

## Platforms and Pipelines in Transition: Anatomy of a Policy Crisis

By Jennifer Holt, UC Santa Barbara

[jholt@filmandmedia.ucsb.edu](mailto:jholt@filmandmedia.ucsb.edu)

At the MacWorld Expo in January, 2007, CEO Steve Jobs announced that Apple was reinventing the phone and giving the world a “breakthrough Internet communications device.”<sup>1</sup> It would do the work of a video Ipad, a mobile phone and an Internet-enabled computer all in one. It would also have patented touch screen controls, visual voicemail, Internet browsing, video capability and apps that could provide everything from stock market updates to surf reports. One thing it would not have: a regulatory framework to accommodate all of those services found on one device. As Jobs proclaimed, the convergence of telecommunications, media, and computing represented by the iPhone has indeed been a dream come true for consumers—but for regulatory policy, it has created a nightmare.

By the time of the iPhone’s launch, contemporary media and telecommunications industries had taken on new dimensions and functions that had largely rendered the fundamental tenets of their regulation inadequate and irrelevant. Thanks to technological advances and the ripple effect of

shifting business models, different industries and sites of engagement with policy now find themselves housed together in one device. Add the dramatic pace of innovation and rapidly blurring boundaries between media and telecommunications into the mix, and the result is that the standards of regulation have grown out of touch with reality. Essentially, policy has been outpaced by technological and industrial advances, as regulators are struggling to accommodate a digital and convergent media landscape. Legal analysts agree that the pace of digitization and convergence, which has united previously separate applications and protocols in one communications platforms, has also created major problems for regulators. As one legal scholar argues: “To harness the full potential of this convergence, a wholesale, bottom-up revision of basic communications law is necessary.”<sup>ii</sup> Content and carriers no longer conform to their originally designed borders or boundaries—computers now deliver phone calls, phones now deliver information and entertainment—and that has created a regulatory crisis.

This crisis has left regulatory policy unable to address the needs of consumers, the requirements for a competitive marketplace, and responsibilities to the public interest (which have yet to be delineated in new media policy). Instead, we have converging markets for entertainment, information and communications being regulated by policies designed by, in

and for a different era. In fact, the Federal Communications Commission (FCC) is partially regulating the iPhone and similar devices with policy fundamentals first written in the era of the telegraph.

Convergence is certainly not a new phenomenon or idea. While it has been a prominent feature of academic and popular discussion for just over a decade, the term has a much longer history than is usually acknowledged. In fact, convergence is a concept that has been active in regulatory discourse since the 1960s. In what would become known as the “*Computer I Inquiry*,” the FCC began to investigate the best way to treat and regulate computer networks that were already beginning to pose some tough questions for regulators. The agency was concerned with the growing interfaces between computers and communications, and labeled this dynamic “convergence” in 1966. In the Inquiry, which one attorney for the FCC labeled “a necessary precondition for the success of the Internet,”<sup>iii</sup> the commission noted that this convergence had already “given rise to a number of regulatory and policy questions within the purview of the Communications Act” and began to tackle some of these fundamental issues of classification and regulatory design.<sup>iv</sup>

Forty-five years later, these regulatory and policy questions have yet to be resolved. The arrival of the Internet and subsequent accelerated convergence of distribution technologies has created a much larger “regulatory

hangover”—an economic term used to describe the inability of policy to keep pace with technological development. This regulatory hangover has become particularly pronounced in the language and concerns of media policy, where technology has transformed communications industries and, in turn, wreaked havoc on the foundational rationales for many regulatory paradigms.

In many ways, the current regulatory crisis—and hangover—is fundamentally about distribution. When the functions and purposes of distribution “pipelines” are no longer singular, which function and attendant regulatory standard should take precedence? Which rational drives policy? The iPhone receives and transmits voice, video and data, and it is often impossible to distinguish where one service ends and the other begins. In short, the government needs a new framework that somehow accommodates multi-platform, voice and data applications and networks.

One particularly vexing problem in this regard has been the treatment of Internet service providers (ISPs) and the classification of broadband services. This history of broadband regulation is one of the more contentious and contested policy histories, and represents the hangover engendered by the growing disconnect between the capabilities and practices of new digital technologies, and the policies designed to police them. Thus, the iPhone’s

simple switch that allows one to choose between using Wi-Fi networks and AT&T's 3G network (in the U.S.) for an Internet connection also links the user to a host of not-so-simple regulatory dramas that have been playing out for years –battles to determine how we classify and regulate content that is delivered over mobile technologies. v

Currently, there are laws and provisions in the U.S. for regulating what are known as “information services,” “telecommunications services” and cable television—separately. As of this writing, broadband service is being regulated as an “information service.” The Telecommunications Act created the category of information services, which can make information available via telecommunications but they can't own or operate that system. Information services are distinguished from (and regulated less stringently than) telecommunications services, and have the important distinction of being *common carriers*.

