Brooklyn Journal of Corporate, Financial & Commercial Law

Volume 12 | Issue 2

Article 5

6-1-2018

REMNANTS OF NET NEUTRALITY: POLICING UNLAWFUL CONTENT THROUGH BROADBAND PROVIDERS

Aaron Lerman

Follow this and additional works at: https://brooklynworks.brooklaw.edu/bjcfcl

Commons, Energy and Utilities Law Commons, Entertainment, Arts, and Sports Law Commons, Internet Law Commons, and the Law and Society Commons

Recommended Citation

Aaron Lerman, *REMNANTS OF NET NEUTRALITY: POLICING UNLAWFUL CONTENT THROUGH BROADBAND PROVIDERS*, 12 Brook. J. Corp. Fin. & Com. L. (2018). Available at: https://brooklynworks.brooklaw.edu/bjcfcl/vol12/iss2/5

This Article is brought to you for free and open access by the Law Journals at BrooklynWorks. It has been accepted for inclusion in Brooklyn Journal of Corporate, Financial & Commercial Law by an authorized editor of BrooklynWorks.

REMNANTS OF NET NEUTRALITY: POLICING UNLAWFUL CONTENT THROUGH BROADBAND PROVIDERS

ABSTRACT

The 2015 Open Internet Order, released by The Federal Communication Commission (FCC), introduced sweeping, new rules that promised to preserve an equal and open Internet to consumers. These rules, otherwise known as "Net Neutrality," prohibited broadband and internet service providers from impairing, blocking, or throttling access to "lawful content" online. But with a new administration and agenda, the FCC's 2017 Restoring Internet Freedom Order repealed Net Neutrality. Since then, various states have pushed back against the repeal, with some adopting their own versions of the 2015 Open Internet Order's Net Neutrality, keeping most of the rule language intact, including the "lawful content" distinction. As a result, unlawful content is not subject to Net Neutrality rules and providers are free to block access to such content. But difficulty lies in the classification of content as lawful or unlawful. This Note contends that large-scale copyright infringement such as digital piracy falls under the unlawful content category. With the proliferation of the Internet, digital piracy has taken a large economic toll on American media, leaving the private and public sector without a long-term, efficient solution. This Note argues, whether Net Neutrality survives at the federal or local level, that internet service providers are within their legal rights to block and impair access to digital piracv sites, applications and other unlawful content online.

INTRODUCTION

The Federal Communication Commission's (FCC) 2015 Open Internet Order (Open Internet Order), ruled as law in June 2016, sought to preserve a neutral Internet, where broadband and content providers operate on a level playing field established by regulatory measures.¹ Among its chief mandates, the Order prohibited broadband providers from accepting payment from content providers (such as websites) in exchange for prioritized service.² Additionally, the Order prevented broadband providers from blocking or slowing access ("throttling") to online content, so long as the hosted content is lawful.³ This could have suggested that broadband providers could limit access to sites hosting such unlawful content.⁴ But the FCC offered no explicit, codified definition of unlawful content in its Open Internet Order

^{1.} See, e.g., Brian Fung, The Net Neutrality Court Decision, in Plain English, WASH. POST (June 15, 2016), https://www.washingtonpost.com/news/the-switch/wp/2016/06/15/the-net-neutral ity-court-decision-in-plain-english/?utm_term=.22d46277eeab.

^{2.} See U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 696 (D.C. Cir. 2016).

^{3.} See id.

^{4.} See id.

and is mostly silent on how unlawful content should be treated with respect to the Open Internet Order. There is some indication in the FCC's record that certain conduits of copyright infringement will qualify as unlawful content.⁵ If so, broadband providers may combat mass copyright infringement and digital piracy by blocking and throttling unlawful content such as websites and applications that facilitate infringement. Broadband companies are best equipped to act and should combat digital piracy through action that complies with the FCC Open Internet Order, leaving the battle against digital piracy in the private sector.

Digital piracy is a symptom of the information age, and most often characterized as the theft of media files over the Internet. Far removed from the last millennium's pirates and looters of goods in transit, digital piracy today is a mundane exercise requiring basic internet savvy.⁶ Since the advent of broadband Internet and quick download speeds, internet users have had the ability to download or stream unauthorized copies of music, movies, television, and applications at rapid speed. Content producers, advertisers, and distributors suffer from diminished profits lost to an audience diverted toward digital piracy.⁷ Since the turn of the century, there have been many efforts by the federal government to implement sound policy against digital piracy.⁸ Despite these efforts, some groups have reported increases in piracy in recent years.⁹ Absent a unified solution by legislators and executive agencies, digital piracy remains a problem. As content producers and broadband providers merge into large media conglomerates, these new media giants hold business interests in content production and internet access infrastructure.¹⁰ These large vertically integrated companies are organized to police infringement of their content and carry the fight against digital piracy.¹¹

^{5.} Protecting & Promoting the Open Internet, 30 FCC Rcd. 5601, 5732-33 (2015).

^{6.} See David Meyer, Pirate Bay Just Made It Easier to Watch Illegal Movies Online, FORTUNE (Feb. 8, 2016), http://fortune.com/2016/02/08/pirated-videos-got-even-easier/ (Pirate Bay, a leading piracy site, created a new service allowing users to stream movies and television directly in their browsers, for free, replacing the older system requiring users to download media files to their systems).

