising revenue declined 0.7% in 2007 and 3.6% in 2008—the first recorded two year decline in the U.S. since tracking began in 1940. He predicts that overall ad spending will fall another 8.2% in 2009 and 3.0% in 2010, while growing only 0.4% in 2011, 1% in 2012, and 0.6% in 2013—a total drop of 12.4% by 2013.[5] In the first half of 2009,

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1. For a discussion of the criticism of targeted advertising, *see generally* Berin Szoka & Adam Thierer, The Progress & Freedom Foundation, *Targeted Online Advertising: What's the Harm & Where Are We Heading?*, Progress on Point 16.2, Apr. 2009, http://www.pff.org/issues-pubs/pops/2009/pop16.2targetonlinead.pdf; Berin Szoka & Adam Thierer, The Progress & Freedom Foundation, *Online Advertising & User Privacy: Principles to Guide the Debate*, Progress Snapshot 4.19. Sept. 2008, http://www.pff.org/issues-pubs/ps/2008/ps4.19onlinetargeting.html.

2. David Hallerman, *US Advertising Spending: The New Reality*, eMarketer, Apr. 2009, at 16 http://www.emarketer.com/Reports/All/Emarketer_2000576.aspx.

3. Walter Mossberg, *Now You See 'Em...*, SmartMoney.com, June 15, 2000, *available at* http://web.archive.org/web/20061124235126/http://www.smartmoney.com/mossberg/index.cfm?story=20000615.

4. *See generally* Chris Anderson, *The Long Tail: Why the Future of Business is Selling Less of More* (Hyperion 2006); Chris Anderson, *The Long Tail*, Wired, Oct. 2004, available at http://www.wired.com/wired/archive/12.10/tail.html.

5. Hallerman, *supra* note 2 at 15.

online advertising revenues fell by 5.3%.[6] Even Capitol Hill has noticed the particular distress of newspapers,[7] whose print ad revenues are projected to decline 28-42% from 2007 to 2010.[8] Hallerman concludes "the shifting advertising landscape will require more experimentation—different ad formats, different ways to market that engage the audience, different spending."[9]

Amid this economic turmoil, only online advertising revenue is expected to continue growing in the next few years—but at a considerably slower pace (~10%) than over the last 12 years, when revenues grew at a 31.5% compound annual growth rate (and even more in some recent years).[10] As the overall advertising market shrinks and as ad dollars follow users online, Internet advertising is expected nearly to double its share of total ad spending from 8.7% in 2008 ($23.4 billion) to 15.2% ($37.2 billion).[11] This revenue supports content and services offered both by the large web portals like Google, Yahoo!, Microsoft and AOL, and by the millions of publishers, large and small, that depend on online advertising revenue. Among the top fifty websites by traffic, *all* offered users considerable amounts of free content while 65% prominently serve ads.[12] Estimates indicate that at least one third of web applications rely on advertising.[13]

The importance of these growing revenue streams is not simply economic. Yet many critics have ignored or downplayed the key benefits of online advertising in favor of strict, pre-emptive privacy regulation such as opt-in mandates or a "Do Not Track" registry.[14] No matter how well-intentioned privacy regulation is, such regulation necessarily amounts to an industrial policy for the Internet because, as with all media policy, intervention that affects both the amount and distribution of available funding has profound cultural, societal, and political consequences. As Szoka and Thierer concluded:

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6. *See* Interactive Advertising Bureau, *Internet Advertising Revenue Report*, Oct. 2009, at 5 [hereinafter *2009 Half Year IAB Revenue Report*], www.iab.net/media/file/IAB-Ad-Revenue-Six-month-2009.pdf.

7. *See, e.g*, Susan Milligan, *Senators consider options for ailing newspapers*, Boston Globe, May 7, 2009, www.boston.com/news/local/massachusetts/articles/2009/05/07/senators_consider_options_for_ailing_newspapers/.

8. Hallerman, *supra* note 2 at 19.

9. Hallerman, *supra* note 2 at 20.

10. *See* Interactive Advertising Bureau, *Internet Advertising Revenue Report*, March 2009, at 7 (presenting annual growth rates for each year) [hereinafter *2008 IAB Revenue Report*], www.iab.net/media/file/IAB_PwC_2008_full_year.pdf.

11. Hallerman, *supra* note 2 at 5 and 7.

12. Survey conducted by Eric Beech, PFF Summer Fellow, on Alexa.com in July 2008 (excluding sites primarily focused on pornography); site lists available at http://www.alexa.com/topsites/countries/US.

13. Chris Anderson, *Terrific Survey of Free Business Models Online*, March 26, 2009, http://www.longtail.com/the_long_tail/2009/03/terrific-survey-of-free-business-models-online.html

14. *See, e.g,* Berin Szoka & Adam Thierer, *Behavioral Advertising Industry Practices Hearing: Some Issues that Need to be Discussed*, PFF Blog, June 18, 2009, http://blog.pff.org/archives/2009/06/behavioral_advertising_industry_practices_hearing.html; *see also supra* note 1.

> the overall health of the Internet economy and the aggregate amount of information and speech that can be supported online are fundamentally tied up with the question of whether we allow the online advertising marketplace to evolve in an efficient, dynamic fashion.[15]

As valuable as privacy is, it is not *in*valuable: Economic studies have found that consumers are willing to trade privacy for goods and services, and that the value of advertising depends on how much is known about the audience. Thus, policymakers need to be careful not to impose restrictive regulatory defaults that override the preferences of consumers.[16]

Four questions must be front and center in this debate:

1. What are the benefits of online advertising in general and of specific forms of targeted advertising in particular?
2. What would be the impact of regulation to consumers, culture and media?
3. What harm is privacy protection seeking to address?
4. How should policymakers balance these benefits and harms?

Szoka and Thierer have previously questioned the existence of a market failure that requires data regulation, proposing instead to empower privacy-sensitive users to more easily implement their own preferences rather than impose uniform restrictive defaults based on assumptions about what users would choose.[17] Here, we focus on the first two questions above and identify five broad categories of benefits to users from targeted advertising:

1. More relevant, and potentially less annoying/interruptive advertising for consumers;
2. Higher-quality content and services supported by advertising;
3. Better correlation between the production of content and services, and the preferences of consumers;
4. A more vibrant media, improved political discourse, and stronger communities; and
5. Lower prices for consumers and greater innovation throughout the economy.

In broad strokes, better targeting of advertising delivers these benefits by:

- Increasing the informational value of advertising to consumers and enhancing the effectiveness of all varieties of advertising, both commercial and non-commercial;
- Increasing advertising funding for content and services that might not be sustainable on an ad-supported basis with untargeted or less targeted advertising; and
- Reducing the costs of buying and selling ("transaction costs").

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15. *See* Szoka & Thierer, *Targeted Online Advertising*, *supra* note 1 at 9.

16. *See* Adam Thierer, The Progress & Freedom Foundation, *The Perils of Mandatory Parental Controls and Restrictive Defaults*, Progress on Point 15.4, Apr. 11, 2008, www.pff.org/issues-pubs/pops/pop15.4defaultdanger.pdf

17. *See supra* note 1. *See also* Adam Thierer & Berin Szoka, *What Unites Advocates of Speech Controls & Privacy Regulation?*, Progress on Point 16.19, Aug. 2009, http://www.pff.org/issues-pubs/pops/2009/pop16.19-unites-speech-and-privacy-reg-advocates.pdf.

II. The Evolution of Targeted Online Advertising Towards Greater Relevance

As online advertising revenues decline, the central challenge for online advertising is to evolve and find sustainable business models for online media, content and services. Across media, advertising is commonly priced in terms of cost per thousand impressions (CPM). Advertising in traditional media have been estimated to produce average CPMs of $4.54 (radio) to $10.25 (broadcast), while non-premium Internet display advertising produces average CPMs of $0.60 to $1.10.[18] Matching the profitability of traditional media has driven the evolution of online advertising since the early days of the web toward increased relevance because more relevant ads are:

- Less likely to be ignored by users and are, therefore,
- More effective for advertisers; and
- More profitable to publishers.

The evolution of Internet advertising can be broadly segmented into four categories or, "stages" in terms of increasing relevance, all of which currently co-exist:

1. **Web Ads 1.0: Static Banner Ads**. Publishers sell space on their sites ("inventory") directly to advertisers, who fill the space with banner ads (or pop-up ads). While some sites attract more valuable audiences than others and larger sites can negotiate better deals with advertisers, the value of the inventory largely depends essentially on how many users saw a page because the ads are, at best, targeted to the overall nature of the site (*e.g.,* sports) or its demographics (*e.g.,* middle-aged men), much as billboards might be targeted to the presumed audience of drivers on a particular highway. Today, much "non-premium" inventory is still filled with "run of network" ads sold in this way.
2. **Web Ads 2.0**: **Contextually Targeted Ads**. Most search engines target ads next to search results based on the search terms entered by the user. Similar algorithmic matching technologies are used to dynamically and automatically tailor the ads shown on individual webpages to "keywords" on those pages: Instead of buying ads on a site entirely dedicated to high fashion, an advertiser could buy ads on web pages across many sites that contain relevant words (*e.g.,* "fashion"). While some large publishers employ their own sales teams to deal directly with advertisers, most sell ad inventory to advertisers through third party ad networks like the Google AdWords network.
3. **Web Ads 2.5: Better Ads Through Basic Tracking**. Ad networks can improve the effectiveness and reliability of contextual or demographic ads by tracking users across multiple sites in the ad network in order to, among other things:
    - Analyze the effectiveness of advertisements (a critical metric for advertisers);
    - Prevent "click-fraud" (fraudulently increasing the number of clicks on an ad);
    - Allow "affiliate marketing" (one site rewarding another for bringing in a customer);

18. Howard Beales, *Public Goods, Private Information, and Anonymous Transactions: Providing a Safe and Interesting Internet*, PowerPoint presentation given at the Law & Economics of Innovation Symposium at George Mason University School of Law, May 7, 2009 (copy on file with authors) at 17 (citing Media Dynamics data from 2008).

- "Sequence" ads in a scripted order;
- Cap the frequency with which a user sees an ad to prevent over-saturation; and
- "Append" data about users from user account data or public records.

4. **Web Ads 3.0: Behaviorally Targeted Ads**. Ad networks can use more sophisticated tracking systems to offer advertisers the ability to:
   - Target ads based on a profile of the user's likely interests by tracking the pages each user visits across the ad network;
   - "Re-target" an ad to user on one site for a product he nearly purchased on another site; and
   - Better understand their customers by analyzing correlations of interests.

Smarter advertising can increase revenue for some publishers significantly beyond what is possible with untargeted or basic contextual ads. However, serving better contextual and behavioral ads requires the collection and processing of data about what users do online, which raises privacy concerns. While some privacy advocates want to restrict both forms of improved targeting (Stages #3 and #4), behavioral advertising has received more attention, driven by concerns about "digital dossiers:" detailed profiles of a user's likely interests (although such profiles may only be associated with a "cookie" ID and not with a specific user). While assessing the harms associated with such profiling is beyond the scope of this paper,[19] the benefits from greater use of behavioral targeting are significant—and under-estimated.

Better data can improve the relevance and profitability of contextual advertising (Stage #3) but even the most advanced contextual advertising pays publishers for each reader based on how much advertisers value keywords associated with a particular webpage. By contrast, behavioral targeting pays publishers more for each user because ads are targeted to the user's likely interests rather than the contents of the particular page they are looking at. As Hallerman has put it:

> Behavioral [advertising] targets people, not pages. That is, behavioral uses the actions of a person to define its target, unlike contextual targeting, which serves ads based on a page's contents."[20]

Indeed, behavioral advertising profoundly changes the way that advertising works. As former FTC economist Howard Beales has explained:

> [Conventional advertising involves] *measuring* the average characteristics of an audience with something else in common (they like the content), [while behavioral advertising involves] *assembling* an audience with a given set of characteristics.[21]

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19. *See e.g.*, Thomas Lenard & Paul Rubin, *In Defense of Data: Information and the Costs of Privacy*, May 2009, at 32-40, http://www.techpolicyinstitute.org/files/in%20defense%20of%20data%20exec.pdf.

20. David Hallerman, *Behavioral Targeting: Marketing Trends*, eMarketer, June 2008, at 2, http://www.emarketer.com/Reports/All/eMarketer_2000487.

21. Beales *supra* note 18 at 19.

More relevant advertising benefits consumers indirectly by funding content and services, and lowering prices, and directly though increased relevance. We begin by considering the direct benefits of increased relevancy, followed by the economic impact of reducing the cost of matching readers to advertising.

III. Increased Relevance as a Benefit to Users

If visitors to a website are going to see advertising, they prefer—unsurprisingly—to see more relevant advertising. Polls find that 72% of consumers "find online advertising intrusive and annoying when the products and services being advertised are not relevant to [their] wants and needs."[22] Eighty-five percent of web users say that less than 25% of the ads they see while browsing online are relevant to their wants and needs.[23] While other opinion polls have suggested that users are uncomfortable with having ads, news and content tailored for them and being tracked online, such polls tell us more about the psychology of decision-making under the artificial uncertainty of polls than about the choices users would actually make in the real world. They overstate the costs of targeted advertising, understate its benefits, and ignore the tools available to users to address their privacy concerns.[24]

Even the fairest poll cannot meaningfully simulate the trade-offs inherent in the real world. If we really want to know how much subjective value consumers place on a particular aspect of their privacy, we must look to the preferences they reveal in the process of making real choices.[25] Two important metrics used in studies of behavioral targeting provide a tangible indication of just how much consumers value relevance:

- **Click-Through Rates (CTR)**: the percentage of users who click on an ad; and
- **Conversion Rates**: the percentage of users who complete the action desired by the advertiser (*e.g.,* making a purchase or signing up for a list).

Several experiments have been conducted comparing behavioral targeting to contextual targeting, and found the following increases in click-through and conversion rates:

- Increased CTR from 94% to 225%—and conversion rates up to 3,000% (2005);[26]
- Increased conversion rates of 400-900% (2008);[27]and
- Increased CTR of 670-1000% (2009).[28]

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22. TRUSTe, *2009 Study: Consumer Attitudes About Behavioral Targeting*, March 4, 2009, at 5, available at http://www.truste.com/about/bt_overview.php.

23. *Id.* at 2.

24. *See* Berin Szoka, *Privacy Polls v. Real-World Trade-Offs*, The Progress & Freedom Foundation, Progress Snapshot 5.10, Oct. 2009, www.pff.org/issues-pubs/ps/2009/pdf/ps5.10-privacy-polls-tradeoffs.pdf.

25. *See generally* Solveig Singleton and Jim Harper, *With A Grain of Salt: What Consumer Privacy Surveys Don't Tell Us*, http://ssrn.com/abstract=299930.

26. Scott Ferber, Stepping Up Search: How Behavioral Targeting Can Enhance ROI, MediaPost Publications, Jun 6, 2005, http://www.mediapost.com/publications/index.cfm?fa=Articles.showArticle&art_aid=30838.

27. Erik Sherman, *Want to Target Online? You Better Build Trust*, Advertising Age, Apr. 14, 2008, http://adage.com/adnetworkexchangeguide/article?article_id=126242.

IV. Understanding the Benefits of Relevant Advertising

To understand the benefits of relevant advertising, we must understand two central paradoxes of advertising, which American Enterprise Institute scholar Jack Calfee explained in his 1997 work *Fear of Persuasion*. First,

> The great majority of consumers—about 70% on average—think that as a general rule, advertising claims cannot be believed. About the same proportion—another 70% majority—think advertising is a useful source of information.[29]

Calfee explains that:

> Decades of data and centuries of intuition reveal that all consumers everywhere are deeply suspicious of what advertisers say and why they say it. This skepticism, far from representing an irrational fear or a barrier to creative advertising techniques, is in fact the driving force that makes advertising so effective. The persuasive purpose of advertising and the skepticism with which it is met are two sides of a single process. Like supply and demand (neither able to work alone, as in the famous analogy to two blades of a scissors), persuasion and skepticism work in tandem so advertising can do its job in competitive markets.

Second, not only do most consumers inherently distrust ads, most ignore them (or at least claim to). This phenomenon is especially acute on the Internet, where most ads reside alongside content, trying to attract the user's attention—much like newspaper ads but in stark contrast to ads on television and radio, which completely displace content for a certain period of time during a broadcast. Recent estimates indicate that a mere 8% of Internet users account for 80% of clicks on web ads—and that this percentage is falling as more Americans get online.[30] Yet despite this, American advertisers spent nearly $25 billion[31] on these distrusted, easily ignored online ads in 2008. Why?

The answer is that advertising directly benefits consumers and advertisers through the same mechanism—by communicating useful information about products and services. Advertising isn't just *one* way to promote such communication; for centuries, it has been the market's response to the dilemma of how to fund the creation of pure information about products, which "can be neither patented nor copyrighted," and which is "difficult or impossible to sell… for what it is worth." Advertising solves this problem by "arrang[ing] for the information to be so closely tied to the product that buyers will pay for the information as part of the price of the

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28. Jun Yan, Ning Liu, Gang Wang, Wen Zhang, Yun Jiang & Zheng Chen, *How much can Behavioral Targeting Help Online Advertising?*, paper delivered at the World Wide Web Conference, Apr. 20–24, 2009, Madrid, Spain, at 262.

29. John E. Calfee, *Fear of Persuasion: A New Perspective on Advertising and Regulation*, 38-39 (1997).

30. *See* Kunur Patel, *Barely Anybody Clicks On Banner Ads Anymore*, Silicon Alley Insider, Oct. 1, 2009, http://www.businessinsider.com/barely-anybody-clicks-on-banner-ads-anymore-2009-10.

31. *2008 IAB Revenue Report*, *supra* note 10.

product."[32] True, the Internet has lowered the cost of users generating and sharing information through communities like Yelp.com, but user-generated reviews offer a tiny trickle of information compared to the vast torrent that flows before consumers eyes every day—generally without their even realizing it.

How advertising persuades is subtle and easily ignored. As Calfee explains, "We need to think of sellers and consumers as participants in a continuous process. The process provides a way for ads to move from skepticism to persuasion."[33]

Long before the invention of Twitter and its 140-character limit, advertisers figured out that "information in advertising comes in tiny bits and pieces."[34] The small AdWords text ads that are Google's mainstay for both search and display ads consist of just 95 characters (a 25-character headline and two 35-character lines, plus a destination URL).[35] But as Calfee explains, and as anyone on Twitter should now understand, it is possible to "communicate a great deal of information in a few words." This is especially true for advertising because it taps into the broader "information environment." For example, "The famously concise 'Think Small' and 'Lemon' ads for the VW 'Beetle' in the 1960s and 1970s were highly effective with buyers concerned about fuel economy, repair costs and extravagant styling in American cars." Second, advertising pits sellers against each other in the best sort of competition, forcing them to tell consumers why their products are better than their competitors.

V. Smarter Advertising Lowers Transaction Costs

Behavioral targeting can help to reduce the cost of buying and selling, known as "transaction costs," both for content providers and for advertisers. The importance of transaction costs to economic organization was first noted by Ronald Coase in 1937;[36] an insight which would eventually win him the Nobel Prize. Another Nobel Prize-winning economist, Douglass North, has observed that we spend only half our economic wealth on production costs, with the other half being consumed by transaction costs.[37] Reducing transaction costs makes it possible to produce more goods, content and services for consumers. For example, introducing bar codes in supermarkets reduced transaction costs, reducing prices and making it possible for shoppers to afford more with their paychecks.