The common carrier status is a crucial element of the battle over broadband classification.<sup>v</sup> Congress first enacted common carrier legislation in 1910 for the telegraph and telephone.<sup>vi</sup> “At the heart of common carriage”, Tim Wu explains, “lies the idea that certain businesses are either so intimately connected, even essential, to the public good, or so inherently powerful—imagine the water or electric utilities—that they must be compelled to conduct

their affairs in a nondiscriminatory way.”<sup>vii</sup> These businesses are subject to stricter regulations, as they are viewed as essential infrastructure for the national economy and public welfare, and must be available to the general public without prejudice. In general, Wu notes that telecommunications, banking, energy and transportation are identified as common carriers.<sup>viii</sup> Broadcasters are not considered to be common carriers. At this point, neither are Internet service providers (even if they are telecommunications companies) – although they have been historically treated as such - and that distinction has been the focal point of contention in much of broadband’s regulatory history.

Indeed, the the classification of broadband access as a telecommunications service is essential to preserving “net neutrality,” or what are essentially common carriage principles for the Internet. The importance of maintaining these common carriage requirements are paramount for a host of cultural, economic and industrial concerns – including the cultivation of a free and open Internet with the flow of information not subject to influence or control by conglomerate gatekeepers, political forces or censors of any kind; the stimulation of investment in developing platforms and technologies; and maintenance of a competitive marketplace that encourages and supports continued innovation. One only has to look at how Internet access has been

manipulated by governments in China, Iran, North Korea, Cuba and most recently during the January, 2011 uprising in Egypt (among others), for examples of what can happen when these principles are not enshrined in new media policy.<sup>ix</sup>

Cable modems had been treated the same way as phone companies providing Internet service—as a “telecommunications service” —but in 2000, the Ninth Circuit court ruled that cable broadband operators actually provided a combination of “telecommunications” and “information” services, offering a decision that only created confusion for regulators.<sup>x</sup> Shortly thereafter, the Bush FCC defined cable Internet service providers as an information service.<sup>xi</sup> This basically exempted ISPs from common carriage regulations. Activists have been demanding the return of the Title II classification for ISPs ever since, in order to preserve common carriage principles for the Internet and regulators’ ability to enforce those principles and maintain an open Internet.

The US Ninth Circuit District Court then reversed the FCC’s cable modem order in 2003, and went back to the characterization of ISPs as telecommunications services/common carriers. Two years later, the United States Supreme Court upheld the FCC’s 2002 policy in the Brand X Case, reversed the Ninth Circuit and went back to the classification of cable modem services as Title I information services. The Supreme Court’s decision in the

“Brand X” case in 2005 released Internet service providers from common carriage requirements.<sup>xii</sup> This meant that Internet service providers were reclassified three times in as many years by Federal agencies and the courts, ultimately arriving at the Supreme Court’s decision in 2005 that cable modem services are Title I information services and, therefore, not common carriers.

One of the most interesting aspects of the Brand X decision was the scathing dissent (moment of clarity?) from Justice Antonin Scalia. Scalia disagreed with the Court’s reasoning that since cable modem service did not offer high speed Internet access separately and by itself—it needed the help of other services, applications and functions—then it did not actually “offer” high speed access to the Internet. Scalia argued that this was analogous to a pizzeria saying that they did not offer pizza delivery, even though they bake pizzas and bring them directly to your house. “The pet store may have a policy of selling puppies only with leashes,” he contined, “but any customer will say that it does offer puppies—because a leashed puppy is still a puppy, even though it is not offered on a ‘stand-alone’ basis.”<sup>xiii</sup> So just as pet stores bundle puppies with leashes and pizzerias bundle baking with delivery, Scalia saw that cable modem bundled cable and telecommunications services, and refused to deny the existence of either one.