^{7.} See Carl Bialik, Putting a Price Tag on Film Piracy, WALL ST. J. (Apr. 5, 2013, 11:42 PM), http://blogs.wsj.com/numbers/putting-a-price-tag-on-film-piracy-1228/.

^{8.} See Geoffrey A. Fowler et al., U.S. Shuts Offshore File-Share 'Locker', WALL ST. J. (Jan. 20, 2012), http://www.wsj.com/articles/SB10001424052970204616504577171060611948408.

^{9.} See Robert Steele, *If You Think Piracy is Decreasing, You Haven't Looked at the Data...*, DIGITAL MUSIC NEWS (July 16, 2015), http://www.digitalmusicnews.com/2015/07/16/if-you-think -piracy-is-decreasing-you-havent-looked-at-the-data-2/.

^{10.} See David Trainer, AT&T Time Warner Acquisition a Rare Deal that Makes Economic Sense, FORBES (Nov. 15, 2016, 10:20 AM), http://www.forbes.com/sites/greatspeculations/2016/1 1/15/att-time-warner-acquisition-a-rare-deal-that-makes-economic-sense/#da16aab5b69d.

^{11.} See Thomas Gryta, AT&T Reaches Deal to Buy Time Warner for \$85.4 Billion, WALL ST. J. (Oct. 22, 2016), http://www.wsj.com/articles/at-t-reaches-deal-to-buy-time-warner-for-more-than-80-billion-1477157084.

In June 2016, the FCC succeeded in its years-long mission to issue regulation supporting Net Neutrality.¹² The goal was to provide uncompromised and equal access to all internet content,¹³ whether it be an advertiser's website or a young entrepreneur's science blog.¹⁴ Because internet access is facilitated through private companies, the government's main concern is that paid preferences may tilt internet traffic in favor of those with deep pockets.¹⁵ During the Obama administration, the FCC framed Net Neutrality as a principle akin to free trade, arguing that innovation and fair competition will blossom on a level playing field.¹⁶ But with the election of President Trump, the FCC flipped to a Republican-principled, deregulationbased agenda and repealed Net Neutrality with the Restoring Internet Freedom Order (Repeal) in December 2017.¹⁷ The Repeal is deeply unpopular with the American public, with a decisive majority in favor of preserving Net Neutrality.¹⁸ In fact, some states are proposing legislation to codify the Open Internet Order into their state legislation, seeking to effectively negate the Repeal.¹⁹ Net Neutrality, either at the federal or state level, comes with a caveat. At both levels, unlawful content is not protected by Net Neutrality laws and remains prone to disrupted service; only "lawful content" is guaranteed to be free and undisturbed for consumers.²⁰ Whether Net Neutrality rules exist at the national or state level, or not at all, broadband providers may freely interfere and impede consumer access to unlawful content.

Part I of this Note supplies a technical background of the elements of digital piracy and the various platforms supporting it, as well as a sampling of the damage stemming from illegal file-sharing and a description of the relevant copyright regulation. Part II will address the various efforts taken to

^{12.} See U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 696 (D.C. Cir. 2016).

^{13.} *Net Neutrality*, OBAMA WHITE HOUSE ARCHIVES, https://obamawhitehouse.archives.gov/node/323681 (last visited Nov. 22, 2016).

^{14.} Net Neutrality, as a system of laws and regulations, is primarily concerned with supplying consumers and businesses equal access to the internet. Regulators fear that in a non-neutral internet, companies and individuals will be able to pay broadband internet providers to prioritize their content and boost accessibility to obtain a benefit over a competitor's site. The FCC's 2015 Open Internet Order seeks to promote a neutral internet by treating the internet as a public utility and broadband providers as common carriers. *See generally* Protecting & Promoting the Open Internet, 30 FCC Rcd. 5601, 5604–07 (2015).

^{15.} Net Neutrality, supra note 13.

^{16.} *Id*.

^{17.} See generally Restoring Internet Freedom, 83 Fed. Reg. 7852 (Feb. 22, 2018) (to be codified at 47 C.F.R. pts. 1, 8, & 20).

^{18.} See Harper Neidig, Poll: 83 Percent of Voters Support Keeping FCC's Net Neutrality Rules, THE HILL (Dec. 12, 2017, 5:02 PM), http://thehill.com/policy/technology/364528-poll-83-percent-of-voters-support-keeping-fccs-net-neutrality-rules.

^{19.} See Patrick Caughill, *California Joins New York and Montana in Defying Net Neutrality Repeal*, FUTURISM (Feb. 1, 2018), https://futurism.com/california-joins-new-york-montana-defyin g-net-neutrality-repeal/.

^{20.} See U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 735 (D.C. Cir. 2016).

deter digital piracy's prominence, with special attention to federal and legislative efforts and the public sector's efforts to curb the issue. Lastly, Part III addresses Net Neutrality rulemaking litigation and state-level backlash against its subsequent repeal. This Note concludes by advocating for broadband providers to throttle users' access to illegal content.

I. DIGITAL PIRACY OVERVIEW

In order to understand the distinction between lawful and unlawful content, an examination of digital piracy is necessary. Modern technology and internet infrastructure allow for large-scale copyright infringement and theft. Our copyright laws have mostly failed to adapt to advances in technology, resulting in serious economic harm to media industries, particularly music and film companies and the artists they enlist.²¹ This section explores digital piracy through the relationship between technology, copyright law, and economic damage.