Although transaction costs roughly equal production costs on average, the actual ratio varies depending on the product. The same product will cost more, pound for pound, in a

32. Calfee, *supra* note 29 at 20.

33. Calfee, *supra* note 29 at 40.

34. Calfee, *supra* note 29 at 44.

35. Google, Google and Google AdWords, http://adwords.google.com/support/aw/bin/static.py?page=guide.cs&guide=22835&topic=22887 (last accessed Nov. 6, 2009).

36. R. H. Coase, The Nature of the Firm, *Economica*, New Series, Vol. 4, No. 16 (Nov., 1937), pp. 386-405.

37. John Joseph Wallis and Douglass C. North, *Measuring the Transaction Sector in the American Economy, 1870-1970*, in Long-Term Factors in American Economic Growth *95-162 (Stanley L. Engerman& Robert E. Gallman, eds.* 1986), *available at* www.nber.org/chapters/c9679.pdf.

supermarket than in a Costco or Sam's Club because those companies can keep transaction costs lower. When transaction costs are high relative to the value of the product being sold, the transaction may not take place at all. For example, companies will sometimes wish to avoid accepting credit cards for small transactions because the processing fee is more than the company would make in profit.

Newspapers reduce transaction costs by bundling both news and readers: Users pay a fixed amount to read a paper rather than buying news stories individually and advertisers buy access to a bundle of readers (*e.g.,* all people who buy *The New York Times* as opposed to Joe Smith, who reads the New York Times and likes fishing). Bundling means that journalists do not have to each have their own distribution network and sales department, but also that readers pay for news they do not want and receive advertisements that may not be relevant to them.

The Internet has made it easier for readers to pick and choose the content they wish to see, and for publishers to sell their "inventory" of ad space directly to advertisers. The unbundling of content means that advertisers must buy access to a larger, and less specific, bundle of readers, reducing the value of advertising inventory on websites. Larger content providers therefore continue to rely on direct sales of online advertising inventory through conventional sales departments. Howard Beales suggests that this may produce revenues as much as 10-33 times higher for larger online publishers than for smaller publishers, who still rely on ad networks and whose inventory may have little value to advertisers.[38]

Small websites cannot easily scale down the model employed by newspapers. Although micropayments have been suggested as a way of selling online content, the transaction costs of this model have so far been prohibitively high.[39] Websites must therefore find a way to replicate the effectiveness of large sales departments—*without* the transaction costs. Behavioral targeting through ad networks allows websites to better replicate the effectiveness of large sales departments without the transaction costs though through very different technical means: by targeting advertisements to the reader, rather than to the website.

Advertising is itself a significant transaction cost: the price producers must pay to inform consumers of their product. Making advertising more effective reduces transaction costs for producers. The overall effect of this improvement on total advertising expenditures is unpredictable. For example, if a supermarket lowers its prices, shoppers will be able to buy the groceries they have previously bought for less cost but, because prices are now lower, they will probably do more of their shopping at that supermarket. The supermarket's revenue may go up or down depending on how much, and how many, more shoppers decide to use the supermarket. The benefits of behavioral targeting will be distributed among advertisers and web publishers—leading to some combination of lower prices or more ad-supported content for consumers. Either way, consumers ultimately benefit. The following sections consider the potential economic impact of behavioral targeting from increased ad spending, reductions in advertising costs, and increased production of informative advertising.

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38. Beales *supra* note 18 at 13.

39. *See, e.g.*, Clay Shirky, *Why Small Payments Won't Save Publishers*, http://www.shirky.com/weblog/2009/02/why-small-payments-wont-save-publishers/.

VI. Increased Funding for Sites & Services Preferred by Consumers

As Internet advertising currently occupies a small proportion of the total advertising market, behavioral targeting is likely to increase overall Internet ad spending. Even if significant improvements in ad effectiveness reduce overall ad spending, behavioral targeting is likely to increase the total funding directed to the most desirable online content, and thereby increase production of that content. Understanding why targeted advertising can better distribute revenue according to consumer preferences requires first understanding the fundamental difference between the two main business models for supporting content or a service:

- **User Pays**. When content is sold directly to users, its value depends on what consumers are willing to pay. Thus, user preferences directly determine what resources are available to support content production by "voting with their dollars."[40]
- **Advertiser Pays**. When content production and distribution is given away to users and supported by associated advertising, the value of that content depends not on what consumers are willing to pay for it, but on what advertisers are willing to pay for *viewers—i.e.*, for the opportunity to communicate a message to the audience that views that content. Thus, there are two sides to this market: Publishers offer content to users and ad inventory to advertisers.

In the advertising model, the "value of viewers" depends not only on the *number* of viewers (or views), but also on *who* the viewers are. Advertisers will pay more for viewers who are more likely to take a desired action, such as making an immediate purchase, a future purchase ("brand-building"), visiting a website, signing up for a mailing list, joining an organization, or making a donation. What advertisers value is *relevance*: Every advertiser wants the greatest possible return on their spending, which means targeting their message to the audience most likely to be interested. Improving the ability to target advertising increases the value of ad-supported content. Aligning the value of advertising with the content consumers want to see will increase the production of that content.

A. Breakdown of Current Revenue & Projections

Again, U.S. Internet advertising revenues in 2008 totaled $23.4 billion.[41] Of this total, (44%) went to "search ads" or "sponsored results" on search engines,[42] which fund ongoing innovation by search operators such as Google, Yahoo! and Microsoft. Another $7.6 billion (33%) went to "display ads" (banner, animation ads or video ads),[43] which fund content given away by hundreds of thousands of publishers (*e.g.,* news, commentary and services like free directions from MapQuest). Contextually targeted display ads attempt to infer the user's interests based on keywords on the page the user is looking at. Thus, broadly speaking, it is

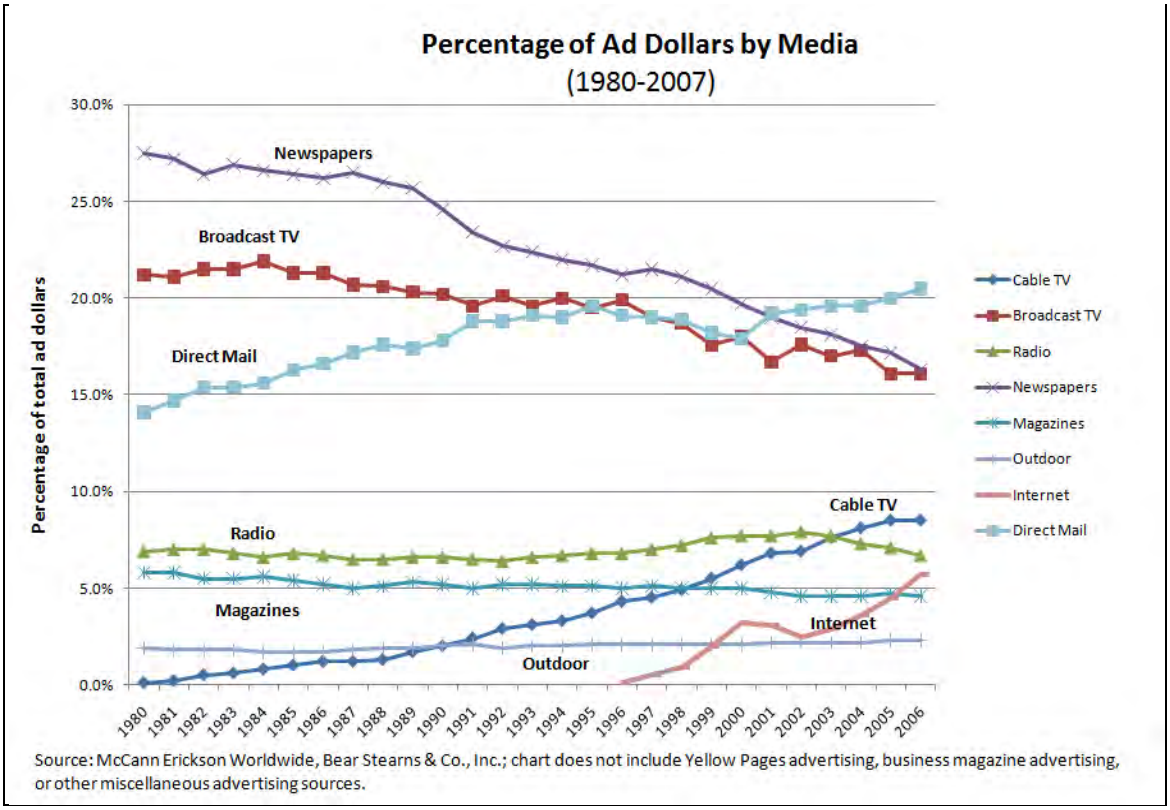
40. *See generally* Beales *supra* note 18.
41. *2008 IAB Revenue Report*, *supra* note 10.
42. Hallerman, *supra* note 2 at 10.
43. *Id.*

display (rather than search) advertising that stands to gain most from behavioral targeting because it is currently the least well targeted.[44] In particular, Hallerman predicts:

> The prime mover behind the growth of behavioral advertising will be the mainstream adoption of online video advertising, which will increasingly require targeting to make it cost-effective.[45]

On this slender revenue base of "display advertising" rests the vast majority of online content and services—from NewYorkTimes.com to tiny blogs, from popular services like webmail to niche applications. By comparison, this $7.6 billion total represents just 20% of 2008 newspaper ad revenue ($37.9 billion), 40% of radio ad revenue (~$19 billion), and 11.4% of total television ad revenue ($66.9 billion).[46]

Exhibit 1: The Growing Importance of Internet Advertising[47]



Source: McCann Erickson Worldwide, Bear Stearns & Co., Inc.; chart does not include Yellow Pages advertising, business magazine advertising, or other miscellaneous advertising sources.

44. "Through comparing different user representation strategies for BT, we draw the conclusion that the user search behavior, i.e. user search queries, can perform several times better than user browsing behavior, i.e., user clicked pages. Moreover, only tracking the short term user behaviors are more effective than tracking the long term user behaviors, for targeted ads delivery." Jun Yan et al, *supra* note 28 at 262.

45. Hallerman, *supra* note 2020 at 4.

46. Hallerman, *supra* note 2 at 17-18 (newspaper and television ad revenue estimates are produced by eMarketer and radio estimate is a rough average of estimates provided by Hallerman; percentages are obtained by dividing Hallerman's numbers by the $7.6 billion figure provided by the IAB Revenue Report).

47. Internet advertising revenue here excludes search ad revenue.

In the aggregate, spending on behavioral advertising has been projected to grow from $525 million in 2007 to $4.4 billion in 2012—when it will represent a quarter of all display ad spending.[48] While these aggregate figures and comparisons to total display revenue provide a sense of the "rising tide" by which behavioral advertising can "lift all boats," they also obscure three closely inter-related dynamics of crucial importance to the future of online media and culture:

1. Publishers whose content has little value with purely contextual advertising stand to gain considerably more from behavioral targeting than the average publisher;
2. Empowering these publishers to compete for more highly-valued advertising increases the extent to which online content and services truly reflect consumer preferences; and
3. Small amounts of revenue can have a disproportionate impact on the "Long Tail" of web publishers.

Thus, the evolution of advertising promises to increase both revenue streams and, in particular, the extent to which ad revenue reflects consumer preferences for online content and services. Whether to interfere with this evolution by restricting the data flow that makes it possible can fairly be said to be one of the central Internet policy issues of our era, and one that will have enormous consequences for the future of media and culture.

B. Increasing Advertising Revenue

Data collection can improve the profitability of contextual advertising for publishers that depend on ad revenue but, as explained above, even the most advanced contextual advertising is limited by the value advertisers place on the keywords associated with a webpage. The publisher of a site about digital cameras may therefore earn a decent return because ads can be targeted to users interested in a valuable product, making them valuable viewers. The same cannot be said of publishers of content that has little keyword value. This is a key part of the complex challenge facing journalism through the transition from print to web media.

With behavioral targeting, the value of a site's viewers depends less on the content associated with that site (keywords) and more on the viewers themselves. In this sense, behavioral advertising levels the playing field by allowing websites to sell access to viewers directly, rather than through the keywords associated with the website. Better targeting democratizes the ad-supported economy by empowering consumers to direct advertising revenues to the sites they spend time on. Targeting increases the ability of Internet users to "vote with their clicks" just as they "vote with their dollars" every time they make a purchase in the traditional economy.

There are a wide range of predictions on the potential value created by behavioral targeting. As with previous innovations in online advertising, it seems likely that the performance of behavioral targeting will improve over time. Professor Tracy Tuten, author of *Advertising 2.0*, predicts that a twelvefold increase in the value of page views, from $10 to $120 per thousand

48. Hallerman, *supra* note 2 at 5.

views. [49] Rich Karpinski calculates that Blue Kai, an ad network, is currently selling behaviorally targeted ads a rate of $4-15 per thousand views[50]—a significantly lower rate than Ryan suggests but higher than the current performance of print advertising ($5.50)[51] and several times higher than the average price of non-premium display advertising ($0.60-$1.10).[52] One experiment with re-targeting (showing users ads on one site based on actions taken towards but not completing a purchase on another site) produced significantly higher returns: "retargeted impressions represented only 7% of all the banner impressions delivered, [but] were responsible for over 50% of the revenue and 25% of the sales generated by the campaign as a whole."[53] Hallerman concludes that "Behavioral targeting is more than hype…. For publishers, it can mean making more money from undersold or unsold ad inventory."[54]

One of the reasons for the difficulty in predicting the impact of behavioral targeting on publisher revenues is that the improvements in effectiveness amount to both a decrease in the cost of providing advertising and an increase in the supply of access to online readers. If, as some studies have found, behavioral targeting actually raised click-through rates between 94% and 1000%,[55] it is unlikely that advertisers would increase their online budgets by a corresponding amount. Indeed, advertisers may buy the same amount of access (measured by clicks) at a lower cost. The impact of behavioral targeting on revenues will therefore depend not only on the effectiveness of targeting, but also on the willingness of advertisers to switch from traditional media to online advertising, and the response of advertisers to a reduction in the cost of advertising.

If advertisers see traditional and online advertising as effective substitutes then a significant increase in total online ad spend is likely. The effective cost of acquiring customers through online advertising (advertisers' Return on Investment) would have to fall to induce advertisers to switch; publishers would therefore not get all the benefits of increases in click-through rates. Furthermore, advertisers may take time to make the switch from traditional to online media, meaning that initial improvements in the effectiveness of online advertising may be slow to affect increases in online advertising spending. Improvements in the distribution of ad spending to better match consumer preferences are likely to be achieved more rapidly.

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49. Erik Sherman, *Want to Target Online? You Better Build Trust*, Advertising Age, Apr. 14, 2008, http://adage.com/adnetworkexchangeguide/article?article_id=126242&search_phrase=computer+law (subscription only). (Tuten's maiden name is Ryan.)

50. Rich Karpinski, *Will Using Behavioral Data Lead to Smarter Ad Buys?*, Advertising Age, Apr. 20, 2009, http://adage.com/adnetworkexchangeguide09/article?article_id=136003.

51. Beales *supra* note 18 at 17.

52. *Id*. at 13.

53. *Id*.

54. Hallerman, *supra* note 20 at 2.

55. *See supra* notes 26 and 28.

C. Improved Distribution of Revenues According to Consumer Preferences

Better targeted advertising would likely allocate ad revenues to better reflect consumer preferences. The status quo disproportionately rewards larger publishers and publishers of content that is more likely to attract audiences valued by publishers (given the nature of contextual advertising).

Currently larger publishers with "premium" inventory can earn significantly higher revenue per view with direct sales to advertisers: Directly sold inventory earns $10-20 CPM compared with $0.60-1.10 CPM for inventory sold through networks.[56] A study of seven large publishers in 2007 found that inventory sold by intermediaries accounted for around 25% of impressions and only 2% of revenue.[57] The reason for this disparity may partly be the quality of the websites but also that direct sales gives advertisers some ability to target a demographic: *The New York Times* knows more about its readers than many smaller websites—partly because *The Times* can track users' activity on its site, and potentially on other sites through ad networks, and partly because *The Times* may have even more information about users that have created accounts. More importantly, *The Times* is able to communicate that information to advertisers to allow better targeting to its readers. With behavioral targeting, advertisers can pick their audience directly across multiple sites, generating more precision than possible with direct purchases of advertising from publishers.

Behavioral advertising will not produce perfectly uniform revenue per impression or per click. No technology can erase the premium that advertisers place on some sites over others. There is some evidence that behaviorally targeted ads that are completely unrelated to the contents of a webpage (*e.g.,* digital camera ads on a health site) may actually be more effective than ads that are contextually related (*e.g.,* digital camera ads on a photography site) because they stand out more.[58] Even so, some sites will likely continue to command a premium because of content or audience demographics.[59]

A 2005 study found that, while behavioral targeting increased the value of ad inventory on "Tier 1" sites (those with the highest value for contextual ads) by a mere 5%, the increase was 86% for "Tier 2" sites and 360% for "Tier 3" sites.[60] Indeed these figures are conservative when compared to other estimates of the benefits of behavioral targeting. As might be expected, it is the sites which currently have the least valuable content that will benefit most. "Tier 3" sites currently have so little value to advertisers they generally sell on a "Run of Network" basis—meaning that the advertising is not contextually targeted but simply displayed across the websites participating in an ad network, or to broad categories of site subject matter.[61]

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56. Beales *supra* note 18 at 13.

57. *Id*.

58. 24/7 Real Media, *Quarterly Behavioral Targeting Research Report*, Apr. 2005, http://www.marketingvox.com/behavioral_media_study_shows_largest_benefits_go_to_publishers-018498/.

59. *Id*.

60. *Id*.

61. 24/7 Real Media, *Quarterly Behavioral Targeting Research Report*, Third Quarter 2005, at 4.

Although lower tier sites do not have valuable ad inventory, they may be valuable to users. Examples of such content would include news that is unrelated to the products users are interested in, minority or niche-interest content, and non-commercial content such as news and commentary. Without advertising this content may disappear or be amalgamated into larger providers. Behavioral targeting allows these websites to increase their revenue per user to levels similar to larger players, and possibly above. Ad networks are already serving this "long tail" of third tier websites (as evidenced by the fact that they control 80% of ad inventory but only 30% of display ad revenue).[62] Thus, these sites already have a relationship with the most likely providers of behavioral targeting.

Increases in revenue may confer disproportionately large benefits on publishers in the Internet's Long Tail because many such publishers rely on advertising revenue to pay the basic expenses of operating websites, such as hosting, maintenance and design costs. Small increases in revenue for sites run by amateurs may determine whether a site operator must subsidize such costs out of personal income, and therefore whether operating such sites can be sustained.