Nevertheless, the court had spoken. The FCC then based its own Internet Policy Statement (adopted in August, 2005, less than two months after the Brand X decision) on the Telecommunications Act, which holds separate regulatory regimes for carriers providing telephony and those providing information services.<sup>xiv</sup> This Supreme Court decision and the resulting regulatory approach by the FCC has drawn the agency into an “existential crisis” according to media reform group Free Press, “leaving the agency unable to protect consumers in the broadband marketplace, and unable to implement the National Broadband Plan.”<sup>xv</sup> This crisis was evident when the FCC later censured Comcast for “throttling bandwidth hogs”<sup>xvi</sup> who were on BitTorrent and using more than their fair share of Comcast’s bandwidth. The FCC said that throttling Internet traffic was illegal and in violation of the FCC’s rules to “preserve and promote the vibrant and open character of the Internet.”<sup>xvii</sup> Although they were not fined, and no rules had been set up, Comcast still turned around and sued the FCC over its order—and won. The FCC’s sanction was later struck down by the DC Circuit Court of Appeals in April, 2010 because the court ruled that the FCC did not have authority under Title I of the Communication Act to regulate the Internet, or tell Comcast what it could or could not do. Therefore, in somewhat of a Catch-22, the decision to regulate ISPs as information services also, according to this court, removed

the agency's authority over Internet regulation. The current state of indecision leaves consumers (and content providers) vulnerable, leaves pipelines in control, and leaves devices like the iPhone at the mercy of ISPs who have the power to deliver value (and valuable content) to these platforms—and the power to take it away.

As a result, of the DC Circuit Court's decision in April, 2010, the FCC found itself with no legal authority to preserve any type of "net neutrality." This sent the FCC's legal argument for enforcing an "open Internet" into chaos: it was based on their 2005 Internet Policy Statement, but according to the courts, lacked the legislative mandate necessary to continue. The Telecommunications Act did not specifically say the FCC could regulate ISPs or the Internet. Therefore, Congress would have to pass a law giving the FCC the authority to do so.

In the midst of this regulatory limbo, August, 2010, Google and Verizon offered up their own "legislative framework" for the FCC to consider when crafting the nation's Internet access policies.<sup>xviii</sup> These companies were strange bedfellows indeed. Google had been a longtime supporter of "net neutrality" and had been rather active in urging the public to join the fight to preserve an open Internet.<sup>xix</sup> After all, their business model depends on billions of consumers being able to access their properties (YouTube, Google, Gmail)

quickly and without having to pay extra for speedy service. Verizon, on the other hand, has fought against the open Internet, as they have much to gain financially from a “tiered” system that could charge content providers more depending on the speed of transmission. The proposal included arguments for transparency, limiting the FCC’s jurisdiction, and assorted loopholes for managing networks and eliminating “net neutrality” requirements for wireless services.

The arrogance of two major stakeholders purporting to help the FCC establish policy to regulate themselves might have been funny, if it were not having such a serious impact and shaping debate for the press, lawmakers and the FCC. In fact, just four months later, the FCC passed new “net neutrality” rules that were remarkably similar to those proffered by Google and Verizon. Indeed, in December, 2010, hoping everyone might be on vacation and not notice, the FCC came out with new “net neutrality” rules that didn’t make anyone happy, leading many to label them “fake net neutrality.” The rules echoed many of the same principles put forth by the companies they would be regulating, most notably supportive of non-discrimination practices—except for all wireless networks.

Almost immediately after the FCC’s announcement, Verizon had one of their own: in January, 2011, the company asked a federal appeals court to toss

out the “net neutrality” rules just put forth by the FCC. This, even though the watered-down rules were in fact almost exactly what Verizon proposed with Google just a month earlier.<sup>xx</sup> Verizon claimed that the rules were illegal and asked for the whole “net neutrality” order to be vacated by the court. Despite the similarities to their own plan, despite the fact that the rules were clearly written with overriding concern for Verizon’s interests, Verizon was unhappy enough about the threat of FCC regulation in any form that they went to the courts. Essentially, Verizon does not want the FCC to exercise any authority over broadband networks and the Internet and the company would rather take the odds that Congress—a body much slower to act, and full of members who take millions of dollars from the telecommunications industry—will be more sympathetic to their needs than President Obama’s FCC.

In the end, these infrastructure politics are also helping to redefine the power dynamics between platforms and pipelines, with Apple and the iPhone playing a significant role in this shift. Apple basically changed the wireless business model, creating a phone that had value in and of itself. Some have argued that the iPhone has actually transformed the US mobile phone industry, giving the actual phones value for the first time, as opposed to simply being cheap lures used to seduce customers into signing long term service contracts. As a result,

emphasis in the marketplace is increasingly being focused on the device itself (platform) instead of the the service (pipeline)—the United States is full of iPhone owners who will tell you that they actually buy and keep their phone for reasons that have nothing to do with AT&T's service and in fact, it's worst part about owning the phone.