A. TECHNICAL SUMMARY AND THE EVOLUTION OF DIGITAL PIRACY

Many forms of digital piracy involve complex computing and internet processes, which often skirt the traditional legal perception of what constitutes copyright infringement.²² File sharing, at its most basic form, is the sharing of a computer file from one user to another.²³ Primitive peer-to-peer (P2P) networks required users to download entire files from a single peer.²⁴ The introduction of BitTorrent changed the way P2P networks operated. With BitTorrent, users are able to download small pieces of the desired file from multiple sources, or seeders, while simultaneously distributing those file pieces to others.²⁵ Downloading a file becomes exponentially faster as more users download that file. With quicker download speeds, BitTorrent allows users to share larger files, such as high-definition movies, as opposed to early P2P networks, which predominantly facilitated

^{21.} See Bialik, supra note 7.

^{22.} The Ninth Circuit's opinion in *Columbia Pictures Indus. v. Fung* provides an accurate and technically-savvy summary of the infrastructure supporting digital piracy. *See generally* Columbia Pictures Indus., Inc. v. Fung, 710 F.3d 1020, 1024 (9th Cir. 2013).

^{23.} See id.

^{24.} See *id.* at 1026. If the download was interrupted, a user would have to "find another peer that had the file and resume the download from that peer." This limited the speed of P2P file transfers and a "user could only begin sharing his copy of the file with other peers once he had completed the download." *Id.*

^{25.} See Bernard A. Mantel, Note, *The Google Police: How the Indictment of the Pirate Bay Presents A New Solution to Internet Piracy*, 20 U. MIAMI BUS. L. REV. 77, 81–83 (2011). The fragmented files are very small, and are distributed across the user network. When all the fragments are downloaded, the file is reassembled to its original form. When more users have more file fragments, it becomes easier for other users to download the targeted file. A file can "go viral" when a large number of users are hosting it for download, resulting in a large amount of downloaders, and so on. *See id.*

the transfer of smaller files, such as music.²⁶ P2P streaming sites, where users do not permanently download the targeted file, but instead stream the file, have become increasingly popular as a way to watch pirated television, movies, and sports.²⁷ As in BitTorrent's system of simultaneous downloading and uploading, a P2P streaming system turns a user's computer into both a broadcast receiver and a broadcast uploader.²⁸ The potential for copyright infringement follows in each of these piracy methods.

The process of how a user accesses and ultimately downloads the targeted file reveals at what point infringement actually occurs. Torrent files are published on torrent sites.²⁹ The torrent is a "very small file" that contains instructions on the whereabouts of the pieces of the targeted file and "contains none of the actual content that may be copyrighted."³⁰ Once the user begins downloading the fragments of the targeted file, he or she acquires the copyrighted material, and infringement occurs.³¹ Downloading becomes easier for other users when one user receives file fragments, since the fragments are uploaded to other users while they are downloaded. But because torrents do not contain copyrighted material and torrent sites host some lawful content, copyright owners and agencies have struggled to implement a proper and efficient strategy to fight against digital piracy.

B. COPYRIGHT LAW

2018]

At the center of digital piracy lies copyright law. Comprised of civil and criminal statutes, as well as common law, copyright law governs what works may be protected, the rights a copyright holder holds, what actions constitute infringement, and what penalties such infringement carries. Commonly-copyrighted works include audiovisual works, such as movies and television, and phonorecords, or songs.³² Among other rights, a copyright holder has the right to reproduce their work or authorize a reproduction of that work.³³ In the digital world, a movie file is a copy of the copyrighted work, the movie. Music and movie files are either permanent digital copies or licensed copies

^{26.} See Richard Nieva, Ashes to Ashes, Peer to Peer: An Oral History of Napster, FORTUNE (Sept. 5, 2013), http://fortune.com/2013/09/05/ashes-to-ashes-peer-to-peer-an-oral-history-of-nap ster/.

^{27.} See Geoffrey A. Fowler & Sarah McBride, Newest Export from China: Pirated Pay TV, WALL ST. J. (Sep. 2, 2005), https://www.wsj.com/articles/SB112560377411829361.

^{28.} See Jon Brodkin, BitTorrent Inc. Announces Live Streaming TV Service Powered by P2P, ARS TECHNICA (May 17, 2016, 1:09 PM), http://arstechnica.com/information-technology/2016/05/bittorrent-inc-announces-live-streaming-tv-service-powered-by-p2p/.

^{29.} Columbia Pictures, 710 F.3d at 1027.

^{30.} *Id.*

^{31.} See Christina Sternbenz, *How Sketchy Streaming Sites Really Work* — And Why Some Are Legal, BUS. INSIDER (Apr. 24, 2014, 3:40 PM), http://www.businessinsider.com/are-streaming-site s-legal-2014-4.

^{32.} See What Does Copyright Protect?, U.S. COPYRIGHT OFF., http://www.copyright.gov/help/faq/faq-protect.html (last visited Oct. 21, 2016).