VII. Increased Effectiveness of Advertising

While advertising plays a critical role in funding the speech of others, it is itself an important type of speech that communicates relevant information to consumers. As Nobel laureate economist George Stigler pointed out in his now legendary 1961 article on the economics of information, advertising is "an immensely powerful instrument for the elimination of ignorance."[63] As advertising expert John E. Calfee has argued, "advertising has an unsuspected power to improve consumer welfare" since it "is an efficient and sometimes irreplaceable mechanism for bringing consumers information that would otherwise languish on the sidelines."[64] More importantly, Calfee argues:

> Advertising's promise of more and better information also generates ripple effects in the market. These include enhanced incentives to create new information and develop better products. Theoretical and empirical research has demonstrated what generations of astute observers had known intuitively, that markets with advertising are far superior to markets without advertising.[65]

The increased ability to match the right audience with the right message made possible by better targeting creates new economic value that is split between advertisers and publishers. Advertisers get more for their money, and may decide to increase overall online ad spending.

Measuring the precise impact on an advertiser's Return on Investment (ROI) from better targeting is difficult. The higher click-through and conversion rates mentioned above provide a

62. Beales *supra* note 18 at 11.
63. George Stigler, *The Economics of Information*, 69 Journal of Political Economy 3, June 1961, at 213.
64. Calfee, *Fear of Persuasion*, supra note 29at 96 .
65. *Id.*

useful starting point (as well as indicating the value consumers place on more relevant advertising). One advertising researcher has suggested "a rough rule-of-thumb of doubled effectiveness" for behaviorally targeted ads.[66] The actual increase will vary from advertiser to advertiser but behavioral targeting can clearly benefit advertisers substantially. This, in turn, can benefit consumers. In First Amendment cases the courts distinguish between commercial advertising (to sell a product or service) and non-commercial advertising (all other messages). Economic evidence finds that consumers benefit from more effective speech of *both* kinds.[67]

A. Improved Commercial Advertising

Increasing the effectiveness of commercial advertising benefits consumers by lowering the ultimate prices of goods and services across the economy and increasing their quality in at least four ways.

1. Making Markets More Competitive

A survey of the benefits of advertising conducted in 1990 by Noble Prize-winning economists Kenneth J. Arrow and George G. Stigler concluded that:

> Advertising is a powerful tool of competition. It provides valuable information about products and services in an efficient and cost-effective manner. In this way advertising helps the economy to function smoothly—it keeps prices low and facilitates the entry of new products and new firms into the market. [68]

In a major study of the market for eyeglasses in 1972, when some states restricted advertising, the economist Lee Benham found that "advertising restrictions in the market increase the prices paid by 24 percent to more than 100 percent."[69] Numerous studies have also noted the benefits of advertising to competition and de-concentration, finding that advertising lowers barriers to entry in markets and reduces prices.[70]

Contrary to previous assumptions that "advertising was synonymous with the absence of competition," Stigler and Arrow concluded that, "advertising generally promotes entry and expansion by enabling new or small firms to inform customers efficiently about their products."[71]

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66. Hallerman, *supra* note 20 at 6 (quoting Tracy Tutten).

67. *See generally* Ronald Coase, *Advertising and Free Speech*, 6 Jrnl of Legal Studies 1 (1977).

68. Kenneth J. Arrow & George J. Stigler, Lexecon Inc., *Economic Analysis of Proposed Changes in the Tax Treatment of Advertising Expenditures*, Aug. 1990.

69. L. Benham, *The Effect of Advertising on the Price of Eyeglasses*, 15, Journal of Law and Economics 337 (1972).

70. *See, e.g.,* Lynk, Information, *Advertising, and the Structure of the Market*, 54 Journal of Business 271 (1981); Gomes, *The Competitive and Anti-Competitive Theories of Advertising: An Empirical Analysis*, 18 Journal of Applied Economics 599 (1986); Kessides, *Advertising, Sunk Costs and Barriers to Entry*, 68 Review of Economics and Statistics 84 (1986); Eckard, *Advertising, Concetration Changes, and Consumer Welfare*, 70 Review of Economics and Statistics 340 (1988)

71. *See* Arrow & Stigler *supra* note 68 at 17.

2. Increased Innovation & New Products

Stigler and Arrow also concluded that advertising is particularly to benefit society by promoting new products because advertising "promotes not only the firm that does the advertising, but the industry in which that firm participates as well."[72]

3. Lowering Search Costs

Economists have long recognized that "search costs" (time, effort and money spent on making decisions about purchases) are an important part of the total effective prices to consumers. More effective advertising makes it easier for consumers to find products and services.[73]

Behavioral targeting can increase the responsiveness of Internet advertising to what consumers are *literally* searching for online by allowing publishers to sell advertising based on searches conducted by users on search engines run by the same ad network that sells ads on that publisher's webpage. Yahoo! has pioneered precisely this kind of behavioral targeting,[74] which promises to raise display ad revenue while also increasing advertisers' return on investment.

4. Reducing Advertising Costs

As noted above, while better targeted advertising is likely to better align the production of content with the preferences of users, it may also cause some advertisers to reduce advertising spending because they can achieve the same results with less spending. To this extent, those advertisers costs of providing goods to consumers would fall, leading to a reduction in consumer prices for those goods.

B. Improved Non-Commercial Advertising

Non-commercial advertising represents a small but important share of all advertising, both offline and online. On the Internet, just as with traditional media like television and newspapers, advertising is used by political, non-profit, religious, civic, educational and governmental organizations to spread their message, rally volunteers, recruit donors and otherwise influence public opinion and build communities both online and offline:

> [S]marter advertising isn't just about selling products or services. It is ultimately about making *all* kinds of speech more cost-effective. The ability to "target" listeners more narrowly also increases the ability of political and other not-for-profit speakers to communicate their messages. In short, smarter advertising means more voices, more choices, and more speech.[75]

Internet advertising offers non-commercial advertisers a much more powerful platform for their speech—especially to niche audiences. While the concept of user-generated content has

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72. *Id*.

73. *See id*. at 11; Stigler, *The Economics of Information*, 69 Journal of Political Economy 213 (1961).

74. *See* Stephen Shankland*, Yahoo now targets ads based on search behavior*, CNET News, Feb. 24, 2009, http://news.cnet.com/8301-1023_3-10170725-93.html.

75. *Principles to Guide the Debate*, *supra* note 1 at 4.

become a cultural commonplace, the "participatory Web" (Web 2.0) also allows the creation of what Tracy Tuten in *Advertising 2.0* calls "Citizen Advertising" or "Consumer Generated Advertising." Tuten explains how commercial advertisers can make use of this advertising to better reach and build loyalty among consumers. But the tools that make Citizen Advertising possible also create enormous opportunities for non-commercial speakers to communicate their message.

The Internet has profoundly democratized advertising by providing a more accessible interface: *Anyone* can set up an account on a leading ad network and begin running ads in less than an hour. By reducing transaction costs, the Internet has essentially lowered barriers such that speakers who might never have thought about advertising in traditional media can easily begin running targeted advertisements on as large or as small a scale as they might like.

Consumer data can enhance the effectiveness of advertising for non-commercial speakers for the same reasons it does so for commercial speakers: making it easier to build an audience of listeners likely to be sympathetic to a message. Beyond the reasons mentioned above, data collection about users can be particularly important to non-commercial advertisers for several reasons, such as that:

- Data about how users respond to advertised offers can provide advertisers with nearly-real-time data about the effectiveness of advertising. Behavioral data can provide invaluable market research about correlations of user interests. Both could be especially important in fast-moving political campaigns, which closely scrutinize public opinion on a microscopic level.
- Data about users' locations is essential for certain kinds of non-commercial advertising. As former House Speaker Tip O'Neill famously said "All politics is local."[76] The same is true for most kinds of non-commercial activity, which tends to be focused on real communities in the real world. Because traditional media are tied to geography, advertisers can simply chose which newspapers, TV stations or cable systems to advertise in if they want to reach a specific market. But because the Internet is a ubiquitous global medium, unless advertisers can "geo-target" their message, the Internet may not be useful to them. Geo-targeting allows political campaigns to target specific states and districts, and all sorts of other non-profit organizations speak directly to their communities. Location-based mobile services could even allow "hyper-local" targeting on the level of neighborhoods—the "grassroots" of civil society.
- Internet ads can support viral marketing efforts driven by social networks and other online communities that revolve around user identity. For example, on social networks, ads can tell users which friends of theirs already support the organization or cause (*e.g.,* by being a member of the organization's Facebook Page), and also allow users to show support for the organization by updating the user's friends on social networks to let them know that they have become a fan of the organization (*e.g.,* on the Facebook News Feed), made a donation (*e.g.,* through the Causes application on Facebook), etc. Users can take action within the ad itself. For example, Facebook ads will let users

76. O'Neill (D-MA) was Speaker of the U.S. House of Representatives from 1977 to 1987.

> "Become a fan" of an organization's Facebook Page within the ad, which allows the user to receive updates from the organization. As Facebook is rumored to be planning to begin offering its ads across the web like a traditional ad network, but with the benefit of greater user information,[77] such "social advertisements" could quickly become commonplace as display ads on websites across the Internet. When they do, non-commercial speakers will certainly use them.

These examples provide some indication of how non-commercial speakers can use Internet advertising to more effectively spread their message as citizens, voters and activists, and also why they could benefit from the enhanced targeting made possible by data collection. Non-commercial advertising and the potential effects of privacy regulations on non-commercial speech have received scant attention in the broader debate about online privacy. Yet these questions are profoundly important. While the First Amendment recognizes commercial advertising as speech and offers it some protection, it offers greater protection for non-commercial speech, applying a higher standard of scrutiny on regulations that affect non-commercial speech.

Past efforts to regulate the Internet have attempted to avoid burdening non-commercial speech by simply exempting non-commercial websites (*i.e.*, sites operated not-for-profit) from the scope of their rules. For example, the Children's Online Privacy Act (COPPA) requires verifiable parental consent for users of most sites directed at children and the Child Online Protection Act would have (had it not been struck down by the courts as unconstitutional) required age verification before allowing access to content deemed harmful to minors.[78] But both laws exempted non-commercial sites from their requirements. Similarly, the FTC's Do Not Call registry allows Americans to opt-in to a blacklist of numbers commercial telemarketers are not allowed to call, but does not apply to non-commercial telemarketers.[79] One problem with broad restrictions on online data collection is that non-commercial targeted advertising cannot be easily insulated from the effects of such restrictions: If restrictions are imposed on all data collection, they will significantly burden the behavioral targeting of non-commercial speech because the same advertising networks are used by both commercial and non-commercial advertisers. Even if data collection were heavily restricted for commercial purposes (*e.g.,* by requiring an opt-in by the user prior to data collection) but not for non-commercial purposes, the practical consequence of the law might be the same if the platforms that allow targeted advertising are driven out of business. This is particularly true of behavioral advertising, which requires a large network to create profiles of users' interests across multiple sites.

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77. Fred Vogelstein, *Great Wall of Facebook: The Social Network's Plan to Dominate the Internet -- and Keep Google Out*, Wired, June 22, 2009, http://www.wired.com/techbiz/it/magazine/17-07/ff_facebookwall?currentPage=all.

78. *See generally* 15 U.S.C. §§ 6501–6506. *See* Berin Szoka & Adam Thierer, The Progress & Freedom Foundation, *COPPA 2.0: The New Battle over Privacy, Age Verification, Online Safety & Free Speech*, Progress on Point 16.11, May 2009, http://pff.org/issues-pubs/pops/2009/pop16.11-COPPA-and-age-verification.pdf.

79. *See, e.g.*, https://www.donotcall.gov/faq/faqbusiness.aspx#who.

VIII. Policy Recommendations

Using data to improve the effectiveness of advertising creates real benefits for consumers. Estimates of the benefits to consumer, publishers, and advertisers from better ad-targeting are significant, but also uncertain. New technologies make it possible to deliver more relevant content to users, and to increase the informational benefits of advertising. By reducing the cost of delivering information to users, better targeted ads—especially behavioral targeting—increase the efficiency of advertising; these productivity gains may be used to reduce the cost of existing goods and services, or to generate new "free" (ad-supported) online content and services. The way in which these costs savings are used will depend on the evolution of the still-nascent online economy—but either way, consumers benefit.

Many of the benefits of better targeting online advertising are diffuse: Even if online publishers earned $10 per thousand impressions (roughly the CPM rate for cable TV),[80] the publisher would still earn just a penny per view. In fact, non-premium publishers today earn just fractions of a cent per view. While these transactions are not individually valuable, collectively their economic benefits are significant. Polls indicate that 23% of people will not pick up a penny on the sidewalk but the total value of all the small change on sidewalks, behind sofas, and in change jars has been estimated at $10.5 billion.[81] In other words, the ability to collect diffuse benefits is itself valuable. Some of the regulatory solutions proposed, such as requiring opt-in before permitting the collection of data from users, would raise the cost to users perhaps not significantly, but enough that many users would not "bend down to pick up the penny."

Against these uncertain benefits is an equally uncertain cost: users must sacrifice some privacy. While users express a clear preference for privacy when surveyed, individuals frequently place low value on this preference when making trade-offs in economic experiments.[82] Moreover, consumers vary widely in their attitudes towards the inherently nebulous concept of privacy, as Cato Institute scholar Jim Harper has explained:

> Privacy is a state of affairs or condition having to do with the amount of personal information about individuals that is known to others. People maintain privacy by controlling who receives information about them and on what terms. Privacy is the subjective condition that people experience when they have power to control information about themselves and when they exercise that power consistent with their interests and values…. An important conclusion flows from the observation that privacy is a subjective condition: government regulation in

80. Beales *supra* note 18 at 17.

81. Barbara Hagenbaugh, *A penny saved could become a penny spurned*, USA Today, July 7, 2006, http://www.usatoday.com/money/2006-07-06-penny-usat_x.htm.

82. *See, e.g.*, Il-Horn Hann, Kai-Lung Hui, Tom S. Lee, and I.P.L. Png, *The Value of Online Information Privacy: An Empirical Investigation*, AEI-BROOKINGS Joint Center For Regulatory Studies (2003), http://www.aei-brookings.org/admin/pdffiles/php2b.pdf; HH Teo, SYT Lee, *The Value Of Privacy Assurance: An Exploratory Field Experiment*, 31 MIS Quarterly 1, at 19-33 (2007).

> the name of privacy is based only on politicians' and bureaucrats' guesses about what "privacy" should look like.[83]

In the real world, the "value exchange" of online advertising is an implicit *quid pro quo*: Users receive the benefits of online advertising whether or not they see ads or opt-out of the data collection that makes advertising valuable. Privacy-sensitive users are free to block tracking cookies and/or exercise other opt-out options provided by the behavioral targeting industry.[84] In a more extreme case, users can block all ads using browser plug-ins like AdBlock Plus.[85] ***Under the no-cost opt-out model, these users free ride off the value of advertising created by users who do not block tracking cookies or targeted ads***. If the number of users opting out of data collection or seeing ads remains small then a website may still be able to glean sufficient information about the likely interests of average visitors to serve more relevant advertising even to the minority of users who opt out, although that advertising would not be as relevant as behaviorally targeted advertising. Of course, when ads are completely blocked, the user is completely "free riding" off advertising served to others. Anything that drives the opt-out rate above some "acceptable loss threshold"—whether a restrictive opt-in mandate or aggressive promotion of a one-size-fits-all opt-out header by which users can set their browsers to tell websites not to send tracking cookies—will likely require that today's implicit *quid pro quo* may become explicit: Websites and ad networks will have to find increasingly creative ways to grant access to certain content and services for users who do *not* block ads or the tracking that makes ad space more valuable.

There are user benefits to such an explicit trade-off but also significant costs. Increasing the proportion of users who opt out is only "user empowerment" (*i.e.*, enabling users to more easily implement their own subjective privacy preferences in trade-offs with other competing values) if this is what users would have chosen with no costs to switching. When defaults are important, selecting the most restrictive privacy setting as the default may result in more users selecting a more costly privacy setting than they might prefer operating on a more costly privacy setting than they might prefer if they directly bore, and were aware of, all of the costs of privacy. Thus, defaults matter significantly to the rate of participation; where participation has the potential to create as much economic value as does better targeting of advertising, restrictive defaults have huge costs for consumers. Imposing such defaults cannot be

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83. Jim Harper, *Understanding Privacy – and the Real Threats to It*, Cato Institute Policy Analysis No. 520, Aug. 4, 2004, http://www.cato.org/pub_display.php?pub_id=1652. "Debates about online privacy often seem to assume relatively homogeneous privacy preferences among Internet users. But the reality is that users vary widely, with many people demonstrating that they just don't care who sees what they do, post or say online. Attitudes vary from application to application, of course, but that's precisely the point: While many reflexively talk about the 'importance of privacy' as if a monolith of users held a single opinion, no clear consensus exists for all users, all applications and all situations." Berin Szoka, *A Wide Diversity of Consumer Attitudes about Online Privacy*, PFF Blog, Oct. 30, 2008, http://blog.pff.org/archives/2008/10/a_wide_diversit.html.

84. Network Advertising Initiative, Opt Out of Behavioral Advertising, http://www.networkadvertising.org/managing/opt_out.asp (last accessed Nov. 6, 2009).

85. Adam Thierer & Berin Szoka, The Progress & Freedom Foundation, *Privacy Solution Series: Part 2 – Adblock Plus*, PFF Blog, Sept. 8, 2008, http://blog.pff.org/archives/2008/09/privacy_solutio_1.html.

considered mere "nudges" under the "libertarian paternalism" proposed by Cass Sunstein and Peter Thaler because the costs of restrictive defaults are significant and the "true" preferences of users are unclear.[86]

Policymakers faced with the challenge of balancing privacy concerns with the free speech facilitated by advertising should avoid imposing rigid regulatory defaults and focus on promoting the development of solutions that maximize the ability of users to make real, incremental trade-offs. Making users more aware of data collection practices, and making it easier for them to express their privacy preferences would empower users to protect their own privacy:

> Truly privacy sensitive users should be free to opt out of whatever tracking they find objectionable—but not without a cost: The less data they agree to share, the less content and services they can fairly expect to receive for free… Each content creator and service provider must be "free to strike whatever balance it deems appropriate." This freedom is vital to the Internet's future because the easier we make it for some users to get "something for nothing," the smaller will be the economic base for the content and services everyone else takes for granted.[87]

There are no easy answers or free lunches to be had. User empowerment will not be provided by costly or restrictive defaults, but by policies that better reflect the preferences of users and, whenever possible, give users the freedom to make decisions for themselves about the trade-offs highlighted here.

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86. "A nudge," as defined by Sunstein and Thaler, "is any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates." Richard H. Thaler, Cass R. Sunstein**,** *Nudge: Improving Decisions about Health, Wealth, and Happiness* (2008) at 5. Their "Libertarian paternalism is a relatively weak, soft, and nonintrusive type of paternalism because choices are not blocked, fenced off, or significantly burdened." *Id*. at 6. *See also* Adam Thierer & Berin Szoka, *What Unites Advocates of Speech Controls & Privacy Regulation?*, Progress on Point 16.19, Aug. 2009, www.pff.org/issues-pubs/pops/2009/pop16.19-unites-speech-and-privacy-reg-advocates.pdf.

