

REGULATION AND TECHNOLOGY

ANTHONY FALZONE*

This Article consists of some general observations and a few examples that illustrate them. First, technology can benefit tremendously from government involvement. Regulation may be part of that involvement, but thinking just in terms of regulation obscures some important points. When people talk about regulating technology, they usually assume technology is a private good, and the question becomes whether—and how—the government should regulate private property. This obscures the truth that technology is frequently a product of public and private collaboration.

The Internet is a good example. It began as a creature of government-funded research.¹ That rudimentary network laid the groundwork for all sorts of innovation that nobody could possibly have foreseen in the 1960s and 1970s when the government was funding research that eventually resulted in the development of the Internet.² The wealth the Internet created and the innovation it helped foster were completely unforeseeable. The payoff horizon was far too long and uncertain to stimulate sufficient private investment, so had it not been for the government's investment, there may have been no Internet, or at least not the Internet we know.

* Anthony Falzone is Deputy General Counsel at Pinterest, Inc. and a Non-Resident Fellow at Stanford Law School's Center for Internet & Society. Prior to joining Pinterest, he was the Executive Director of the Fair Use Project and a Lecturer in Law at Stanford Law School, as well as a partner in the San Francisco office of Bingham McCutchen LLP. The views expressed in this article are the personal views of the author, and do not necessarily reflect the views of his present or past employers. This essay was adapted from panel remarks given at the 2012 Federalist Society Annual Student Symposium held March 3, 2012, at Stanford Law School in Palo Alto.

1. *A Brief History of the Internet & Related Networks*, INTERNET SOCIETY, <http://www.internetsociety.org/internet/internet-51/history-internet/brief-history-internet-related-networks> (last visited Sept. 20, 2012) [hereinafter *A Brief History*]. But see L. Gordon Crovitz, *Who Really Invented the Internet?*, WALL ST. J., July 22, 2012, <http://online.wsj.com/article/SB10000872396390444464304577539063008406518.html>.

2. *A Brief History*, *supra* note 1.

Now that the Internet has become so important to our everyday lives, there are problems that need to be addressed. One is network neutrality.³ Should the government allow the people who own the infrastructure to adopt practices that are going to favor or disfavor certain uses of data, applications, content, or certain users, and if so, to what extent?

The answers to this question will determine both whether the Internet will remain an open platform where people can innovate without permission and whether the kind of radical disruption that has marked Internet technology will continue.⁴ Allowing incumbents to make the rules will stifle the innovation that exists because of an open architecture that lets everybody in and allows for newcomers, whether or not the newcomers have permission from the incumbents.⁵ Is there a good market solution here? No. That is why the government has a role to play. It needs to protect the public good by keeping the structure open and preserving the ability of new participants to use the network in new and unforeseen ways.

Internet privacy is another question and it has a different answer. Should the government regulate the information websites collect and how they use it? Here, there is much more potential for market-based solutions. If there is sufficient demand, firms can compete with one another to provide technology that protects privacy. Moreover, the extent to which each technology is successful at protecting privacy can be measured reasonably well. Of course, there are some barriers to a market solution. Information costs are very high for users, and many users do not fully understand the privacy implications of data

3. See, e.g., Bill D. Herman, *Opening Bottlenecks: On Behalf of Mandated Network Neutrality*, 59 FED. COMM. L.J. 103, 108 (2006) ("The network is 'stupid,' faithfully carrying all data and placing the intelligence at the ends of the network. While 'smart' networks predestine certain uses, stupid—or neutral—networks liberate 'large amounts of innovative energy.'").

4. See, e.g., Mark A. Lemley & Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. REV. 925, 928 (2001) (defending open network access as a stable base for innovation). But see Christopher S. Yoo, *Would Mandating Broadband Network Neutrality Help or Hurt Competition?: A Comment on the End-to-End Debate*, 3 J. ON TELECOMM. & HIGH TECH. L. 23, 68 (2004) (arguing that a neutrality mandate would reduce consumer choice and stifle innovations in access technology).

5. See, e.g., Dan Hunter, *Cyberspace As Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439, 512 (2003) ("Legal recognition of anticommons owners' rights has stifled these innovative uses and will prevent others like them from arising at all.").

collection.⁶ It is difficult for users to make tradeoffs and conduct the balancing required by a market solution. It is, however, at least possible to imagine some market-based solutions to privacy problems.

The new “Do Not Track” proposals⁷ may be the worst possible solutions in some respects, because they permit lots of tracking even when a user opts out of tracking.⁸ A system that ostensibly prohibits tracking but really permits tons of it may be very confusing to consumers (depending on its implementation) and prevent the market from delivering a solution. Here, we should ask whether regulation is likely to thwart what might otherwise be a good market solution.

Ultimately, regulation of technology is not inherently good or bad. In many instances, technology is a public resource that will be under-produced, and there may be a symbiosis between innovators and the government. Government is often at its best when it cultivates new technologies and then gets out of the way. In that situation, it will help deliver innovations the market could not deliver on its own. Once technology matures, the market may or may not provide the right solutions. In those instances where the market is likely to do the job, it is often best for the government to get out and stay out. In those instances where the market is not likely to do the job, we have to be prepared to step in with government regulation step in. That is especially true when incumbents may stand in the way of innovation. In that situation, regulation is necessary to protect the process of innovation, and the creation of new markets that drive technology forward.

6. See, e.g., Tal Z. Zarsky, *Desperately Seeking Solutions: Using Implementation-Based Solutions for the Troubles of Information Privacy in the Age of Data Mining and the Internet Society*, 56 ME. L. REV. 13, 40–41 (2004) (describing market failures of “transacting” in personal information).

7. See WHITE HOUSE, *CONSUMER DATA PRIVACY IN A NETWORKED WORLD: A FRAMEWORK FOR PROTECTING PRIVACY AND PROMOTING INNOVATION IN THE GLOBAL DIGITAL ECONOMY*, (2012), <http://www.whitehouse.gov/sites/default/files/privacy-final.pdf>.

8. See *id.* at 16 (“[C]ompanies should limit personal data uses to fulfilling purposes that are consistent with the context in which consumers disclose personal data.”).