^{33. 17} U.S.C. § 106 (2012).

of a protected work.³⁴ Streaming a copyrighted work produces a copy of a file saved on a hard drive and thus would constitute a reproduction.³⁵

Digital piracy is a form of infringement which essentially involves copying a protected digital file and sharing it with others without the copyright owner's permission.³⁶ Legislators have hardened their stance on digital piracy in recent years. It is a federal crime to "willfully infringe[] a copyright . . . for purposes of commercial advantage or private financial gain."³⁷ Such a violation carries a penalty of up to five years in prison if the offender distributes at least ten copies of a copyrighted work.³⁸ Convicted repeat offenders risk a penalty of imprisonment up to ten years.³⁹ Under the same statutes, reproductions and public distributions of copyrighted works online carry criminal penalties with a range of fines and sentences.⁴⁰ Courts have been reluctant to utilize these penalties due to the controversial nature of their severity.⁴¹ Additionally, officials and courts have favored prosecuting bigger fish over small-time infringers.⁴² The court's rationale is "that a party who distributes infringement-enabling products or services may facilitate direct infringement on a massive scale, making it 'impossible to enforce [copyright protection] effectively against all direct infringers."⁴³ Even when a user downloads part of a file, "it counts as a copy of copyrighted material, which is illegal."44

A court may impose secondary liability on a party "that has not directly infringed a copyright, but has played a significant role in direct infringement committed by others."⁴⁵ The two variations of secondary liability—stemming from common law—are contributory infringement and vicarious infringement.⁴⁶ Contributory infringement is imposed where a party intentionally induces or encourages direct infringement.⁴⁷ To be liable for

^{34.} See David Lazarus, When You Buy Digital Content on Amazon or iTunes, You Don't Exactly Own It, L.A. TIMES (May 13, 2016, 3:00 AM), http://www.latimes.com/business/lazarus/la-fi-laza rus-digital-content-20160513-snap-story.html.

^{35.} Sternbenz, *supra* note 31. This is true only if the stream exists for "more than a transitory duration" on the user's device. For an in-depth analysis on the transitory duration definition, *see* Cartoon Network LP, LLLP v. CSC Holdings, Inc., 536 F.3d 121 (2d Cir. 2008).

^{36.} See Jose Pagliery, *Kickass Torrents' Huge File Sharing Site Shut Down by Feds*, CNN MONEY (July 21, 2016, 1:01 PM), http://money.cnn.com/2016/07/21/technology/kickass-torrent/i ndex.html.

^{37. 17} U.S.C. § 506(a)(1).

^{38.} See 18 U.S.C. § 2319 (2012).

^{39.} See id.

^{40.} See id.

^{41.} See Lori A. Morea, The Future of Music in a Digital Age: The Ongoing Conflict Between Copyright Law and Peer-to-Peer Technology, 28 CAMPBELL L. REV. 195, 218 (2016).

^{42.} See Arista Records LLC v. Lime Grp., 784 F. Supp. 2d 398, 422 (S.D.N.Y. 2011).

^{43.} Id. (quoting Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 930 (2005)).

^{44.} Sternbenz, supra note 31.

^{45.} Arista Records, 784 F. Supp. 2d at 422.

^{46.} See Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 929 (2005).

^{47.} See id.

vicarious infringement, a court must find that a party has profited from direct infringement "while declining to exercise a right to stop or limit it."⁴⁸ In a case against the former highly-popular LimeWire⁴⁹ P2P service, the court found that LimeWire engaged in conduct to attract infringing users to its service and depended on infringing use for its business success,⁵⁰ and as a result, the court found LimeWire liable for both contributory and vicarious infringement.⁵¹ Shortly after that verdict, LimeWire reached a settlement with the recording industry, agreeing to pay out \$105 million to record companies and permanently terminate its service.⁵²

By applying the relevant statutes and the court's reasoning in *Metro-Goldwyn-Mayer Studios Inc. v. Grokster*, a torrent site will likely be found secondarily liable for copyright infringement by offering torrents of copyrighted works for download.⁵³ Because a torrent allows its downloader to receive an unauthorized reproduction of a protected work, the downloader is a direct infringer.⁵⁴ Since most torrent sites exist to facilitate this kind of copyright infringement, they will be likely held contributorily liable, and if the torrent site benefitted financially, it will be vicariously liable.⁵⁵ The analysis for P2P piracy streaming sites is similar, and those sites may be directly liable for reproduction and/or performance infringement.⁵⁶ Without a doubt, torrent and torrent streaming sites host copyright infringing conduct, which is certainly considered "unlawful" under the Copyright Act.⁵⁷ A complex problem with multiple infringers requires targeted action against the sources of the infringement—torrent and P2P sites—to proactively disrupt access to infringing content.

C. DAMAGE IN PIRACY'S WAKE

The Internet is a major center of commerce in the United States, and there is no denying the forceful nature with which e-commerce affects the economy. There are dozens of conflicting studies available on digital piracy's

2018]

^{48.} Id.

^{49.} The *Arista Records* court held that LimeWire was overwhelmingly used for infringement. *See Arista Records*, 784 F. Supp. 2d at 426. The court determined that LimeWire's operators and users both treated the service as a platform to share and obtain infringing copies of protected works. *See id.* at 431.

^{50.} See id. at 426.

^{51.} See id. at 440.

^{52.} See Eriq Gardner, Record Labels Settle Massive LimeWire Copyright Lawsuit, HOLLYWOOD REP. (May 12, 2011, 2:56 PM), http://www.hollywoodreporter.com/thr-esq/record-labels-settle-ma ssive-limewire-188028.

^{53.} Metro-Goldwyn-Mayer Studios, 545 U.S. at 930.

^{54. 17} U.S.C. § 506(a)(1) (2012).

^{55.} Metro-Goldwyn-Mayer Studios, 545 U.S. at 930.

^{56.} See Sternbenz, supra note 31.