87. Szoka & Thierer (Apr. 2009), *supra* note 1.

Related PFF Publications

- *Benefits of Online Advertising*, Berin Szoka, Mark Adams, Howard Beales, Thomas Lenard, Jules Polonetsky, PFF Capitol Hill Briefing, July 2009.
- *What Unites Advocates of Speech Controls & Privacy Regulation?*, Adam Thierer & Berin Szoka, Progress on Point 16.19, Aug. 2009.
- *Behavioral Advertising Industry Practices Hearing: Some Issues that Need to be Discussed*, Berin Szoka & Adam Thierer, PFF Blog, June 18, 2009.
- *Google's Ad Preference Manager: One Small Step for Google, One Giant Leap for Privacy*, Berin Szoka, Progress Snapshot 5.2, March 2009.
- *Targeted Online Advertising: What's the Harm & Where Are We Heading?*, Berin Szoka & Adam Thierer, Progress on Point 16.2, April 2009.
- *Online Advertising & User Privacy: Principles to Guide the Debate*, Berin Szoka & Adam Thierer, Progress Snapshot 4.19, Sept. 2008.
- *Freedom of Speech & Information Privacy: The Troubling Implications of a Right to Stop People from Talking About You*, Eugene Volokh, Progress on Point 7.15, Oct. 2000.
- *Writ of Certiorari of PFF*, Amicus Brief, U.S. Supreme Court in the matter of *Trans Union v. FTC*, by Randy May, Feb. 22, 2002.
- *Privacy and the Commercial Use of Personal Information*, Thomas Lenard & Paul Rubin, 2002.

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Regulating Online Advertising: What Will it Mean for Consumers, Culture & Journalism?*

Berin Szoka, Moderator
Mark Adams
Howard Beales
Thomas Lenard
Jules Polonetsky **

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I. Introductions

Berin Szoka, Fellow and Director, Center for Internet Freedom, The Progress & Freedom Foundation: Thank you all for coming today. I am Berin Szoka. I am a Senior Fellow at The Progress & Freedom Foundation and Director of our Center for Internet Freedom.

We are going to have a pretty freewheeling discussion today. There will be no PowerPoints except for a few slides, and we are going to make sure to take questions from the audience and get you all out of here at a decent hour.

I want to get started by introducing my colleague Adam Thierer in the back, who I've been working on this subject with for many months, and Adam is going to be taking questions from the audience when we're done with this event.

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* This is an edited transcript of a PFF Congressional Seminar that took place on July 10, 2009 in Washington, DC. The edited transcript has not been reviewed by the program participants. An audio recording is available at www.pff.org/events/pastevents/071009-regulating-online-advertising.asp.

** Speaker biographies are included at the end of this transcript.

If you haven't picked up a glossary, there are still copies over here. We've tried to explain all of the basic key terms people might use in our conversation and tried to keep jargon to a minimum.

So, I want to introduce my colleagues and say a few brief words and then get right into the discussion. I have today with me Tom Lenard, formerly of PFF, and now President of the Technology Policy Institute. Tom has written extensively on the economics of advertising and privacy, including an excellent book on this subject when he was at PFF and more recently a paper entitled "In Defense of Data."

Sitting to his right is Howard Beales, an Associate Professor of Management and Public Policy at George Washington University. He served for three or four years as the Director of the Bureau of Consumer Protection at the Federal Trade Commission, and has also written extensively about the economics of advertising.

Just to my left is Jules Polonetsky. Jules is currently the Co-Chair and Director of the Future of Privacy Forum and has been doing great work convening privacy advocates to talk about solutions that the power users without breaking advertising.

He brings great experience to our conversation, having been former Chief Privacy Officer for both AOL and DoubleClick, which, as you probably know, is now Google's ad network.

And then at the extreme left of our conversation, so to speak, is Mark Adams. I assure you he worked for the Tory Party in Britain, so he's not, in fact, at the extreme left. He's currently a visiting fellow here at PFF, and is published on a variety of subjects and has been working with me on economics in online advertising.

And you'll see there's a working paper. We put copies out if you're interested. We'd certainly appreciate any feedback that you might have.

So, before getting into conversation, I just want to say a few quick words about our topic today. You've probably all heard about the debate about online privacy and data collection. For the last 10 years the online advertising industry has been operating under a system of self regulation.

It's enforced by the FTC's existing authority to punish unfair and deceptive trade practices, but there have been many concerns about online privacy and many proposals about having the FTC do more for instituting legislation in Congress.

In February the FTC released much awaited voluntary guidelines for the industry. Commissioner Lebowitz declared rather ominously when those guidelines came out, if the industry didn't clean up its act that a day of reckoning would be approaching.

So, earlier this month the online ad industry, including folks at the Interactive Advertising Bureau represented here today and many other trade associations released a new set of regulatory principles to increase protection for consumers and, of course, we still have legislation pending or about to be introduced on the hill.

Unlike Mark Antony at Caesar's funeral, we're not here today to bury online advertising but to praise it. This is a rare event for us because we normally really try to engender debate, but this is a debate that most people have really only heard one side of. There's been little conversation about the benefits of online advertising and advertising generally.

So, today we are here just to talk that through and explain the economics of it. Why is it that online advertising and advertising generally can benefit consumers and how? So, before I turn it over to my colleagues to get started, I want to give you just a few numbers to frame our conversation today.

As I said, there are just a few slides. The first slide shows you advertising spending, which Walt Mossberg at the Wall Street Journal has called the mother's milk of the media. Advertising spending, generally, is shrinking and shrinking at a pretty considerable rate. In fact, one analyst that covers the industry has called this the perfect storm of concurrent technological, economic and societal trends that threaten to reduce the funding on which media in this country relies.

In total, we expect that total advertising will fall by about 13 percent from 2007 in 2012, which is really a pretty significant number. In some sectors the drop will be worse. Newspapers are expected to lose anywhere between 25 and nearly half of their revenue, so this is a major transition in the media in this country.

It's a moment and which we need to talk about online advertising and what online advertising can do to help fill that gap as media moves increasingly to digital distribution.

Very quickly, I just want to give you a sense of how fast online advertising has been growing. Over the last 12 years it grew at about 31 percent compounded annual rate, which is pretty significant.

That rate of growth is expected to shrink considerably to about 10 percent or less over the next few years, and the growth rate will be different across the different sectors of the online advertising industry. But, it is one bright spot in advertising generally.

II. Discussion

Berin Szoka: So having said all that, I want to turn this over first to Howard to tell us about advertising generally and why online advertising is so important. Howard?

Howard Beales, Associate Professor, Department of Strategic Management and Public Policy, George Washington University: Thanks. I want to be just very brief here and talk about the major components of the online advertising market, because there are really two different segments of it. They are sold in different ways and in different locations.

One kind of online advertising is search advertising. This is advertising that is based on key words that you enter in a search. It's about 45 percent of total revenue, for total online advertising revenue. That's search advertising. It is usually sold on a cost per click basis which means that if nobody clicks through the ad, whoever put out the ad doesn't get paid.

The search engine that hosts the advertising will obviously consider what different advertisers bid for key words, and there's an auction market where people bid for how much they are willing to pay to have their advertisement associated with a particular key word.

But, the search platform is also going to consider what it knows about behavior and the likelihood that a particular consumer will actually click through on that ad, because what it cares about is if somebody clicks. That's what advertisers bid.

But, it doesn't get paid at all unless somebody clicks. So, it uses whatever it knows about the particular consumer and their search history to make a prediction about the likelihood of a click and then, it uses that to serve the advertising or choose which advertisement to serve.

The other major component of the online advertising market is display advertising. This is things like banner advertising. More recently, it's rich media and digital video that are also part of the display advertising market. This was about 31 percent of revenue in 2008, and it's usually sold on a different basis. It's sold on a cost per thousand views basis.

It doesn't depend on clicks. It just depends on how many people are out there that actually see the advertisement. There are variations on those pricing schemes, but that's sort of the main way that display advertising is sold.

The other feature about the online advertising market is that the revenue is extremely concentrated. The top 10 websites get 72 percent of the total online advertising revenues. That doesn't leave a whole lot for everybody else. The top 50 websites get 91 percent of online advertising revenue.

There is a small slice of the online dollar that's spread out across what's commonly called the long tail of websites, with relatively small audiences and relatively low advertising revenue. If advertising is going to support those kinds of websites, they need to figure out ways to raise more money from the advertising availabilities in order to make it possible.

One of the ways that happens is through advertising networks and Jules is going to talk about that advertising.

Berin Szoka: Jules is the expert on this having been at one of the major advertising networks since its birth. Jules?

Jules Polonetsky, Co-Chair & Director, Future of Privacy Forum: So thanks. I think you'll find that I'm perhaps a little less allergic to the idea of regulation or legislation than some of my colleagues, and that's not just because I am no longer earn a living that is based on ad revenue.

But, I recall the early days of the beginning of ad networks, and I remember visiting folk at the FTC and on The Hill. Going through some of these early terminologies, and cookies, and web beacons, and networks and a decade ago, I think there was an awful lot of confusion.

And frankly, I think easily rushing in probably would've caused a lot of havoc. I think today, the FTC staff, and a lot of The Hill staff, who have been working on this for years have a far deeper view and understanding.

That being said, this isn't something, whether its self regulation or legislation, that's easy to do. A lot of the terminology and the business models are still confusing, and I think you certainly can see things that could cause more harm than good.

One of the interesting things to think about is very early on. There are many people that think that the first ad that was actually placed was an AT&T ad placed on a wired site. And it very was a very simple, "Put up my name and my product here. Here's what it looks like. Make it red and put it on top of your page."

And very quickly, websites realized reporting back and actually telling the advertiser, "OK, it was seen 1,000 times", wasn't something easy for them to do. The tools weren't there. The advertiser would say, "Well, that doesn't seem to be working. No one's clicking. Is anyone seeing it? Here's another one."

And that business started becoming fairly complicated. Companies started to focus on doing just that part of the equation. And so, instead of just having a couple of sales staff - you didn't have the money to pay a sales staff as the industry was just beginning - here was somebody who would take that little banner, that little image, and insert it on your site.

One of the great values of this sort of network infrastructure, is that anybody can actually handle any piece of your site whether it's coming from you or someone else. But, I don't want to use the term "third party" because right away people get very confused, "Well, it means someone else." Right? Well, it doesn't always mean someone else. It might just be someone who's providing this for me.

Technically it might be very obvious that it's someone else because it's a different server. Maybe it's a different company. The very interesting thing about this is that some of the vendors, who might actually be completely under your control, are visible online.

One of the criticisms sometimes is that, "Oh, this is all invisible to the user." And of course, to typical users, it may be. But, to some of the folks who are a bit more technical, or the experts, or the reporters, you can actually end up seeing a lot more of the architecture of where things go, and where browsers go and where data goes than in the offline world where you walk and you transact.

And you don't necessarily understand what actually happens once you handed over your card, or you handed over your data where, who, and where the architecture behind it is.

So, very early on you had companies who simply focused on putting that banner ad on the site, and using the consistent technology so if you told an advertiser, "Hey you owe me $100. You owe me $1,000. The ad was displayed 1,000 times and Oh, I used Dart, the DoubleClick technology," that you recognize because it works in a certain way.

So, you can trust the numbers, as opposed to somebody else promised your ad showed one million times because they think they had a lot of page views. No one's ever clicked to your site. You don't know what's going on. You can't figure it out.

And so, very early on you had people outsourcing the delivery of the ad. Take another step. You saw the concentration today. Early on, the concentration was even more profound, right? We didn't have all these bloggers who were just putting up some code and getting some ads.

You really had lots and lots of the revenue concentrated with the AOL's and, the MSN's and Yahoo. Google was a small player in those early days.

And so, if you were a big advertiser, if you were Coke or Proctor & Gamble, if you were spending money online you spent it with those guys, because they were the only ones who could give you one million users or two million users. Even if you wanted to, you couldn't go to twenty thousand little sites if you wanted to support little publishers, there was no effective way.

And frankly, they didn't have salespeople. It was somebody like hamsterdance.com, somebody who's got some hamsters, and he's got his video camera trained on some hamsters, and people look at it and somehow their ads on the site. Today, people are making money with that or with other entertaining content.

And so, the ad networks of the world innovated, and they said, "You know what? How about we go ahead and we sign up thousands of sites, and then you know what? We might buy those sites. No, you know what? We're not going to buy them. Let them continue publishing, and we will simply hire the salespeople. And we'll handle the technology that places the ad on their site.

"But, we're going to treat them like one bit site, so that when we knock on the door of say, Coke or Proctor & Gamble, and we say 'Hey, you're buying at AOL, and at MSN, and Yahoo, and some of those publishers. How about you spend some money with us? And we also have an auto area.

"And instead of it being Yahoo autos or AOL autos, its eighteen different auto sites. It's a roll up of Auto by Kelly, Kelly Bluebook, and autos.com, or whatever the different brands are. And we're just as big as them. So, how about spending some of this money with us?"

And so right away, before we even talk about behavioral targeting, or all kinds of robust data use, just think about what has to happen for that ad network to be able to treat two thousand sites, rolling them up with an auto section, and a sports section and different categories just like the big portals had.

You needed to use one technology; you needed to deliver the ads across all the sites.

And just like those big portals could say to you, "We'll show the ad just one million times to each individual user, so that we'll show it just three times to each user. You don't want to show it over and over. Certainly, the big portals can do that because they're setting a cookie and recognizing the user. We're doing the same thing, except now it's a third party cookie."

It's the ad network's cookie treating this big collection of sites as one big entity and trying to, in the same way that the big portals are able to see or recognize the user across sites by using the

cookie and by using some of the targeting that comes along with it, doing that. So, a little bit of the evolution.

Berin Szoka: So, Jules you're basically explaining that the ad networks evolved to build certain needs for small sites, and to make it possible for them all to receive advertising much as if they were larger sites, but, that it also created a certain amount of data collection in order to make that system work.

Jules Polonetsky: That's exactly right. And just think about it as well. If you want to be able to tell that advertiser, again without getting into even the more robust stuff, if you want to be able to tell that advertiser, "Here's how many times your ad was seen or clicked on when you bought." They don't want eight thousand little reports. They want one consistent report.

Another set of companies called "ad delivery companies" started evolving to simply serve the ads. These are folks who work for advertisers or for agencies, and their job is to find Coke and [working for Coke] I want to advertise on all those sites. And I don't want a report from Hamsterdance saying, "Here's how I count the page views and the banners, and here's how I count them."

"I actually want to be able to compare all my ad serving across all my different site, so that I might use an ad serving company just on my behalf as an advertiser or as an agency to use this activity across a whole range of sites."

Berin Szoka: Before we get into data collection, Tom let me bring you in here. Can you talk a little bit about why this is important for maybe reducing transaction costs?

Thomas Lenard, President & Senior Fellow, Technology Policy Institute: Obviously, the ad networks make it possible for lots of small players to behave as if theirs is a similarly integrated firm and to be one network to compete with the larger firms which are totally integrated.

And this obviously is very important because all this information, all this advertising is the lifeblood of the Internet and supports all these services ranging from search engines, to email, to newspapers. But, in particular in relation to your question, lots of smaller operations.

So, on the one hand, you need the revenues to support the services. On the other hand, the Internet is a particularly attractive place for advertising, specifically because of the ability to more easily target prospective purchasers more accurately which lowers the cost.

Berin Szoka: So, before we get into benefits to users, we talked about one kind of data collection which is the kind of data collection that sites are currently doing today when they give you an ad that is contextually targeted. It's based on maybe a search that you did or keywords that are on the page.

But that's not entirely what the debate in Washington has been about. Most of the people in Washington are talking about behavioral targeting. So Jules, What's the difference and why is behaviorally targeted advertising maybe more sensitive?

Jules Polonetsky: Well, I think we miss the ball if we solely focus on behavioral. It gets so much time and attention. It is a significant but not a huge share of most of the online data use. We ought to sit back a little bit when we start thinking about what are people doing to try to make the ads that appear on the page more relevant or smarter.

And then what are the kinds of things that if you are doing that and tailoring somebody's experience you might do to make that a little bit more of a feature, right?

Amazon does an awful lot to decide what books to show me. My God, books, we're really sensitive about books being tracked, right. The librarians will fight to the death not to divulge people's viewing habits but we're all kind of like, I get it and I even get that you are making money tracking me and everybody else.

But we get that there is some benefit to us. So I think the challenge is since what most of the folks are doing whether it is behavioral, I'll come to that, or appending other data they may have, all the other interesting things that we just scratch the surface of.

If at the end of the day what someone is doing is I'm trying to make this better. The opportunity is I think for the industry is to say, "Sure we are. We're proud that we are giving you a better experience. Here's how we're doing it."

Cracking that nut is something that I think folks have been struggling with. OK, so let's come back to behavioral.

So, we talked about all these different ways these ads are served and again, the basics of serving it. But, the data being collected is happening in almost the same way, whether or not we're talking about behavioral. Lots of fussing is going around - are you collecting it or not?

But the basic infrastructure, the ad being served, the cookie being set, the third party helping enable it in large part results in this data being collecting and sitting in a log file [is all the same].

Now the question is, who does it belong to and are the sites giving permission to an ad network? Let's take those little sites again that are rolled up in that big ad network.

Are they giving permission to the network? Are they saying: look do you have that data because you are serving my ads. You also are serving ads for lots of other people. Go ahead; use the fact that you can recognize that user, because your technology and your cookies are being set at all these sites.

So you could go in the evening and mine those log files that show that that ad and that cookie and that site are being recorded in lots and lots of different places.

Berin Szoka: So that's the key to behavioral targeting. You are basically compiling a profile if you will of what that cookie has visited, not of that person specifically, but the browser that has that cookie in it has visited the following sites and that suggests that that person maybe is going to be interested in things that are relevant to those terms.

OK. So I want to talk about the benefits here. But I wanted Jules to really lay out how this all works. So, Howard, before I bring in Tom and Mark, can you tell us why we would want behavioral advertising. What does it do for advertisers?

Howard Beales: Well, the key thing for online advertising in general and for its ability to support content, is how much revenue the advertiser can command. There is a substantial difference, depending on how the advertising is sold.

For advertising that is sold by large publishers, big websites like CNN or ESPN that have lots of traffic, the advertising that is sold directly, the display advertising gets $10 to $20 per one thousand viewers. That's a number that is comparable to what broadcast television gets on average, although there are obviously shows that will cost you more than that on television.

For what those same sites sell through ad networks, the cost per thousand is somewhere between 60 cents and a dollar. There's a whole lot of difference in the kind of content that can be funded by advertising that sells for $10 or $20 per thousand views and advertising it sells for less than a buck.

There's just not the same kind of revenue that is available in order to support content or anything else, for that matter.

Thomas Lenard: Let me just ask a question. So the $10 or $20 per thousand viewers on ESPN or CNN is much better targeted than the $10 or $20 per thousand viewers on the broadcast network? Because everybody that is seeing the show is counted on the site you are talking about that ad is just served up to people whose behavior suggests that they would be interested in that ad.

So that reduces the cost to the advertiser substantially, right?

Howard Beales: Well, some of that advertising is sold pretty much the same way that it would be on television. If you are at a sports site, you see the same kinds of advertising that you would see on sports programming on television. It's based on taking an audience that has got something in common, they like sports, and people who like sports like my products so that's where I want to be.

The alternative approach that the networks try to use and some do it based on contextual advertising.

Berin Szoka: Showing an ad, based on keywords on a page.

Thomas Lenard: Either keywords on a page or the nature of the site, assembling different auto sites. What behavioral advertising tries to do is to assemble an audience that meets a different set of criteria.