Whether this newly ascribed agency to consumers, manufacturers and developers has turned wireless networks into what is referred to as dumb pipes – or carriers without agency - has yet to be determined, particularly by regulators. In fact, that is precisely what is at stake: how conscious, how active, how controlling can these pipelines actually be when delivering content? A dumb pipe is traditionally an open pipe, so as far as net neutrality advocates are concerned...the dumber the better. In all likelihood, however, regulators, lobbyists, consumers, lawyers, judges, and politicians will continue to spar over this until regulatory language is rewritten for a convergent, digital, multi-platform era.

- 
- <sup>i</sup> The video of Steve Jobs' keynote at the MacWorld Expo in January 2007 (with transcription) can be found at – <http://dotsub.com/view/d924d37a-caad-449a-a898-af8cb68f790b> (15 February 2011).
- <sup>ii</sup> John T. Nakahata, "Regulating Information Platforms: The Challenge of Rewriting Communications Regulation From the Bottom Up" *Telecommunications & High Technology Law* no. 1, 2002.
- <sup>iii</sup> Robert Cannon, "The Legacy of the Federal Communications Commission's Computer Inquiries," *Federal Communications Law Journal* no. 55, 2003.
- <sup>iv</sup> "Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities," Notice of Inquiry, 7 FCC 2d 11, 8 Rad. Reg. 2d (P&F) 1567 (1966).
- <sup>v</sup> The Communications Act of 1934 declares that it is "unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services for or in connection with like communication service, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage."
- <sup>vi</sup> See Mann-Elkins Act, Pub. L. No. 61-218, 36 Stat 539 (1910).
- <sup>vii</sup> Wu, Tim, *The Master Switch: The Rise and Fall of Information Empires* (New York: Alfred A. Knopf, 2010), 58.
- <sup>viii</sup> *Ibid.*
- <sup>ix</sup> See "Web 2.0 versus Control 2.0," Reporters Without Borders Report, March 18, 2010 - <http://en.rsf.org/web-2-0-versus-control-2-0-18-03-2010,36697>. Also see Cristina Venegas, *Digital Dilemmas: The State, The Individual and Digital Media in Cuba* (New Jersey: Rutgers University Press, 2010) for an in-depth look at the complexities of Internet censorship in Cuba.
- <sup>x</sup> See *AT&T Co. v. City of Portland*, 216 F.3d 871, 876-80 (9<sup>th</sup> Cir. 2000).
- <sup>xi</sup> "FCC Classifies Cable Modem Service as 'Information Service.'" FCC News Release 14 March 2002 – [http://www.fcc.gov/Bureaus/Cable/News\\_Releases/2002/nrcb0201.html](http://www.fcc.gov/Bureaus/Cable/News_Releases/2002/nrcb0201.html) (15 February 2011).
- <sup>xii</sup> *National Cable and Telecommunications Association v Brand X Internet Services*, 545 U.S. 967 (2005).
- <sup>xiii</sup> Justice Scalia, "Dissent in National Cable & Telecommunications Assn. V. Brand X Internet Services" 545 US 976 (2005) Part I – <http://www.law.cornell.edu/supct/html/04-277.ZD.html> (15 February 2011).
- <sup>xiv</sup> "FCC Policy Statement, 05-151" 5 August 2005 – [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-260433A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-260433A1.pdf) (15 February 2011).
- <sup>xv</sup> Matthew Lasar, "Comcast 1, FCC 0: What to Look for in the Inevitable Rematch" *Ars Technica* April, 2010 – <http://arstechnica.com/telecom/news/2010/04/comcast-1-fcc-0-what-to-look-for-in-the-inevitable-rematch.ars> (15 February 2011).
- <sup>xvi</sup> Andy Kessler, "The iPhone, Net Neutrality and the FCC," *Wall Street Journal* 10 June 2010.
- <sup>xvii</sup> FCC Policy Statement 2005.
- <sup>xviii</sup> See "Verizon-Google Legislative Framework Proposal" – [http://docs.google.com/viewer?url=http://www.google.com/googleblogs/pdfs/verizon\\_google\\_legislative\\_framework\\_proposal\\_081010.pdf&pli=1](http://docs.google.com/viewer?url=http://www.google.com/googleblogs/pdfs/verizon_google_legislative_framework_proposal_081010.pdf&pli=1)
- <sup>xix</sup> See "A Note to Google Users on Net Neutrality" – [http://www.google.com/help/netneutrality\\_letter.html](http://www.google.com/help/netneutrality_letter.html) (15 February 2011).
- <sup>xx</sup> See Nate Anderson, "Why is Verizon Suing over Net Neutrality Rules it Once Supported?" *Ars Technica* January, 2011 – <http://arstechnica.com/tech-policy/news/2011/01/verizon-sues-over-net-neutrality-rules-it-once-supported.ars> (15 February 2011).