^{57.} See 17 U.S.C. § 506.

impact on the economy, most likely due to the complexity of the issue.⁵⁸ Content producers, distributors, and advertisers have direct stakes in the cash flow of content, and with many more parties affected by piracy, the total effects are difficult to gauge.⁵⁹ The rise of digital piracy can be attributed to the widespread use of P2P file sharing made popular in 1999 by the music sharing application Napster.⁶⁰ Current P2P technology "split[s] up big media files into many small parts," for people to simultaneously download from multiple locations and then upload to other downloading users.⁶¹

With easily accessible pirated content from unknown sources comes grave security risks. P2P applications and networks are known to harbor risks to users' cybersecurity.⁶² P2P networks often expose users to malware, spyware, and other viruses which may expose holes in users' firewalls, allowing attackers to infiltrate users' computers and steal personal information.⁶³ The issue lies in the access granted to the open network and all users operating in that network.⁶⁴ As a result of that access, "P2P provides a key to unlock data across corporate intranets and extranets."⁶⁵ Worms and Trojans infect devices through the equivalent of a digital Trojan horse attack. By either supplanting malicious code into a file or by posing as a fellow peer, malware can infect a computer and provide a hacker with access to the infected system.⁶⁶ Personal information is often targeted to commit identity theft against the compromised P2P user.⁶⁷

Another common attack on P2P users is a Distributed Denial of Service Attack (DDoS), where attackers exploit a security vulnerability in a user's computer to attack a site or server.⁶⁸ In a DDoS, the attacker controls the user's computer and sends "huge amounts of data" to its target, with the attacker distributing the attack by manipulating multiple computers through the same process.⁶⁹ Through malware, hackers infect a computer or home network which can then spread to all internet-enabled devices connected to

^{58.} See Kal Raustiala & Chris Sprigman, *How Much Do Music and Movie Piracy Really Hurt the U.S. Economy*?, FREAKONOMICS (Jan. 12, 2012, 3:09 PM), http://freakonomics.com/2012/01/1 2/how-much-do-music-and-movie-piracy-really-hurt-the-u-s-economy/.

^{59.} See id.

^{60.} See Nieva, supra note 26.

^{61.} Fowler et al., *supra* note 8.

^{62.} See Mindi McDowell et al., *Risks of File-Sharing Technology*, U.S. COMPUTER EMERGENCY READINESS TEAM (Oct. 1, 2016), https://www.us-cert.gov/ncas/tips/ST05-007.

^{63.} See id.

^{64.} *See* Simon Kilvington, *The Dangers of P2P Networks*, COMPUTER WKLY. (Sept. 2001), http://www.computerweekly.com/feature/The-dangers-of-P2P-networks.

^{65.} Id.

^{66.} See id.

^{67.} See McDowell et al., supra note 62.

^{68.} See Mindi McDowell, Understanding Denial-of-Service Attacks, U.S. COMPUTER EMERGENCY READINESS TEAM (Nov. 4, 2009), https://www.us-cert.gov/ncas/tips/ST04-015.

^{69.} See id.

the same network.⁷⁰ The malware then uses those devices, from cell phones to televisions, as "bots" to carry out the attack.⁷¹ DDoS attacks are considered unlawful transmissions under federal law.72

The financial and economic toll digital piracy takes on American media companies is difficult to quantify due to the scope of the issue and unreliable statistics reported by special interest groups.⁷³ For example, many statistics on the web equate a pirated file to a lost sale, assuming that a pirate would have purchased the underlying song or movie had piracy not been an option.⁷⁴ However, that is likely not the case. Others argue that piracy has a positive promotional effect on pirated content by increasing audience size and spreading popularity through word-of-mouth.⁷⁵ But there is data that supports the economic strain inflicted by piracy. The movie, The Hurt Locker, released in 2009, "had a worldwide box office of only \$49 million but was downloaded illegally seven million times, according to TorrentFreak," a website devoted to file-sharing news.⁷⁶ In some cases, movies appear on filesharing torrent sites while they are still in theaters, as was the case when bigbudget movies such as Captain America: the First Avenger and The Amazing Spiderman 2 appeared on Kickass Torrents for download.⁷⁷ Wellesley College economist Brett Danaher, who studied the effect on movie sales after Megaupload's shutdown in 2012, found that "digital sales from two major studios rose 6% to 10%" and while some studies support conflicting data, Danaher asserts "[t]he vast majority of studies say file sharing is hurting sales."78

Looking at the infringing sites' revenue may offer additional insight into the economic displacement caused by digital piracy. Kickass Torrents, a torrent site, received close to \$17 million a year from advertising revenue.⁷⁹ During its peak, Megaupload, a former top torrent site and leading facilitator of digital piracy, received over \$110 million in subscriber fees, which users

^{70.} See Eli Blumenthal & Elizabeth Weise, Hacked Home Devices Caused Massive Internet Outage, USA TODAY (Oct. 21, 2016), http://www.usatoday.com/story/tech/2016/10/21/cyber-atta ck-takes-down-east-coast-netflix-spotify-twitter/92507806/.

^{71.} See id.

^{72.} See 18 U.S.C. § 1030(a)(5)(A) (2012).

^{73.} See Raustiala & Sprigman, supra note 58.

^{74.} See Bialik, supra note 7.

^{75.} See Live Ma et al., The Dual Impact of Movie Piracy on Box-Office Revenue: Cannibalization and Promotion 1 (Feb. 2016) (unpublished manuscript), available at https://techpolicyinstitute.org/wp-content/uploads/2016/02/Smith ImpactPiracyPromotionCanniba lization.pdf.