Rather than take people who have a common interest in a program and then go measure their demographic characteristics to figure out is that the right advertising target for me, behavioral advertising tries to assemble an audience of people who meet a set of characteristics that

aren't any more intrinsically personal than women age 18 to 49 that broadcast advertisers would typically based their targeting on.

But it's a way to try to figure out who your ad is actually going to by assembling an audience of people that are worth more. There's a cartoon from the early days of the Internet in the "New Yorker." The dog is typing at the computer says, the beauty of the Internet is nobody knows you are a dog.

The difficulty in the online advertising market is that there is not a big market for advertising to dogs. And if you can't convince the advertisers that this is an audience that is likely be interested in their product then you are not going to be able to sell that advertisement for very much. That's what's happening right now with the networks.

Behavioral advertising and other ways to target are ways to try to increase that value so that it can hopefully support the kind of content that we would all like to see on the Internet.

Berin Szoka: Before we get into why consumers really care what the bottom line is for each of us, Mark, are there kinds of content online that really are going to benefit more from this than others?

Mark Adams, Visiting Fellow, The Progress & Freedom Foundation: Well, yeah, first of all going back to what Tom said. It's not necessarily cheaper because the CPM is lower. It's because the advertiser is paying for an awful lot of viewers that they don't care about or are not relevant. So it's a lower cost per CPM but not necessarily cheaper.

Berin Szoka: So, maybe it's a great return on their investment, maybe the advertisers get more out of what they are spending.

Mark Adams: Well, specifically with the lower cost per thousand viewers, my point is that it's not cheap. That's just, you are paying less but you are not necessarily paying less per useful viewer.

The place it is really going to make a difference is when you don't have any idea from what the person is viewing what they are interested in. That's true for instance, when I search Google for change in GDP for [the year] 2000, it doesn't know I like pizza.

So when it knows what I have searched for in the past, then it knows how to serve me ads that are relevant to my interests rather than are relevant to what I am looking for at the time. When I'm looking at a site about say, news in Iran, I don't want to buy holidays to Iran.

So, they have to find a way to know what I'm interested in. Video is somewhere where it is really going to make a difference because at the moment we can't search video very easily. We don't know even if a person is watching a video about digital cameras. It might not be obvious to the YouTube or whoever is serving that video that the video is about digital cameras. They might not know.

So they don't know the person's interest. So especially for YouTube, which is a huge loss at the moment for Google, and other video sites are going to be major beneficiaries as are the minority content, as are the non commercial content.

Berin Szoka: So before we get into the bottom line for consumers, it sounds like what is really driving the evolution here of advertising, whether it is behavioral targeting or just trying to collect data to make ads better is great relevance and Tom already mentioned lower transaction costs.

And Tom, do you want to maybe say a word here about the idea that maybe there isn't enough advertising on the Internet?

Thomas Lenard: Actually, I think the issue is not whether there is too much or too little advertising, it's whether there's enough or too much or too little information. Really the whole debate about privacy is a debate about the amount of information on the Internet because privacy at least in the context of the current debate suggests the withholding of information. If you look at this from an economist's point of view that suggest some sort of a market failure, whether there is too much being produced or [too little] is the negative externality.

Markets tend to behave efficiently if all the benefits and costs of the transaction are internalized by the people doing the transactions.

When they are not internalized you have a market failure that in the classic case would be environmental externalities where polluters don't internalize the costs of the pollution. Therefore, there is too much of the polluting good that is produced and that's the rationale for environment regulation.

Berin Szoka: That's probably a good transition here because of course when we are talking about online advertising where we all get great free content and services, whether it's free webmail or calendars or documents or news commentary or software as a service.

And it's advertising that supports all those things but in a way it's a sort of implicit quid pro quo. We go on the Internet. We look at advertising, data is collected. Yeah, that helps improve the value of that advertising. Then we get all this free stuff in return but there is no explicit requirement that we do anything.

We can block ads if we want to. There are tools that let us do that. We can opt-out of tracking. That's really what this privacy is all about. So, users are getting a lot of free stuff and advertising is just trying to come up with a way to fund that.

So this is really where I want to go with this conversation to talk about how consumers really benefit. We already mentioned one important benefit, which is simply more relevant advertising. Tom you just mentioned the essence of this, which is that advertising is information. So when consumers get more relevant advertising, they are getting better information that maybe will help them make decisions more effectively.

But Mark you have looked at some data that actually speaks to how much consumers really value more relevant ads. Can you tell us about what some of the experimental data show us?

Mark Adams: It's very ambiguous. We know certainly that people do value relevancy greatly. We have polling data that says about 85 percent of us really don't like irrelevant advertising. I'm surprised 15 percent of us like irrelevant advertising. Frankly, I'd like to meet these people.

What we know is that consumers do value relevant advertising. They also get turned off by a very, very large amount of advertising. For instance, we tend to ignore email advertising. Most of it, if it doesn't get picked up by our spam filters; we delete it because there's no way of knowing really whether that is relevant to us.

Maybe one in ten thousand emails that I receive really are telling me about fantastic, and I'm not going to suggest what these products might do, but fantastic and useful products that I may wish to buy, but the majority do not. So we ignore them.

Berin Szoka: What Tom has called and discussed is called "ad blindness."

Mark Adams: Exactly, yes. And by giving people a certainty or a higher chance that the advert, sorry, advertisement may be relevant. You have a glossary of terms. You don't have a glossary of Britishisms, so I will try to explain those.

Berin Szoka: But is there evidence that consumers maybe will be more likely to click on more relevant advertising, and then actually make a purpose or do whatever it is that the advertiser wants?

Mark Adams: I can tell you one thing, which is that Google spends a vast amount of time making sure that the adverts they serve are relevant and they believe there is a lot of money in it.

Berin Szoka: Well, since Mark is not giving me the answer that I want Mark to give me, I can tell you the answer. There is some experimental data on this.

Of course, it is hard to generalize but in experiments that have been conducted about behavioral targeting, they seem to indicate that the click through rates, the percentage of users who actually click on ads, will go up anywhere from 300 percent to 700 percent or even 1000 percent.

So again, it's hard to generalize too much, but that gives me a pretty strong indication that users actually like seeing more relevant ads, because they are more likely to click on them.

And they are also more likely to actually make a purchase, which as you will see in your glossary is called "conversion." That's something that can go up as much 30 times.

So I think that that's an important benefit here just to get us started talking that consumers as Tom and Howard mentioned are getting more information. They like getting more information. They like more relevant advertising.

Howard, you talked about the fact that advertising really is supporting all these free content and services that consumers like. So, getting more advertising to the publishers of those content services would seem like a significant benefit to users.

Howard Beales: Well, it clearly is. And it's a benefit that is going to become more important over time. If you look at what's happened with the prices for advertising and advertising networks, the prices there, the cost per thousand, are something like $1. 'If you look at the prices for advertising in conventional media, they are much higher than that. What's happened to date is that the content on line is sort of free riding on the off line content. CNN is producing a broadcast show. They put that stuff online. They put a lot of that same material online. It's an incremental revenue stream.

That's a good thing for them. Newspapers have done this to a considerable extent where it was in incremental revenue stream. Newspapers are where we're really starting to see the beginnings of the potential impact of that.

As people shift from reading the real newspaper to reading the newspaper online, newspapers are going from advertising revenues on a cost per thousand basis that are around $5.50 to advertising revenues that are under a buck.

That doesn't support the same kind of a newspaper. It doesn't support the same kind of newspaper content. The revenue stream just isn't there at current prices.

What advertisers are busy trying to do and what advertising providers are busy trying to do is to figure out ways to make this advertising more valuable, so that it can support the content that we are all accustomed to that we are now getting because it is being produced for our offline world and just copied online with a few additions.

But that's a free ride. That's not something that will continue as viewers shift.

Jules Polonetsky: Do we all agree that there ought to be some limits? I think probably everyone agrees that some more data is better, is going to give you a better experience than not.

That if my colonoscopy or everything I ever did or ever purchased or any extreme amount of data gave you an incremental additional click through or relevancy or more revenue, we would probably say, "Well no, there are boundaries here."

There are some things that seem to be overly intrusive, unfair, too risky, areas where people ought to have far more control over it. And so, I think it's important for us to sort of help define what we agree and what we disagree about. So here's one area where I think people agree.

Right, and I don't mean everyone agrees. There are folks for whom the risks of the government ever getting any of this data are just too great. Nothing should ever be collected or people ought to sign again in blood before any data is all right.

So putting that audience aside, one of the clear things that I think people all across the spectrum agree - advocates, centrists, free market economists - is that one of the things that helps this medium is the measurability of it. It is not as powerful and robust as watching the full, vivid TV thing.

So the way that that little banner ad ends up trying to compete with dollars for much more 360 stuff is that it's a bit more measurable. It's not just a panel. I can actually tell you how many people view, and how many people click.

So I think there is a lot of agreement there, and again, the technologies are very simple. What I worry about when people talk about legislating isn't so much, well, are we going to have some boundaries on the outer bounds? There probably ought to be, but' are people dividing between some of these technologies that really are reasonable for measuring?

Here's a good example. You saw a lot of the advocacy groups, for instance, urging the current administration to revise the current policy about cookies.'

Berin Szoka: On government websites.

Jules Polonetsky: On federal government websites. Years ago, when I was at DoubleClick, we had a client called Ogilvy & Mather, a big global ad agency, and they built a website for the Office of National Drug Control, the White House drug czar, and it was "Kids Don't Do Drugs." Teens and kids were going to this site.

The White House was advertising in all kinds of different places to drive teens to go to this site, and learn about the risks and dangers of drugs.

Ogilvy, like all the other DoubleClick clients, was using tracking pixels so that the government knew that, "Hey, we're spending a lot of money on AOL - yes, we used to charge all kinds of big prices back then - but no one seems to be clicking. Yet we're spending less on Yahoo!

"And there are more clicks. So let's do what people in the private sector would do, spend the money on the place that we're getting results."

Advocates discovered this. The White House is tracking kids and drugs, and a policy was implemented that initially said no cookies. Web managers of the government said, "Excuse me, you just broke all our sites." [The policy] was no persistent cookies without the designation or the approval of the secretary of the agency, and later on that was changed to be the secretary or their designee.

As a result, what ends up happening is the sites end up being very conservative and don't want to use persistent cookies. So knowing how many people visited the site over time, is it doing well or not, are people clicking from here to elsewhere, the kind of stuff you expect to be used to improve sites that you go to in the rest of the world wasn't being done.

Or somebody would go through the trouble and get the approval of the secretary or their designee, in which case anything went. There wasn't necessarily a set of rules that said, hey, just have some privacy rules around this.

So groups like CDT, and EFF, and other groups said, "Hey, you know what? You ought to be able to do analytics. Now there ought to be some rules around it, and they laid out some boundaries. We did as well, using the same technology – cookies, tracking, unique users.

That measurability piece and understanding the difference between, yes, it's called tracking, but being able to actually analyze, and improve, and do performance. I think once you then get to the, OK, now we're going to add other data that we have about what you've done offline, or the sites that you've been to.

Berin Szoka: That was just behavioral targeting.

Jules Polonetsky: So behavioral is this tough term, right? I mean, if I told my mother that she'd go to a site she'd never been there before, but she was going to get ads based on her disposable income. She'd say, "I don't know, that seems tracking, or behavioral." It's not, technically, because it's not based on the sites that you have specifically been to. That's "behavioral."

Berin Szoka: Well, it's better targeting. Tom, do you want to jump in here?

Thomas Lenard: Well, I was just going to ask Jules, or suggest that the issue of government tracking behavior on its websites, or just government tracking behavior in general, does raise different questions than - OK.

Jules Polonetsky: But even there we're saying, the advocates are saying to the government, go track so that there can be a MyEPA.gov.

Berin Szoka: So Jules, your point is that cookies are useful, and that that's just an example of how one might perhaps overreact if one doesn't recognize that cookies can be useful. There are different uses of cookies in collecting data for basic tracking to make websites work, to make ad delivery more effective.

Then it's sort of a different question as to what behavioral targeting will actually allow you to do. I want to make sure we don't lose the forest for the trees here, and since we're talking about the benefits of online advertising, before we get into more about trade-offs, I just want to make sure.

So we've talked about the fact that advertising, however it's targeted, whether that's behavioral or in some other fashion, maybe can give you more relevant advertising. That's a pretty widely recognized good thing for consumers.

It also can increase the total amount of funding available, and Howard has pointed out that it's going to have not just an effect on the total amount of funding but, importantly, on how it's distributed.

Mark, you talked about the fact that behavioral targeting maybe would be particularly important for certain kinds of content that has a hard time finding value with its inventory with simple, contextual targeting because the keywords aren't very valuable, or maybe in the case of video, because there are no keywords.

So I just want to give everybody a little bit of perspective here. When we're talking about benefits of online advertising, on the one hand, we're talking about search revenues, as Howard pointed out. On the other hand, we're talking about display revenues.

It's display revenues that really fund all the hundreds of thousands of websites from the NYTimes.com to Jules' example, HampsterDance.com. When we think about the growth of behavioral advertising, it's important to think about how big that could be.

The projections indicate in another three years, it could be about a quarter of total display advertising, so about $4.4 billion a year.

Mark, you mentioned that online video maybe would be a particularly important driver of behavioral targeting, and that there are other forms of content that maybe need that more than they need contextual advertising. Can you just talk a little bit more about why it's a good thing for users that the advertising technologies make the production of content maybe more closely aligned with what users are interested in?

Mark Adams: Certainly. Clearly, when we're on the Internet, we would like for every site that we visit to receive equal, or somewhat equal, pay for our attention.

If I really enjoy HampsterDance.com, then I would like for them to receive as much money from my attention as the "New York Times" does. I don't actually visit either site, but I'm assuming that they're both fantastic and informative places to go on the web.

What we have at the moment is this big disparity between the big sites, which are able to make a lot per viewer and the little niche sites, the minority sites out there that are able to make very little. It's a form of democratization, in a sense. Democratization is, I think, a reasonable word. When we are able to distribute our dollars equally to the websites we visit, it allows us to essentially vote equally with each website, as opposed to only being able to send a little signal to, I like hamsters, and a big signal to, I like news stories about Iran.

Berin Szoka: So in summary, we're not just getting more content. We're getting content that actually more reflects what we're interested in. Tom, do you want to add to that?

Thomas Lenard: New entrants, who are likely to have a smaller audience when they enter, to the extent that you are able to have a technique like behavioral advertising that more accurately targets the prospective viewers and the prospective customers, then I think those advertisers don't have to spend as much as they would on a less well targeted ads.

Berin Szoka: So advertising becomes itself more cost effective for advertisers.

Thomas Lenard: The smaller websites can be advertisers as well.

Berin Szoka: Tom, Howard, do you want to jump in?

Howard Beales: Yes, I do. Advertisers don't really care who's there. They don't care about names. They're interested in the characteristics of people who are there, and people who might be interested in their product.

The way that's done in conventional media is you take a sample of people who are viewers, and as long as the audiences are large enough, you can get a good sense of what the typical audience of that show is like and make targeting decisions based on that.

You can do that on big websites too, and there's lot of data that does that, trying to figure out what are the typical characteristics of somebody who goes to this website, and how might that appeal to advertisers. Much tougher to do on the long tail websites, on the little bitty guys, because the samples - there just aren't very many people who go there.

And so it's much harder to get a sense of what's the audience like, in order to present that to advertisers. And it's particularly hard when the only practical way to sell it is to aggregate it with a thousand different sites that are sold through a network.

So it's really hard to tell the advertiser what's the audience like unless you can do something to track and identify what else these people are interested in, and that's what [cross talk] mainly interested in.

Berin Szoka: So, Howard, you mentioned earlier that behavioral advertising allows advertisers to assemble an audience instead of assessing the audience that comes to a site, so does that actually help publishers? That advertisers can speak to them across multiple sites?

Howard Beales: Sure, because small publishers can't effectively do the research either for economic reasons or the practicality reasons of finding a large enough sample of your audience in order to figure out what this audience is really like.

Berin Szoka: So, that helps to explain the differences in prices that small sites and big sites receive, as you mentioned earlier?

Howard Beales: At least in part, yes.

Berin Szoka: Howard, would giving consumers a little more control though break that business model at the end of the day?

Howard Beales: Well, you know, it depends. The thing about choice, and if you think about choice, particularly in the opt-out form of choice, it works fine so long as not too many people use it.

But in a world where advertiser support is what pays for the content, you can't say people can opt-out and get the content for free but not suffer through the advertising or put up with what it takes to get the advertising, any more than you can say that broadcast television should give people the choice of commercial free versions.

Jules Polonetsky: But yet, we do. I can confess, I've skipped some commercials, and I bet folks in the room have, and I think we would have a hard time convincing consumers who aren't economists that they're doing a terrible thing.

I think what we need to do, if we're going to succeed, because the technology's giving people this control, right, somebody's going to decide how well my remote works. Someone's going to give me a little plug in that gives me more and more control over what happens online.

So I think we need to make the argument to the user, not just that "This is good for the system, enjoy it", but "This is good for you" because we're all arguing this is good for them, and what could we do to give them a little more empowered control, not so much

Berin Szoka: Howard, if you could wait to answer that, I want to finish just two more points before we get to this question of trade-offs and how we're putting this at risk, and then take questions from the audience. So, my first question is for Tom.

Tom, Howard mentioned that advertising is going to become more effective and you've been talking about how it's more effective in communicating information to consumers, but why is that good for consumers? Does that have an effect on the overall economy that consumers care about?

Thomas Lenard: Well, I think one of the issues with this privacy debate is obviously people are concerned about people's personal information getting into the wrong hands or getting available.

But I also think that part of issue, particularly among privacy advocates, though they don't quite say this explicitly, is that they don't consider advertising to be particularly useful.

They think that it has, at best, limited value and at worst, is manipulative, but I think most economists who study it would say that advertising's a very useful source of information for consumers.

This type of advertising that we're talking about, which gets things to consumers that has a higher probability, has a higher frequency of getting messages to consumers that they're actually interested in, is particularly useful.

That has spillover aspects in general, because that helps all advertisers get their messages read and reduces costs to consumers, reduces monetary costs to consumers because the cost of producers conveying the information goes down, so the cost of consumers getting useful information also goes down.

And then there are these other nuisance costs of having to look at a lot of ads that you're not interested in, that are also reduced, so.

Berin Szoka: So, Mark, advertising maybe costs would fall, so that would lower the cost to consumers of products and services? And, as Tom mentioned, maybe consumers can make better decisions about products and services they want to buy with more information?

But, will advertising increase competitiveness and maybe drive down prices that way?

Mark Adams: Well, the one thing we don't know here is what happens when, essentially, you're massively increasing the supply of relevant advertising. We're going from, if we assume this three hundred to one thousand percent increase in the click through rate to be accurate, we're talking about we're going to be served three to ten times more relevant adverts whenever we go online.

We don't know really if that's going to result in advertisers saying "OK, I can now get as many clicks from ten percent of the budget" or if it's going to result in advertisers saying "OK, I can provide a lot more information now at a much lower cost". If they go down the latter route, we have both more funding but we also have

Berin Szoka: More funding for publishers who depend on…

Mark Adams: More funding for publishers who have more valuable information going out there to users. We have a good literature going back some forty, fifty years that says the more of this information users receive through advertising, the better informed they are when making purchasing decisions, the more competitive markets become, which pushes down prices.

If we go back not so long ago, before I was born, but that's not so long ago anyway, it was common for states to regulate advertising. Eyeglasses [are] a famous example. States that regulated advertising in eyeglasses said, "We've got to stop this harmful, wasteful competition."

The result of stopping this harmful, wasteful competition, these unnecessary expenditures in advertising was consumers paid more for eyeglasses because they weren't aware of the competitors. They tended to be more likely to buy the product they knew about.

So what seems paradoxical is to have advertisers on the one hand spending more money on advertising and on the other hand somehow prices are going down, is actually possible.

Berin Szoka: Great, and that's because advertising essentially becomes more effective. Before we turn to the conversation that Jules and Howard were having, I just want to make one point here of my own. We've been talking here about the benefits to users, which again is increased relevance; maybe they might even see fewer ads because the ads themselves can be more effective.

There's more funding for publishers and that funding is going to be distributed in a way that probably better reflects what publishers are really interested in.

Tom and Howard and Mark have been suggesting here that this is also going to have a broader effect on the economy, of driving down prices, of increasing competition and innovation.

But I also want to point out that advertising isn't just used to sell products and services, it's used for public service announcements by governments, and it's used by noncommercial speakers of all kinds, whether those are charities or political candidates or anybody else.

So when we talk about increasing the relevance of advertising, we talk about giving advertisers data, for example, locational data about where a user actually is. We a're talking about increasing the ability of noncommercial advertisers to reach their audience as well.

That has important consequences for politics, for culture, and for media, in addition to the fact that advertising supports noncommercial media. It supports people who run news or commentary sites with ad revenue.

So, having said that, I want to just now turn to the conversation about trade-offs we were having. Howard and Tom and Jules were talking about why is that privacy advocates are concerned about data collection.

Before we get into that, one of the big questions that Adam Thierer and I had asked here is about harm and what is the market failure that requires government intervention. Tom, you've actually done some work at looking at one of the concrete harms which has been asserted, which is identity theft. Can you tell us about what you found?

Thomas Lenard: Well, a couple years ago we did, not a complete cost benefit analysis, but a somewhat of a cost benefit analysis, of notificational requirements and found that, for a variety of reasons, it would be unlikely they would pass a benefit cost test.

But I do think that because of identity theft consumers may be relatively comfortable with what they think are the intended uses of their data but they clearly want the data to be secure. And probably one of the greatest fears - because it gets a lot of publicity - that they will lose some data that will somehow put them at some financial risk, which is basically what identity theft or identity fraud is.

So that's the type of trade off you have to look at. I don't think there's any evidence that restricting, reducing the use or collection of information by legitimate firms doing business on the Internet would in any way deter identity theft. For one thing, contrary to a lot of popular perceptions, identity theft is not an exploding problem. It's not even a growing problem depending on which time period you look at. It's either declining or constant. But maybe even more importantly, the Internet is associated with a small minority of identity theft cases. Most of them are associated with offline activities.

So to the extent that consumers somehow get the message that identity theft is associated with online activity, and therefore tend to shift their activities more offline, they're doing the opposite of what they should do.

Berin Szoka: So Jules, tell us. Do advertisers who collect data when they're doing it for simple targeting purposes or behavioral targeting purposes, do they really care about who the user is? I mean, how anonymous is this data?

Jules Polonetsky: Well, my argument is that it is nice to anonymize data and try to keep it forever and build up those sets of protections around it but if I go to a site and there's a lot of interesting stuff happening behind the scenes, so that lots of data about me online and offline ends up being pulled in.

Whether I'm identified, de-indentified, re-indentified - I'm not quite sure people can get their heads around that.

All they know is they go to a site and things like where they've been, what they're about, their income ranges, all kind of relevant data is used to make decisions about them. They could have a little bit more visibility and control in that without breaking the system.

If when they went to one of those sites it said, "We use some info to optimize your experience here. Click here to see those preferences and update them. Oh, and by the way, we don't keep it forever." So Yahoo doesn't keep the data for more than six months. Google already shows you those preferences.

Lots of folks are already showing that those pieces are done, that front end of "How do I tell people, 'Guess what? There's some stuff going on here.'" Not "I'm going to scare you off and send you running to the hills. Warning, warning, privacy" but here's how we're trying to do something for you. Getting that language right is one of the things we're working at in our shop, is what I think needs to be nailed.

So I don't think anybody sitting down there interested in your name and peeking at you. But there is certainly, as the data collection mechanisms get more complex, a lot of work will be done to either identify you, pull in data, de-identify you or work using the current technologies to try to tailor the experience based on the non personal info.

I think FTC got it right when they put out their sales report on behavioral marketing. Maybe it's personal, maybe it's not. You know what? Does it really matter? Let's just tell users that things are happening to tailor their experience. Let them do something about that and know a little bit more about it.

Berin Szoka: So what you're talking about here is you're essentially transparency. Let me give a concrete example, since I happened to write a paper on this. 'Google, when they started doing behavioral targeting, they created an ad preference manager that would let users see exactly what categories they were being associated with and then customize them. Which, of course, just makes the advertising much more useful for Google.

So maybe there's a way here for companies to deal with some of the concerns about transparency and mismatched expectations. So the consumers can see what is actually going on.

Jules Polonetsky: Transparency does such great things. Just think about that actually. There's a big debate; people have had a hard time in the self regulatory effort. The IBD, AMA, and ANA authorities really work hard to try to nail what's sensitive and what's not.

We're not talking about hype data; we're talking about someone searching for "cancer." Sounds a little uncomfortable. A search for "diabetes" - a little, but less. A search for toothpaste - well, I don't know. Where do you define sensitive when it's something fuzzier than what we're used to categorizing?

It's very interesting when Google decided to do transparency and said, "Hey, we'll show you your profile." They decide not to do health. So it's a very interesting thing. Instead of debating and killing ourselves around diabetes versus bad breath, which is OK and when does health become health? When it's embarrassing is it wrong if it's not health?

How about just show folks: here's what it is. If we're not comfortable saying, "Hey, we're keeping track of this," well, then maybe we don't do it. And if it's something where we're ready

to say, "Alright, we're in the business of trying to get you the right cures," well then you go ahead and figure out a right way to say that. Transparency.

Berin Szoka: So nobody is going to disagree about transparency. The question is about interfaces, how it's set up and then the question about default. We talked about this a little bit earlier, about opt-in, opt-out.

Before we actually get into that and then after we do that I want to take questions. I just want to ask all of you: Essentially we're talking about a trade off here, right? There are these benefits from online advertising and then maybe there is a cost in terms of what value consumers place on their privacy.

How do we know how consumers really value their privacy? Are poll numbers where people say they absolutely value their privacy helpful? Should we be looking at the choices that users actually make, where they seem not to be bothered that much and they seem to prefer all the content and services they're getting?

How should a policy maker look at that and guess what consumers really want? Or should policy makers even be trying to guess that? Anyone? Howard?

Howard Beales: Well, I think you've got to look at much more at what consumers are actually doing than whether they are giving the politically correct answer in a survey question. That gives' a very high level of generality.

You've got to look at the kinds of choices they are actually making. And even in general surveys, when you try to tease it out, what you find is in the Western surveys is that most people are privacy pragmatists. They are willing to make practical compromises in exchange for real benefits. And that's what you ought to go with.

But I wanted to raise a slightly different dimension of trade-offs and it goes to this transparency question. Some of the technologies that have suddenly become quite controversial in the context of behavioral advertising have actually been around for a while and not in other contexts, even though they are not any more transparent.

The one that really makes that point best is Deep Packet Inspection. Actually assembling the message that's outgoing or incoming.

Berin Szoka: Which is another way of doing behavioral targeting.

Howard Beales: Which is another way of doing behavioral targeting. And in that context it was quite controversial. Well, that's the basis of a whole lot of Internet security. It's the basis of virus scans – put together the message and see if that's a virus or not. It's the basis of spam filters – put together the message and see whether that's a spam or not.

It''s the same basic technology. It's being used in a way that was never transparent to consumers, that your ISP was reading your incoming mail to see whether there were problems or not. It was never particularly controversial because it was so clearly useful to consumers.

The transparency issue becomes a little bit different when the benefits to consumers are less transparent and I think Jules is exactly right. The industry needs to figure out how to explain better to consumers that this really is in your best interest in a better and more tailored Internet.

Berin Szoka: Tom.

Thomas Lenard: Let me just get to the point of "How do we know?" I think one of the ways we might know is what the companies are doing. I do think the companies do have a very strong incentive to satisfy their customers and to attract their customers.

One of the things I don't think you observe over this almost 10 years that I've been somewhat following the subject is companies competing on the basis of privacy, saying we offer more meaningful privacy protections and therefore you ought to use the Microsoft search engine rather than the Google search engine, for example.

It doesn't seem to happen. And it there's...

Berin Szoka: I respectfully disagree a little bit there because we have seen for example search engines have been making a big deal about keeping their data for less time. For example, Google made a big deal about its ads preference manager. That's clearly a form of competition in terms of privacy.

I'm not saying that that means everybody is as concerned about privacy as some regulatory advocates think that they are. But there is some evidence that consumers [cross talk] are maybe responding to privacy.

Thomas Lenard: You don't know whether they are doing that for their customers or they are doing it as just part of the Washington debate. [laughs]

Berin Szoka: Mark, you get the last word here before we turn the question. So we haven't really talked about opt-in/opt-out. I'm sure it's going to come up here in the questions, but if the benefits are a little bit unclear to the user, even if in the aggregate they seem large.

And if the user isn't really sure exactly what's going on, if we set a restrictive default such as, for example requiring opt-in, requiring that you get the consent of the user, which may be very hard to do given the way that some of these technologies work.

Do we risk wiping out scattered but significant benefits in total?

Mark Adams: Since this is my last word I'm going to hog the microphone for as long as I can.

I just wanted to make a comment on Howard's point about spam messaging and one of the reasons why we don't really mind the spam filter is we know it is a computer reading our email. If there was a guy in India actually reading my email and seeing, "Well is Mark interested in this? I don't think he is," then I don't think I would be happy with that. I think I would rather filter my own spam out. But knowing that it's a computer reading it makes a big difference. The same is true with this data that is being collected for delivering advertising.

We're not talking about somebody actually pulling out of all the thousands and thousands or millions of bits of data that are being collected.

Oh, Mark is really boring!

We're talking about an advertiser being able to say, "Well there are so many thousands or hundreds of thousands of people who fit this profile and I'm going to serve an ad to them." And to the other point of course of which I really thinking about now is a lot of us consider junk mail to be an intrusion of privacy.

A lot of people feel that when you get spam in your inbox or you get junk mail on your doormat in the morning, somebody is invading your privacy. Somebody is taking away your time in your home. And the same is somewhat true at least of the advertising, the advertising we are served on websites is intrusive. It's unpleasant.

And that in some sense is an invasion of our private viewing experience at home. But I'll come back to the question you actually asked, which is that these benefits are incredibly diffuse. We are talking about websites which are currently serving you a web page for less than or making less profit than it would cost to print that web pages onto a piece of paper.

We're talking about, I think Howard your figure was 60 cents to a $1.10 per thousand views, per thousand views. Fractions of a penny to see a website. And at the same time, those are very, very small benefits, but in the aggregate they can be phenomenal.

An example that we used in our paper, which is available at all good book stores, is that a lot of us will not bend down to pick up a penny off the street. If we were to bend down and pick up pennies and find the change behind our sofas and on the sidewalks and in other places, there's like $10 billion in small change lying around out there.

So even with these tiny diffuse benefits, all those thousands or millions of people who are viewing a website, actually those fractions of a penny add up. Now, when we talk about an opt-in, that again seems like a very, very small inconvenience to click through a little page in front that says, by the way, this data is going to be tracked about you.

But it's going to happen every single time we visit one of these websites for all those websites where they are picking up so many 10th or 100th of a penny for your custom, you have to make this additional cost. It's more inconvenient than bending down and picking up a penny.

I have seen figures. I quote this with a grain of salt, but just a grain. If we were to read all the privacy privacies on all the websites we visit, it would take us about 200 hours a year. Which means if you would start surfing the web in January, you are actually going to see content about mid April.

Even something as small as a screen you have to click through before you see a website where you consent to have your data tracked, could amount to an enormous cost and could potentially shut down the benefits that we can see through behavioral targeting and online advertising.

III. Questions & Answers

Berin Szoka: Great. Well that's a great place to turn to questions. And I know I said I would let you ask questions because I've been asking questions all this time, but Mark has raised a really important question here which is, OK, so how do we empower users.

Jules you were talking about transparency and choice and Mark has pointed out the problems which many privacy advocates talk about, too, but actually reading website policies, Jules is there a way that companies really can do more to empower users without breaking this model?

Jules Polonetsky: I think the question is where you draw the line. So I argued a lot of this research, analytic stuff I don't want to make someone bend down or click through. Frankly, lots of folks had popups which they were more than happy to let users click to get through and it wasn't the best experience but people kept doing it in huge numbers.

So if I had a pop up one time when I went to a site, frankly it wouldn't blow up any [inaudible 01:12:10]. However, I don't think for lots of the stuff that I do I didn't want to have to click. If you need to understand how many users are at the site, go ahead and do that.

If you are going to do something to tailor the ad to me based on lots of sites I have been to, maybe you can come up with the right four words: we optimized our site here based on this information. Click here to see preferences.

Let's figure that out. Let's get the icon or the three words that nail that experience. You know what, maybe, if I'm actually using things like you searched for cancer and Viagra and stuff that are much more sensitive, whether of not my name is by it or a computer is looking at it. How about maybe for that I do something a little bit more to say that's OK.

You know what, I think we also need to recognize there are lots of these companies are brands. Even that hamster dance guy is a brand. "New York Times" is a brand. There are the ones who people expect to be talking to them and telling them what's going on, like that site.

And they take a lot of time to respect and care about those users. They consider themselves having a user relationship. And so, if we tell them, if we say to some highly branded site, you know, this is an important thing you got to tell people about it.

It's important enough just like you tell them about your return policy. They'll innovate and come up with the right three words, five words, six words...

Berin Szoka: Especially if you have dancing hamsters to help, right?

Mark Adams: So why aren't they doing it now, if they want to protect their brand?

Jules Polonetsky: I think it's been happening without people having a good enough sense of what's been going on. It's been happening in the background. The targeting isn't good enough yet. Most of you don't feel unless you really know what's going on that the ads are tracking you. They're getting there.

My best argument to the industry is what happens when there are one thousand ads. There are not one thousand ads that each advertiser has for you. They just don't. It costs too much to make one thousand ads. There is eBay with a couple of advertisers that are really sophisticated and have to, right, because it's not come to eBay, it's come buy this.

But most advertisers don't yet have real quick great specific targeting. But they are getting there. So in a year or two either this will be the creepiest, strangest experience where like, oh, my God, how come all these things seem to know all about me?

Or, it will be I get it. It's my page. It's my version. People are more than happy to set up several hundred million people have set up a My Yahoo home page. Let's set it up for them, but let them know that we're helping them have a personalized, empowered version of the Internet.

We're all happy to share a lot of data on Facebook; we're using Facebook Connect and other tools to plug into other sites so that, yes, they even know our name when we're at those other sites because it's a little bit more convenient and easy. And so I argue, let's stop worrying so much about, well, we don't really know your name.

How about, "We do, and we're trying to help you, and in fact you're in control of it. And if you want to stop it, you'll do so, but we're actually giving you a better deal, so of course that's the default environment." So I think the reason it hasn't been happening is that this has sort of been a little default.

It's been 'a nice chunk of extra revenue that people have been earning in the background, they're getting a little bit more of a click through.

But as we actually enable your disposable income, your credits, your FICO score, all sorts of other data, shifting that to a little bit more of an Amazon Netflix user empowered experience, it's happening.

But I think you could use a little bit of a push so that it happens in a way without a lot of consumer grief.

Berin Szoka: Or a consolidation in the industry, I would hope. Let's not forget that it may be easy for some of the bigger players to get that sort of a median opt-in, but perhaps smaller players won't be able to do so as easily.

So Adam Thierer in the back here is going to take questions from the audience. Any questions at all, please. Questions about HamsterDance.com?

Jules Polonetsky: It's a real site. I use it as my example of all time. I hope he's getting a couple more page views and some revenue as a result.

Berin Szoka: Your name.

Dan Brenner, Partner, Hogan & Hartson: Dan Brenner, with Hogan & Hudson, Mark, the one thing I think that your last analysis was very cogent.

The one place where I guess I would disagree with you is that there is a concern that while computers are doing a lot of this collecting, and having all the benefits of the last hour of directed ads to us, about the benefits of directed ads, has been - is that somebody gets that information in offline and uses it in ways that we don't expect.

So in the examples that Jules gave about different health issues, people may want to research a health problem, but never want people to know that they're researching it, or want to limit the people who know that research, and if it's just a computer that knows it, it's one thing.

But as we see, data escapes from computers and computers get lost, and records get lost by the government. I think that's the real fear. I think people are privacy pragmatists, Howard, I think you're right about that. But what they aren't pragmatic about is if something is promised to be kept secret and it's no longer secret because somebody invades the computer.

Mark Adams: And I think you're legitimately concerned. My response would be that this data is not specifically tracked to an individual; it's tracked to a user cookie now.

It is possible that if you go through a single person's cookie and you look at every site they visited for the past - however long that cookie goes back; yes, then it is conceivably possible that you can work out who this person is.

But you have to go back for every single person. You would have to go back to every single individual who's been tracked out of all this data - to find what? I'f somebody steals this data, they don't say, oh, I know somewhere in this data is Mark Adam's information.

They have to go through every single person who they have data on, until they stumble on somebody, and they work out, ah, this person is Mark Adams. This is what he does with his time. My God, he is boring. But on the identity factors, which I think is something you're also getting at, I think Tom is maybe more the expert than I am.

Thomas Lenard: I think if there was evidence that this type of activity contributed to identity theft and that they're using this collection of information, then I think that there'd be a legitimate issue. ''I don't think there's really much of a relationship between collection of information online and identity theft.

There's even another study that's a little bit on the point, which is by Symantec. You'd think well, "What's with Symantec, 'what's the issue?" The issue might be that some criminal get a hold of people's credit card numbers.

Well, in fact, according to a Symantec report, they are widely available on the Internet for like $0.40 apiece. So, a shortage of credit card numbers is not the limiting factor in identity theft. I mean, there are others limiting factors. And it's a law enforcement problem, which obviously, I think, should be a law enforcement problem.

But also that it is important to keep in mind a few things that I mention. 'The statistics show it's not a growing problem, certainly. Certainly, on a per capita basis, it's a shrinking problem, and both in terms of incidents and in the dollar value. And secondly, it's predominantly associated with offline activity.

Berin Szoka: So I've seen Jules shaking his head here. I'm sure Jules is going to point out that there… have been circumstances where some data has been reverse engineered back to individual people. I just - if I can answer this question myself because this is what Adam and I have been writing about.

There is a user empowerment answer here that in combination with the industry may be taking better practices to not collect certain kinds of data and to retain it securely, users have tools.

For example, most browsers now will give you a mode where you can do whatever you want and nobody can see what you're doing, either tracking that work or people who are looking over your shoulders. That's one part of the answer.