^{76.} See Eduardo Porter, The Perpetual War: Pirates and Creators, N.Y. TIMES (Feb. 4, 2012), http://www.nytimes.com/2012/02/05/opinion/sunday/perpetual-war-digital-pirates-andcreators.html.

^{77.} See Pagliery, supra note 36.

^{78.} Bialik, supra note 7.

^{79.} See Pagliery, supra note 36.

paid for priority service on the Megaupload site.⁸⁰ In court, a Megaupload executive admitted that "more than 90%" of the site's profit was from "infringing files."⁸¹ With the advent of P2P streaming, live broadcasters have also seen digital piracy encroach on their content.⁸² Professional sports leagues and their broadcasters cite a decline in viewership to the accessibility of free live versions of their games and broadcasts online.⁸³ The damages inflicted by digital piracy span across industries, and the losses suffered by those companies are passed off to consumers through higher pricing.⁸⁴

II. SEARCHING FOR THE PROPER REMEDY

The digital piracy problem caught content providers flat-footed and without viable mechanisms to enforce their copyrights. The problem quickly became a national one, with the federal government attempting to intervene against piracy.⁸⁵ Despite these governmental actions, digital piracy continues to persist. This section examines the efforts made to fight digital piracy thus far and exposes the flaws in those efforts, before suggesting that a new approach is necessary in order to effectively address the problem.

A. FEDERAL AGENCIES

Digital piracy is a problem transcending American borders and copyright law. Facilitators of digital piracy have found ways to shield their activities from the reach of American copyright law. These tactics include hosting websites on servers located in foreign countries, and today, most digital piracy takes place on websites, where "pirates upload and share files from a single website, often based outside of the U.S."⁸⁶ Although many file sharing sites, such as Megaupload, bill themselves as legal ways to share files, their true purpose is often directed at the facilitation of digital piracy and copyright infringement.⁸⁷ Lack of jurisdiction often shields these organizations and

^{80.} See United States v. All Assets Listed in Attachment A, & All Interest, Benefits, & Assets Traceable Thereto, No. 1:14-cv-969, 2015 U.S. Dist. LEXIS 37981, at *17 (E.D. Va. Mar. 25, 2015).

^{81.} Id. at *20.

^{82.} See Jennifer Martinez, Feds Seize Sports Sites, POLITICO (Feb. 2, 2011, 12:53 PM), http://www.politico.com/story/2011/02/feds-seize-sports-sites-048692.

^{83.} See id.

^{84.} See Mark Sweney, Illegal Downloads: Music Industry to Carry Cost of Catching Pirates, THE GUARDIAN (Sep 14, 2010, 10:37 AM), https://www.theguardian.com/technology/2010/sep/14 /illegal-downloads-music-industry.

^{85.} See Erik Kain, A Brief History of US Anti-Piracy Efforts, FORBES (Feb. 15, 2012, 12:40 PM), https://www.forbes.com/sites/erikkain/2012/02/15/a-brief-history-of-us-anti-piracy-efforts/# 57cb10b779bb.

^{86.} Fowler et al., supra note 8.

^{87.} See United States v. All Assets Listed in Attachment A, & All Interest, Benefits, & Assets Traceable Thereto, No. 1:14-cv-969, 2015 U.S. Dist. LEXIS 37981, at *14 (E.D. Va. Mar. 25, 2015).

their servers from federal interference.⁸⁸ The federal government, with its many agencies and legislation, often lacks jurisdiction over foreign entities, relying on intellectual property-focused trade deals as authority instead of shutting down infringing activity directly.⁸⁹ But a broadband internet company in the United States has real-time information on internet infrastructure and its services data.⁹⁰ Where a federal agency must adhere to often time-sensitive procedures in order to obtain data on infringers, broadband companies may simply perform an analysis of its data to weed out infringers, or those accessing unlawful content.⁹¹ For their abilities, broadband providers are dubbed, "gatekeepers of the internet."⁹² These gatekeepers, uninhibited by state jurisdiction, may limit access to foreign-hosted piracy sites.⁹³

Copyright infringement is a federal issue, and the many federal agencies with authority against digital piracy point to the government's awareness of the gravity of the issue. The U.S. Immigration and Customs Enforcement,⁹⁴ Federal Bureau of Investigation, Department of Justice (DOJ), and the International Trade Commission (ITC), to name a few, all have varying degrees of authority over combatting digital piracy.⁹⁵ These federal agencies are lobbied by several private sector groups with the aim of fighting digital piracy.⁹⁶ There have been attempts by public and private sector organizations for nearly two decades in an effort to curb digital piracy.⁹⁷ The results are generally mixed.

Even with the multitude of agencies either committed in full or in part to fighting digital piracy, there are cracks in the authoritative scheme. A recent case highlighted the gap in federal authority to regulate infringement over the Internet. The ITC, a federal regulatory agency operating largely under the Tariff Act of 1930, provides oversight for international commerce and has been at the center of recent litigation regarding the importation of digital

^{88.} See Fowler et al., supra note 8.

^{89.} See Mantel, supra note 25, at 83-84.

^{90.} See U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 696 (D.C. Cir. 2016).

^{91.} See Heather Kelly, Internet Providers to Begin Warning Customers Who Pirate Content, CNN (Oct. 24, 2012, 2:11 PM), https://www.cnn.com/2012/10/18/tech/web/copyright-alert-system /index.html.

^{92.} See U.S. Telecom Ass'n, 825 F.3d at 711.