The other part of the answer is that in simple economic terms, I think a lot of the fear here is based on the idea that more information is always going to be better, and that these companies are going to want to retain forever.

In fact, even with behavioral targeting, what's really been found is that it's really fresh information that's very useful, which is precisely why companies, in general, have been willing to throw away their data over time.

They don't want to keep it for years, because data that's more than even a few months old is not necessarily going to be all that useful to protecting someone's interests. So that's part of the answer. But there is another question here.

Stephanie: Hi, my name is Stephanie. My question is you talked about with the opt-in and opt-out. You talked about what could be the situation which is an opt-in where every single page you go to gives you this option of whether or not you want them to track your data.

And you sort of make it versus the status quo, which is where this tiny privacy link at the bottom of each search engine, would you have to really know where it is, assuming that consumers, even at this point, know at all that their data is being tracked, which I absolutely do not think that they'll do.

Is there not some sort of compromise between opt-in and opt-out that's more favorable to consumers and the status quo, but not quite as inconvenient as the one you suggested?

Jules Polonetsky: Yeah, I think there is. Let's break it down because what we mean when we say opt-in is there's really something here, but it's just completely different going on, and it's unrelated to the main reason you're at this site.

And you really should make a very separate choice about whether this is happening, and you're probably just checking the weather and you're not going to do that, and you may not even think that that's useful if it's something that's done on behalf of the advertiser, right?

So the opt-out today is, it's OK for me to do those other unrelated things because they're not too harmful or I need them or it's good for the economy, right. And those - neither of those is actually very palatable. But let's think about it differently.

When I go to some site, what's the primary part of this? I'm there to see the site and see the content, and if what you're doing is minor analytics and metrics, well, let's not bother asking someone an opt-in, maybe let them turn it off if they're more sensitive with sort of an opt-out.

But what I'm doing is something like Amazon, right, something - I never opted in to tell Amazon, hey, track them books, and sell me more them, and track everyone's, but I can't get it, right I sort of see. They made it the primary purpose.

It's one of the very useful reasons to go there. And frankly, a lot of us talk about Europe, and Europe' has a strong privacy law.

In practicality, what ends up very often happening in Europe is the companies try to make the other purposes part of their value equation of why they're providing the service. Sometimes, it's awkward. Well, that's enough.

That's really right; you're really doing something secondary. But for most of what we're doing, we're not - if any of the companies were saying we'd like to sell people's data, right, but you come to our site and we're making this money because we're selling it somewhere else.

OK, let's talk about you have been there. But what I'm doing is I'm trying to make the page, because we're talking about banner ads, but what if you're eBay or what if you are a commerce site. What's the ad and what's the content and the content is sponsored and it's got a logo on it. It's the site. We're really narrow when we are saying it's that banner ad, right?

There are all kinds of stuff at the site that is being informed by data and things that you are doing. So if we focus on making what's actually happening, we can call it transparent, but I like calling it making it part of that value equation. Amazon has done a good job in it. Lots of other sites have like that's not us. We're the content and the banners, we don't own the banners.

That's the ad network. That's someone else. No, it's you. I'm going to the site. You're in charge. Tell me what's going on. And if you can tell me as a mean way, hey, guess what, my site is a personalized site. It's tailored, you have achieved it without a lot of opt-in/opt-out.

Then what features are you giving me to improve it, enhance it, turn it off. I think we're more accepting of a default experience, whether it is in or out, if we understand what it is and then we either value it or we don't and we have good competition.

Mark Adams: I actually want to respond to that as well. My glib answer would be that there are lots of extremely uninformed people out there who are not aware of the privacy. And broadly they are called voters.

This is the problem that we face with any kind of legislative or regulatory action is that people don't know a lot about it. But people who are visiting websites, generally speaking, know more about and care more about these issues than just the vague, amorphous group that we call voters.

And the second problem is whether we have opt-in, whether we have opt-out, we have got to pay for the content somehow. Even if we make it possible that you can just click, you can very

easily just click no tracking, you're then getting the service that other people are essentially paying for by agreeing to be tracked for a lower price.

Does that mean that you then have to block the content? Do you say OK you don't want to be tracked? Here's your opt-out.

Jules Polonetsky: When you come to the site there's a bit full page ad. Oh, that's already happening at lots of sites. How about that? So you kind of get one experience or you might have to click or see it.

Berin Szoka: But I think what we are getting at here is that users have to make tradeoffs. So the current debate is basically about whether people should be able to free ride and whether that should be free riding by default or free riding for people who want to make an active choice.

I think what both Jules and Mark are getting at is that a more useful framework and a framework in which the advertisers and websites would really do much more to disclose what they are doing would be a framework in which people were given all the tools that they needed to be able to opt-out fully if they wanted to.

But there would be a reason for them not to turn the dial all the way up to block. Because when they did that there would actually be explicit trade off and explicit quid pro quo. Today all these benefits we're talking about, it's an indirect exchange.

User can say, hey you know what, I want to take all the benefits with none of costs, whether that is seeing the ads or being tracked. But it you had a system where users had to think for a second to think, do I want to get this content? Do I want to see more ads?

Maybe there is going to be an ad that comes up and takes up the whole page, like you see on Salon. I think once you had that in place, then publishers and advertising networks would be a little bit less afraid to empower users because they would be assured that the result isn't going to be that all of a sudden 95% of people are just going to opt-out.

Jules Polonetsky: Are there any banking people in the room? I would take big ads on that ATM rather than that $2.50 fee that I have to pay.

[laughter]

Berin Szoka: I'm going to work out that business model. Another question over here on the right?

Amy Stepanovich: My name is Amy Stepanovich. I'm a clerk at EPIC's this semester. I'm one of those privacy advocates you keep talking about. I had a related question to what was just said.

I am definitely in agreement with this 85% of people that say that targeted advertising is good. And I think that behavioral advertising is very good. But with opt-in and opt-out I think you find that both of them inherently fail.

With opt-in you don't get the advertising at all because people will not opt-in or people will do this cost benefit analysis and it doesn't work.

And with opt-out you have two choices. You can either go through your browser and completely turn it off, put it in the mode where you can't track at all, or you can go through the different servers and sites and say, I don't want to be tracked. I want to opt-out of this.

Predominantly those sites and their practical application only allow you to opt-out of the ads, the actual targeted advertising and not out of the tracking. And you are still being tracked anyway, and I think that's what a lot of privacy advocates work not to do.

I know there is technology coming out now, a new technology where they'll allow you to be tracked on your own browser, your own computer will do all the tracking for you. And then try to take the advertising and direct it straight to your browser.

So you never have this information on the cloud where there is all this information out about you that you don't want to be out there, but you can still participate in the actual advertising.

And with that technology do you think that will work to address some of that, if it can be widespread, if people will assimilate to it?

Berin Szoka: Well I have heard about things like that and I think that that's a great sort of innovation. That's exactly consistent with the approach that I was just talking about which is empowering privacy sensitive users to make their own decisions. And I think that's a great thinking. I don't think that anybody would disagree with that.

My concern is about restrictive defaults that are going to break advertising revenue in general and I think they are going to hurt smaller sites and publishers of non commercial content in particular.

So, there are ways of accomplishing maybe what you are talking about but what it requires I think is innovation and not necessarily regulation or legislation. I don't see that sort of thing coming out of the hill.

Thomas Lenard: But also I think what you are talking about, if I understand you, might solve one problem but a lot of this data is used for statistical purposes.

Those are the models that they use to predict what characteristics are going to be interested in and what good and for search engines they do a lot of statistical work just to be constantly improving the search engine and also protecting against a variety of security threats.

So that would be a big cost of that particular system.

Jules Polonetsky: You know what I worry about? Here's what I worry about. I worry a less about behavioral advertising because number one it's not the beginning and the end of the world and number two, it's achievable.

Most companies are actually doing something useful. They will figure out a way to say it better, whether it's because legislation forces it or self regulation or the market, whatever it is.

But let's take your boss, Mark Rothenberg whose home I was at last night. Mark is a big Facebook fan as well as being a privacy advocate, because he gets it. People say well how can that be, Mark? He says that I get that my value of putting data my organization is that I can get the word out. I can invite people to events.

I get it. I might want them to do stricter things with advertising or so forth, but I get it. So when I think of Facebook I don't think of Beacon, because I got a lot of attention and so forth. But I think of early on when they start the news feed, and if you were involved back then you remember.

It got a lot of push back. You had to go to people's profiles previously and you looked up your friends and you went to their profiles. And when you started being able to track, because your page started telling you whatever everyone else was doing, lots of people joined groups and it was, well you are tracking and stalking and that seems kind of weird.

Today, it's like why you go there because like your page has got everything that's going on about everybody interacting with it. Who would have known? I don't know who would have opted into that. I don't know. Track every one, stalk all your friends. It seemed weird, right?

And you could have easily seen us having the same argument. Should you automatically be able to personally stalk everything that anybody who you are connected to is?

Well, I don't know. That ought to be an opt-in. And Zuckerberg and I think that's why he's made the mistake with Beacon, because he had his gut right. He discovered that we want to share, automatically, easily, more than we were able to do before. It worked and built a great business model and Mark uses it and I use it. Lots of us use it.

I worry about that because it's easy. We can figure this one out. We'll figure opt-in, opt-out. We'll figure out how to do it better. But it's the stuff that once I lock in one set of rules, data, cookies, sharing and so I know about behavioral and I know about data pending and I know about a bunch of stuff.

I know about a lot of stuff because I've been doing it a long time. I can maybe figure out what the rules should be.

I don't know that any of us could anticipate what is the really interesting thing that's going to get people to share all kinds of things and solve diseases, whatever. I don't know that. That's my kind of big skepticism.

I could figure out how to legislate exactly what we know about today. I'm a little worried about those innovations that even a privacy advocate says, hey, I'm sharing data. This is working for me.

So, we live with that.

Howard Beales: I think that's inherent in the legislative process. You know, this is a technology that is moving so fast where we are, what we are looking at in the advertising markets that we are talking about is clearly not an equilibrium that is going to persist.

This is going to change. We don't know how. We don't know how legislation would affect those possible changes whether it would push them in good ways or it could just as easily push it in bad ways. And that is sort of the nature of the unknown.

This is somewhere where there is no way the legislation can be up with or ahead of the technology for more than a second or two, because the technology is just changing that fast.

Jules Polonetsky: Everybody's watching behavior. There's a whole bunch of companies that are already saying, "Hmm, what happens if the cookies don't work? What's my new business model? How can I optimize data, assuming that?"

So it is incredible how fluid it really is.

Berin Szoka: Mark, a quick word before one final question.

Mark Adams: Yes, I just wanted to jump in quickly. You are a self described privacy advocate. I'm not against privacy. I don't know if I'm speaking for everyone here, but I don't think any of us are saying privacy is bad.

What's key here is that users are able to make the privacy decisions that are best for them, and they are able to decide what information they are going to share, and what information they're going to not share.

The problem here is, of course, that defaults really matter, and if we set the default where privacy is really, really high, it's a lot harder for users to say, "I want to share more information than this default allows me to."

Tara Thue, Policy Coordinator, Comcast Corporation: Hi, Tara Thue with Comcast. My question was kind of regarding what Howard, what you were getting at. As far as policy recommendations go, 'I know there's a lot going on around the Hill about privacy, and everything's got pushed to the back burner because of the healthcare debate right now. But in September, after recess, we're really expecting some form of legislation from Chairman Boucher to come forward.

What should we expect out of that legislation? I know these self regulatory principles came out. I don't know if they're really sticking on the Hill. I don't know if they're enough. I don't know that we can avoid legislation or further regulation.

What do we really expect going forward? What's your advice for policy makers, especially considering, Howard, what you said about how legislation obviously cannot keep up with the technology?

Berin Szoka: Well, it's probably a good opportunity to give short closing statements. Howard, why don't you go first?

Howard Beales: Well, my advice would be don't. It probably wouldn't be taken, but that's a different problem. [laughs] I think if Congress is going to pass legislation, it's important to be as narrow as possible to address the particular problem that they're really worried about.

I think, frankly, that requires a little bit more specificity about what exactly is the problem we're trying to fix here, because there are different potential solutions depending on what that is.

If what we're worried about is the government gets access to this information at some point in some way, well, we can make that harder without interfering with other things if we focus on that as the problem and the solution.

If we're worried about health information getting out there in public and influencing insurance rates, well, that's actually already regulated under the Fair Credit Reporting Act. Let's think about whether there are changes that we need to address that particular concern.

But if we define the concern as broadly as it sometimes has been defined, that I should be completely anonymous, unless I affirmatively identify myself as to exactly who I am and what I want, that's going to do a lot of damage to the Internet as we know it.

Berin Szoka: Tom.

Thomas Lenard: Yes, I would second that, I think. There's a lot of risk in legislating in a way that just sounds good on the surface but really can restrict the flow of information.

Howard mentioned the Fair Credit Reporting Act, and that may actually be something that people should look at a little bit more, because it's got an entirely different philosophy about how to regulate privacy that basically does not restrict collection of information.

But it homes in on regulating and restricting particular uses of the information that people find objectionable and want to regulate. So it's really a different approach than is now being talked about, and it may be actually a much more successful approach.

Berin Szoka: Mark.

Mark Adams: I just want to make sure that everyone understands that I am not on the extreme left.

[laughter]

Jules Polonetsky: And I'd say continue to push, because the market hasn't worked as well as it needs to here. It took a lot time for the industry to get to the agreement that it got to. The pushing has been helpful. The Europeans pushing is what actually led to data retention limitations, and guess what, it didn't break everyone's business model. It went from forever to something to, again, Yahoo! doing six months.

Consider Google, with the scrutiny of, "What's going to happen when the DoubleClick merger happens? Will they use that dataset?" Oh, OK. When we do, we'll show people these interest rate based preferences. You've got companies in Europe, where there's been a bit of pressure, so they're being more careful with how they use IP addresses.

Continue to push. The opt-outs don't work, right? People opt-out, then they delete the opt-out cookie. They think they have more privacy, boom! They're no longer opted out. Why are the anti spyware companies removing all those opt-out cookies?

There's a whole bunch of places where I don't know why - I mean, I do know why. It's complicated. Lots of different business models, different interests. The law is not clear.

So things haven't moved as well during the years when I was a CPO. If I was able to point to, "Oh my God! Look, someone is threatening this," it pushed things that were doable. We're not - in most of these cases, all these solutions are not, "Shut down the business; shut down the Internet."

It's put a little bit more effort. Ask your CPO what is on his wish list, not his "Shut down the company." He wants to earn a living. But what's on his wish list of top 10 projects that would improve the state of play without having a huge impact, whether it's data retention, a little more careful about IP addresses.

Everyone's worried about the sensitive data. Why don't we just say, "No, we really don't do that," and say it emphatically so that these bogeymen that are out there, "You'll not get health insurance. You'll get discriminated against. You'll get re-identified."

Let's take those off the table, and I think the industry just needs little bit more - when Commissioner Leibowitz started talking aggressively, and staff put out their thing, that gave a push. The Hill activity has given a push. Sometimes the market needs a little grease for that old bicycle to work well. It's a chaotic environment.

Lots of the businesses, if they were starting today, might have structured differently. The ecosystem is a difficult one to squeeze back into the box.

But I think there's a little bit more pressure - positive pressure - not "We want to shut down your business. It's all evil because it's data" but rather please people, please consumers, and make them really happy. I think that's a recipe for success.

Berin Szoka: For my part, I'll just simply say that Congress already passed legislation. The last great progressive who came into this town on a mandate of change in 1913 enacted the Federal Trade Commission Act. The Federal Trade Commission already has the authority to punish unfair and deceptive trade practices.

So when a company or an industry says that they're not going to do something, and they do, the FTC should go after them. That's something that I don't think anybody here would disagree with.

I think that when we talk about self regulation, we need to realize that it's not just companies saying, "Trust us, we'll do the right thing." It's companies doing the right thing, and if they don't, being held to task by people that already have that regulatory authority.

So what I personally would like to see, and what Adam and I have really written about, is the idea of making disclosures enforceable so that, for example, you could use technological invasion to take privacy policies and not have them be these unreadable legalistic things on websites - but actually bake them into the machine readable code so that browsers can actually parse data from websites and tracking cookies to say, "Well, the users decided they don't want to do this, and they do want to do that."

They're just going to reject certain kinds of packets, and if somebody cheats in that system, the FTC can go after them. That doesn't require any legislation. What it requires is self regulation evolves and continues to innovate.

So what I'd really like to see personally is for that to happen rather than someone in Congress going in and thinking that they know what the right answer is, and just trying to impose that in one fell swoop. Because if you take away one thing here today, again, as I said at the beginning, advertising really is the mother's milk of media in this country.

Newspapers in colonial times were advertising supported. Advertising is being devastated at the moment, and this is probably the worst time in our history to go in and to prevent a new form of advertising from actually being able to support content and services.

At the end of the day, however it's done, what that requires is a certain amount of user data. The question I think we need to deal with is how to make consumers comfortable with the collection and use of that data.

So I want to thank all of you for coming, and I want to point out that you can find our work at PFF.org. You can find Tom's work at the Technology Policy Institute. Jules is at the Future of Privacy Forum. I look forward to seeing more from Howard in his ivory tower at the University.

So again, thank you all for coming. There are papers outside, and I'm sure we'd be happy to stick around and answer more questions in person.

Mark Adams: Thank you all.

[applause]

IV. Speaker Biographies

Mark Adams is a Visiting Fellow with the Progress and Freedom Foundation. Adams has published on a variety of subjects, focusing on the economic impact of public policy. He is currently working on evaluating the costs and benefits of Internet regulation. Adams has previously held economics positions with the Mercatus Center at George Mason University and the Environmental Protection Agency. He was also an advisor to the British Conservative Party leadership on economic policy during the 2005 General Election. Adams is a former Army Reservist, a graduate of the University of Liverpool, and received his Masters in economics from George Mason University.

Howard Beales is an Associate Professor of Strategic Management and Public Policy at the George Washington University. His research interests include a wide variety of consumer protection regulatory issues, including privacy, law and economics, and the regulation of advertising. He has published numerous articles addressing these issues in academic journals. From 2001 through 2004, Beales served as the Director of the Bureau of Consumer Protection at the Federal Trade Commission. In that capacity, he was instrumental in redirecting the FTC's privacy agenda to focus on the consequences of the use and misuse of consumer information. During his tenure, the Commission proposed, promulgated, and implemented the national Do

Not Call Registry. He also worked with Congress and the Administration to develop and implement the Fair and Accurate Credit Transactions Act of 2003, and testified before Congress on numerous occasions. He also worked at the FTC from 1977 to 1987, as a staff economist, Assistant to the Director of the Bureau of Consumer Protection, Associate Director for Policy and Evaluation, and Acting Deputy Director. Howard Beales received his Ph.D. in economics from the University of Chicago in 1978. He graduated magna cum laude from Georgetown University with a B.A. in Economics in 1972.