^{93.} See How to Stop Torrent Throttling, TORRENT VPN GUIDE, http://www.best-bittorrent-vpn.com/how-to-block-throttling-and-speed-up-your-torrents.html (last visited Dec. 26, 2016).

^{94.} See Federal Law Enforcement Agencies Join Movie Industry to Unveil New Anti-Piracy Warning, U.S. IMMIGR. & CUSTOMS ENFORCEMENT (May 8, 2012), https://www.ice.gov/news/r eleases/federal-law-enforcement-agencies-join-movie-industry-unveil-new-anti-piracy-warning.

^{95.} See About IPEC, OBAMA WHITE HOUSE OFF. OF MGMT. & BUDGET, https://obamawhiteho use.archives.gov/omb/intellectualproperty/ipec (last visited Oct. 5, 2016).

^{96.} See Daniel Castro & Nigel Cory, Industry Efforts to Fight Digital Piracy Complement Government Action, THE HILL (Dec. 30, 2015, 8:00 AM), http://thehill.com/blogs/pundits-blog/te chnology/264415-industry-efforts-to-fight-digital-piracy-complement-government.

^{97.} See Kain, supra note 85.

files.⁹⁸ Among its many powers, the ITC has the authority to bar the importation of articles infringing on U.S. copyright, trademark, or patents.⁹⁹ Following an investigation and a finding of infringement by the articles, the ITC notifies the Secretary of the Treasury to refuse entry of those articles, or the ITC may impose a penalty of up to \$100,000 dollars a day against individuals violating a non-importation order of the infringing articles.¹⁰⁰

In *ClearCorrect v. ITC*, the orthodontic company ClearCorrect electronically transmitted patent-infringing three-dimensional dental models from its Pakistan office to its office in the United States.¹⁰¹ Despite being a patent infringement case, the trial generated strong interest in the movie and music industries, which wished to use the ITC's authority over digital files "as an opportunity to bring copyright suits at the commission against foreign websites with pirated content."¹⁰² Ultimately, the court ruled that the ITC's charter did not grant it jurisdiction to bar the importation of non-material goods, such as digital files.¹⁰³ While the decision has been framed as a "check on the ITC," absent an express grant of power by Congress to the ITC to regulate the Internet, the challenge of an unregulated Internet remains.¹⁰⁴ The Internet's complex and abstract structure exposes the cracks in the government's regulatory system.

Other federal agencies have had some success in combatting digital piracy. Various agencies have shut down leading piracy sites such as Napster, LimeWire, Megaupload, and KickAss Torrents in the past decade.¹⁰⁵ While these agencies have had some success, federal agencies are not equipped to manage the problem on their own. Persistent monitoring to build a case before intervention is typical, and prosecution often takes years.¹⁰⁶ To make the situation more complicated, the perpetrators are technologically savvy and are often devoted to their practice of piracy. As one piracy site is taken down, more spring up. Sites that are shut-down often appear again with a different domain name or are hosted in another country.¹⁰⁷ Users seamlessly migrate to new platforms to carry on their piracy, until larger sites attract the attention of government officials, and so on.¹⁰⁸ With all the government's

^{98.} See ClearCorrect Operating LLC v. USITC, 810 F.3d 1283, 1286 (Fed. Cir. 2015).

^{99.} See 19 U.S.C. § 1337(a)(1)(B) (2012).

^{100.} See id. § 1337(f)(2).

^{101.} See ClearCorrect, 810 F.3d at 1287.

^{102.} See Ryan Davis, ClearCorrect Ruling Keeps ITC from Policing Web Piracy, LAW360 (Nov. 10, 2015, 10:05 PM), http://www.law360.com/articles/725601/clearcorrect-ruling-keeps-itc-from-policing-web-piracy.

^{103.} ClearCorrect, 810 F.3d at 1302.

^{104.} Davis, supra note 102.

^{105.} See Pagliery, supra note 36.

^{106.} See Arista Records LLC v. Lime Grp., 784 F. Supp. 2d at 422; see also United States v. All Assets Listed in Attachment A, & All Interest, Benefits, & Assets Traceable Thereto, No. 1:14-cv-969, 2015 U.S. Dist. LEXIS 37981, at *14 (E.D. Va. Mar. 25, 2015).

^{107.} See Martinez, supra note 82.

^{108.} See Pagliery, supra note 36.

2018]

efforts, the war over digital piracy continues, leaving copyright owners in search of alternative strategies.¹⁰⁹

B. RECENT LEGISLATIVE EFFORTS

To add to the thrust of federal power, proposed bills such as the Stop Online Piracy Act (SOPA)¹¹⁰ and the PROTECT IP Act (PIPA)¹¹¹ have aimed to arm federal agencies with broader jurisdiction, including targeting overseas infringers.¹¹² The U.S. House of Representatives (House) has contemplated requiring the private sector to block access to piracy sites.¹¹³ Under SOPA, the Attorney General would have had to seek a court order against a foreign internet site committing online piracy before triggering action against a piracy site.¹¹⁴ SOPA went as far as to require online service providers, search engines, payment providers, and internet advertising services to prevent U.S. internet users from accessing infringing sites.¹¹⁵ After nationwide protests sponsored by sites including Google, Wikipedia, and Reddit, the House backed away from efforts to enact the bill and postponed the matter indefinitely.¹¹⁶ Policy makers and scholars argue that copyright law is ill adjusted to counter the rapidly changing infringementassisting technology.¹¹⁷ As digital piracy shifts from file-sharing to digital streaming, copyright law has struggled to keep pace. Recognizing the gap in legislation, the DOJ has recommended that Congress create a felony penalty for unauthorized internet streaming.¹¹⁸

The Digital Millennium Copyright Act (DMCA) was enacted in 1998 as a modern update to copyright legislation.¹¹⁹ Building upon the rights of the copyright holder, the DMCA made it illegal to traffic copyrighted materials obtained by circumventing protective features that control access to the protected work.¹²⁰ Also made illegal in the same statute, one cannot disable protective features of a copyrighted work.¹²¹ The law deters the use of DVD "ripping" software to extract a movie file from its encrypted DVD onto a

^{109.} See Meyer, supra note 6.