Thomas Lenard is President and Senior Fellow at the Technology Policy Institute. Lenard is the author or coauthor of numerous books and articles on telecommunications, electricity, antitrust, privacy, e-commerce and other regulatory issues. His publications include *Net Neutrality or Net Neutering: Should Broadband Internet Services Be Regulated?*; *The Digital Economy Fact Book*; and *Privacy and the Commercial Use of Personal Information*. Before joining the Technology Policy Institute, Lenard was Acting President, Senior Vice President for Research and Senior Fellow at The Progress & Freedom Foundation. He has served in senior economics positions at the Office of Management and Budget, the Federal Trade Commission and the Council on Wage and Price Stability, and was a member of the economics faculty at the University of California, Davis. He is a past president and chairman of the board of the National Economists Club. Lenard is a graduate of the University of Wisconsin and holds a PhD in economics from Brown University.

Jules Polonetsky is Co-chair and Director of the Future of Privacy Forum. Previously, he served as AOL's former Chief Privacy Officer and SVP for Consumer Advocacy, where he was responsible for ensuring that AOL's users could trust the company with their information and for educating employees about best practices for advertising, content, and product development. While at AOL, Polonetsky also served as Vice President of Integrity Assurance. Prior to joining AOL, he served as Chief Privacy Officer and Special Counsel at DoubleClick, where he worked with clients to institute and police their privacy policies and managed compliance with data protection requirements for company subsidiaries world-wide. Polonetsky has served on the boards of a number of privacy and consumer protection organizations including TRUSTe, the International Association of Privacy Professionals, the Privacy Committee of the Direct Marketing Association, and the Network Advertising Initiative. He is also the former chair of the CPO Council of the Internet Advertising Bureau. Polonetsky is a graduate of New York University School of Law and Yeshiva University.

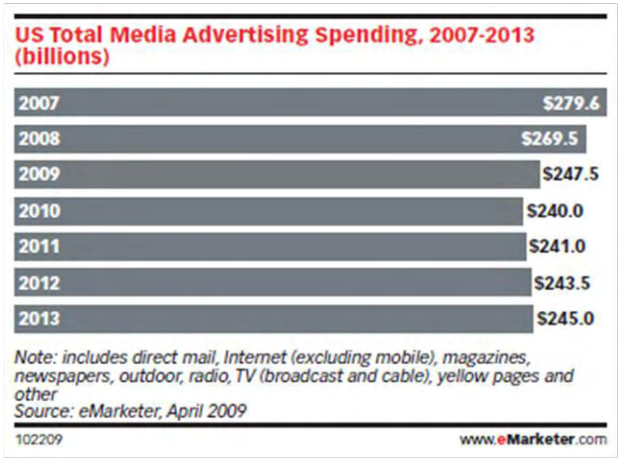
Berin Szoka is Senior Fellow and Director of the Center for Internet Freedom at The Progress & Freedom Foundation. Previously, he was an Associate in the Communications Practice Group at Latham and Watkins LLP, where he advised clients on regulations affecting the Internet and telecommunications industries. Before joining Latham's Communications Practice Group, Szoka practiced at Lawler Metzger Milkman & Keeney, LLC, a boutique telecommunications law firm in Washington, and clerked for the Hon. H. Dale Cook, Senior U.S. District Judge for the Northern District of Oklahoma. Szoka received his Bachelor's degree in economics from Duke University and his juris doctor from the University of Virginia School of Law, where he served as Submissions Editor of the Virginia Journal of Law and Technology.

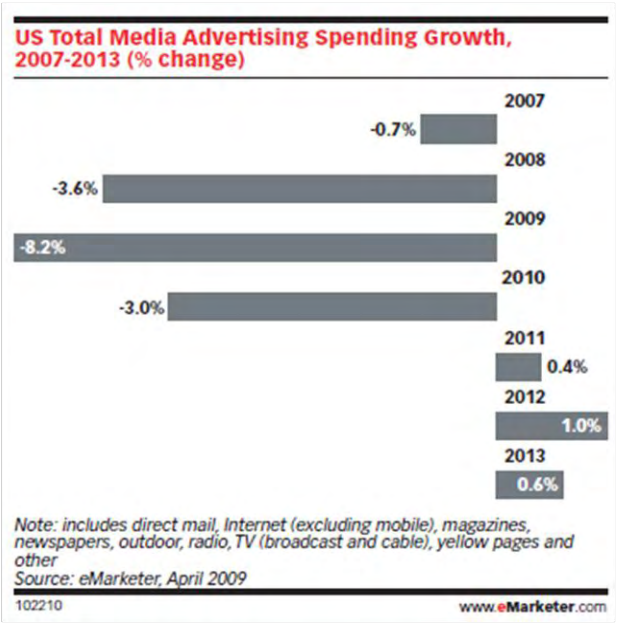
V. Glossary

Term	Definition
Ad Network	A company that delivers advertisements to multiple websites across the Internet. The most prominent ad networks include Google/Doubleclick and Yahoo!
Affiliate Marketing	An e-commerce company providing monetary rewards to a website that refers customers, leads, *etc* (*e.g.*, Amazon Associates)
Banner Ad	An advertisement that is often a long and narrow image
Behavioral Advertising	The process of using information about a user's interests and preferences, usually gained by developing a profile of the user, to serve more relevant ads
Click Fraud	When an individual or robot clicks on a pay-per-click (PPC) ad for the purpose of either draining the advertiser's budget or increasing the advertising's total expense
Contextual Advertising	Selected based upon the content of the page the user is viewing (*e.g.* the ads that appear next to search engine results)
Conversion Rate	The ratio of the number of individuals who click on an ad (or visit a site) and subsequently buy something to the total number of individuals who click on the ad
Cookie	A small piece of text that a server places in a browser. Websites often use cookies to remember preferences or track actions.
CPC	A leading advertising pricing model where advertisers are charged each time a user clicks on an ad
CPM	A leading advertising pricing model where advertisers are charged on a cost-per-thousand (CPM) page impressions; CPM is especially common with banner ads
CTR	The click-through-rate (CTR) is the ratio of users who click on an ad to the total number of users who see the ad (clicks/impressions)
Display Ads	Advertisements that feature images, videos, sounds, or other forms of multimedia
Frequency Capping	Limiting the number of times an advertisement is shown to a particular user
Geo-targeting	Serving ads based upon the user's location
Impression	A page view or advertisement view
Publisher	A website that provides content and/or services. Many ad networks syndicate their advertisements to publishers and offer publishers a percentage of the ad revenue.
Re-targeting	Targeting ads to individuals who previously visited a website yet made no purchase
Search ad	An ad displayed next to search engine results
Sequencing	Displaying ads to the user in a particular order

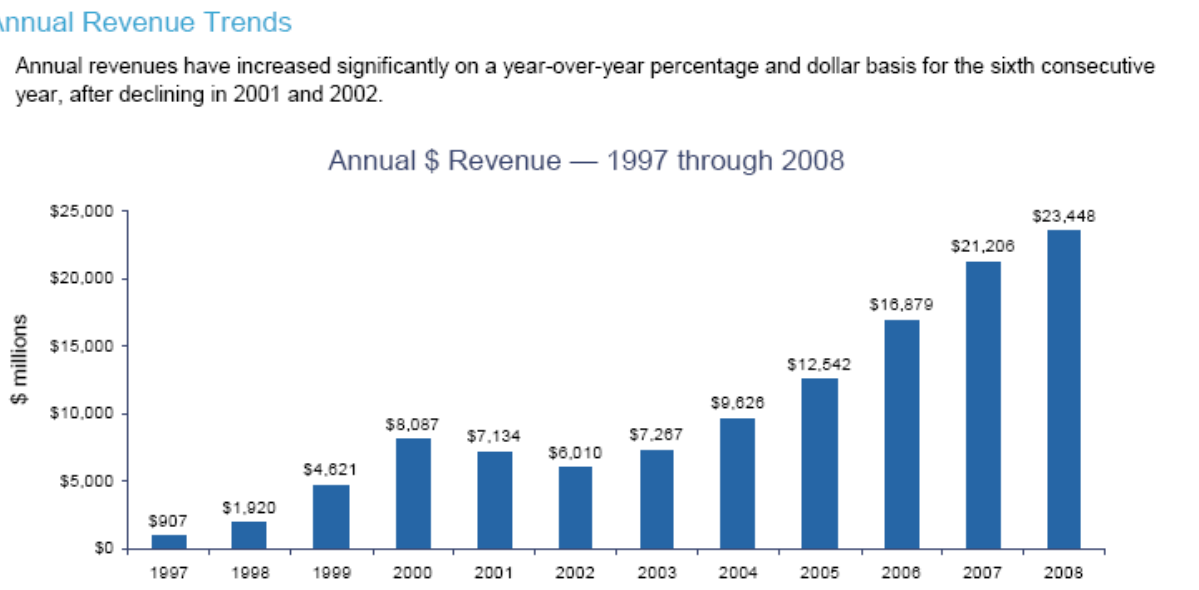
VI. Slides

Declining U.S. Ad Spending

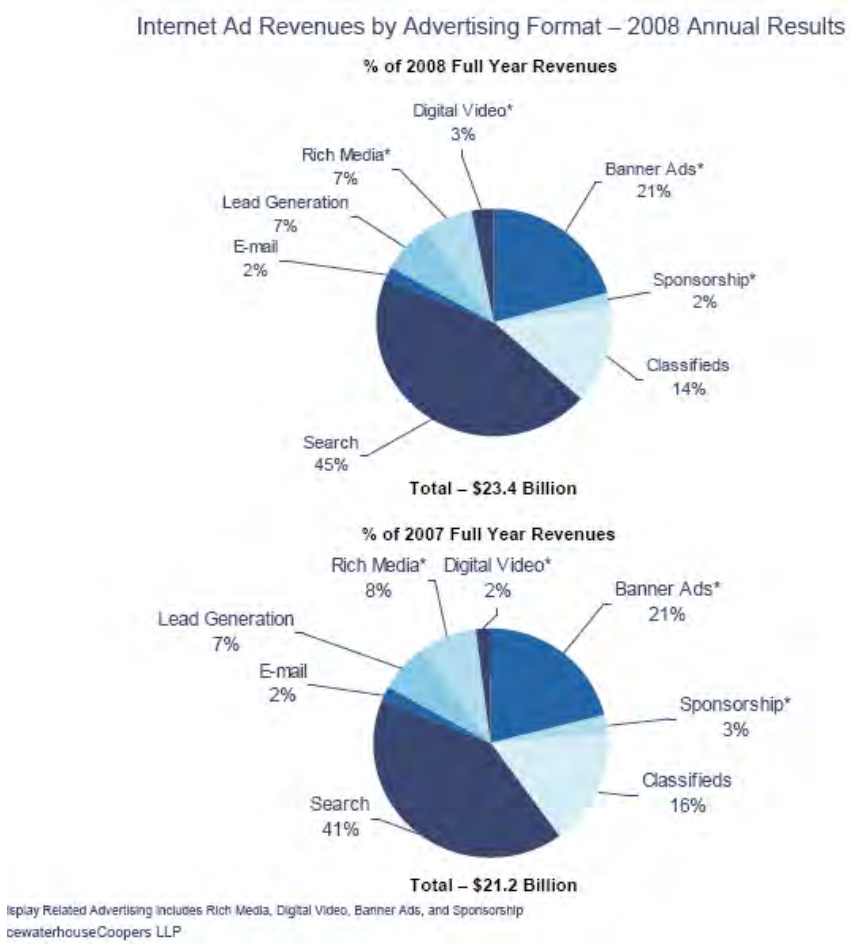




Growth of Ad Revenues



Breakdown of Ad Revenues



Change in Revenue

US Online Advertising Spending, by Format, 2008-2013 (millions)

	2008	2009	2010	2011	2012	2013
Search	$10,546	$11,956	$13,534	$14,969	$16,648	$18,340
Display ads	$4,877	$4,655	$4,824	$5,034	$5,426	$5,543
Video	$734	$1,054	$1,501	$2,109	$3,134	$4,092
Classifieds	$3,174	$2,671	$2,412	$2,554	$2,831	$2,976
Rich media	$1,642	$1,691	$1,849	$2,079	$2,359	$2,641
Lead generation	$1,683	$1,764	$1,930	$2,138	$2,393	$2,604
E-mail	$405	$392	$402	$431	$472	$521
Sponsorships	$387	$319	$348	$386	$438	$484
Total	**$23,448**	**$24,500**	**$26,800**	**$29,700**	**$33,700**	**$37,200**

Source: eMarketer, April 2009

102202 www.eMarketer.com

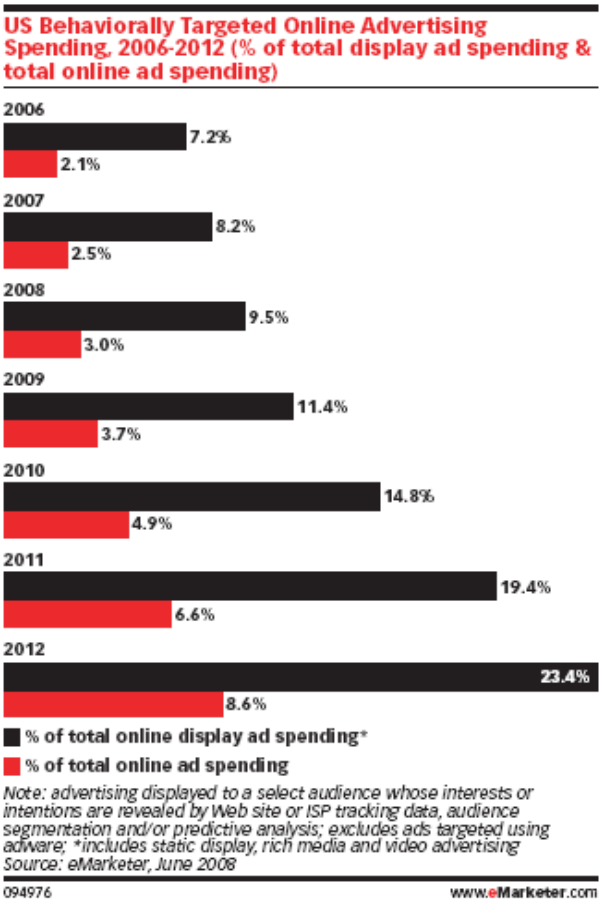
US Online Advertising Spending Growth, by Format, 2008-2013 (% change)

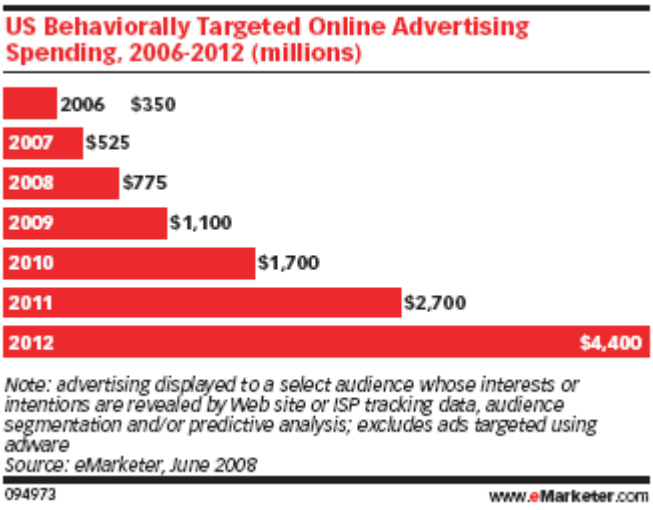
	2008	2009	2010	2011	2012	2013
Video	126.5%	43.5%	42.5%	40.5%	48.6%	30.6%
Rich media	-0.8%	3.0%	9.4%	12.4%	13.5%	12.0%
Sponsorships	-39.2%	-17.7%	9.4%	10.8%	13.5%	10.4%
E-mail	-4.5%	-3.2%	2.6%	7.1%	9.6%	10.4%
Search	19.8%	13.4%	13.2%	10.6%	11.2%	10.2%
Lead generation	6.3%	4.8%	9.4%	10.8%	11.9%	8.8%
Classifieds	-4.4%	-15.9%	-9.7%	5.9%	10.8%	5.1%
Display ads	9.4%	-4.6%	3.6%	4.4%	7.8%	2.2%
Total	**10.6%**	**4.5%**	**9.4%**	**10.8%**	**13.5%**	**10.4%**

Source: eMarketer, April 2009

102206 www.eMarketer.com

Behavioral Advertising Spending

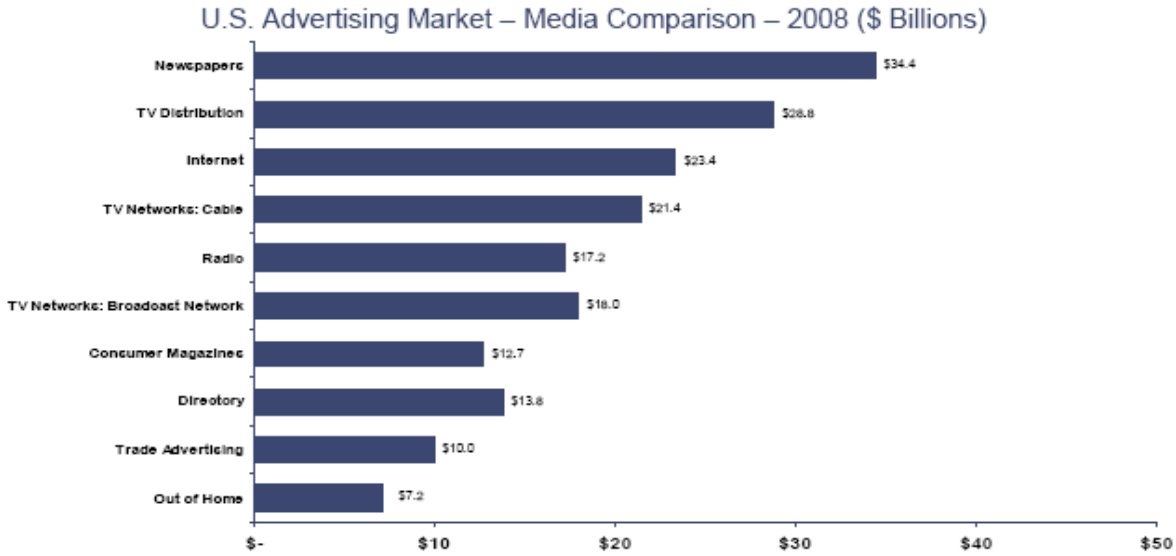




The U.S. Advertising Market

Cross Media Advertising Marketshare

- The Internet has continued to grow in significance when compared to other ad-supported media.



*"The total U.S. advertising market includes other segments not charted here.
**"TV Distribution" includes national and local TV station ads as well as multichannel system ads.

Sources: IAB Internet Ad Revenue Report; PricewaterhouseCoopers Global Entertainment and Media Outlook

Related PFF Publications

- *Privacy Polls v. Real-World Trade-Offs*, Berin Szoka, Progress Snapshot 5.10, Oct. 2009.
- *Targeted Online Advertising: What's the Harm & Where Are We Heading?*, Berin Szoka & Adam Thierer, Progress on Point 16.2, April 2009.
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- *Privacy Solutions*, Ongoing Series, PFF Blog.
- *Freedom of Speech & Information Privacy: The Troubling Implications of a Right to Stop People from Talking About You*, Eugene Volokh, Progress on Point 7.15, Oct. 2000.
- *Privacy & Commercial Use of Personal Information*, Thomas Lenard & Paul Rubin, 2002.

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