^{110.} See generally Stop Online Piracy Act, H.R. 3261, 112th Cong. (2011).

^{111.} See generally Protect Intellectual Property Act, S. 968, 112th Cong. (2011).

^{112.} See Julianne Pepitone, SOPA Explained: What It Is and Why It Matters, CNN MONEY (Jan.

 $^{21,\,2012,\,12:44\} PM),\,http://money.cnn.com/2012/01/17/technology/sopa_explained/.$

^{113.} See id.

^{114.} See H.R. 3261.

^{115.} See id.

^{116.} See Pepitone, supra note 112.

^{117.} See Maria A. Pallante, The Next Great Copyright Act, 36 COLUM. J.L. & ARTS 315, 320 (2015).

^{118.} See Register's Perspective on Copyright Review: Hearing Before the H. Comm. on the Judiciary, 114th Cong. 19 (2015) (statement of Maria A. Pallante, Register of Copyrights & Director of the U.S. Copyright Office).

^{119.} See generally 17 U.S.C. §§ 512, 1201–1205, 1301–1332 (2012).

^{120.} See id.

^{121.} See id.

computer, where that file may be saved to multiple hard drives or uploaded via a file-sharing service.¹²² In the post-CD and DVD world, encrypted mp3s and video files are subject to the same protection.¹²³

C. PRIVATE SECTOR ACTION

A key feature of the DMCA is its take-down provision, which requires content and service providers "to designate an agent to receive notifications of claimed infringement, which trigger[s] the obligation for the service provider to remove the infringing content."¹²⁴ When copyrighted content is infringed upon, the copyright owner notifies the site's designated agent of the infringement.¹²⁵ The copyright owner must claim in good faith that the posted content violates their rights.¹²⁶ Because of the requirements imposed on service providers and the incentives copyright holders have to reduce infringement, the DMCA "preserves strong incentives for service providers and copyright owners to cooperate: to detect and deal with copyright infringements that take place in the digital networked environment."¹²⁷ As a consequence of the DMCA's take-down clause, the private sector started to enforce copyrights on the Internet.¹²⁸ Copyright holders have increasingly turned to "bots," algorithms designed to scour the Internet for potential infringement, to issue notices to service providers.¹²⁹ These bots often have difficulty distinguishing between infringement defenses such as de minimis taking and fair use, due to technical limitations.¹³⁰ In Lenz v. Universal Music Corp., the judiciary held that a fair use consideration must be made in good faith before a copyright holder issues a take-down notice.¹³¹ Occasionally, some notices turn out to be illegitimate, such as when Warner Bros. "threatened a child whose Harry Potter book report wound up in a 'shared' folder and was mistaken for the movie."¹³² Due to the large volume of takedown notices sent by copyright owners and the often thin evidence provided to support a claim of infringement, "there may be little to distinguish innocent from infringing speech, and the legal structure and market pressure give the

^{122.} See Universal City Studios, Inc. v. Reimerdes, 82 F. Supp. 2d 211, 217–18 (S.D.N.Y. 2000).

^{123.} See Capitol Records, LLC v. Escape Media Grp., Inc., No. 12-CV-06646 (AJN)(SN), 2014 U.S. Dist. LEXIS 183098 at *100, *103 (S.D.N.Y. May 28, 2014).

^{124.} Id. at *47, n.13; 17 U.S.C. § 512(c)(2)–(3).

^{125.} See Viacom Int'l, Inc. v. YouTube, Inc., 676 F.3d 19, 30-31 (2d Cir. 2012).

^{126.} See 17 U.S.C. § 512(c)(3)(v).

^{127.} H.R. REP. NO. 105-551, pt. 2, at 49 (1998).

^{128.} See Wendy Seltzer, Free Speech Unmoored in Copyright's Safe Harbor: Chilling Effects of the DMCA on the First Amendment, 24 HARV. J. L. & TECH. 171, 174–75 (2010).

^{129.} See Timothy Geigner, Google Report: 99.95 Percent of DMCA Takedown Notices Are Bot-Generated Bullshit Buckshot, TECHDIRT (Feb. 23, 2017, 10:48 AM) https://www.techdirt.com/ar ticles/20170223/06160336772/google-report-9995-percent-dmca-takedown-notices-are-botgenerated-bullshit-buckshot.shtml.

^{130.} See Lenz v. Universal Music Corp., 572 F. Supp. 2d 1150, 1155 (N.D. Cal. 2008).

^{131.} See id. at 1156.

^{132.} Seltzer, supra note 128, at 211.

service provider little incentive to investigate beyond the face of the notice."¹³³ Likewise, a "full investigation to verify the accuracy of a claim of infringement is not required."¹³⁴

The DMCA has struggled to effectively deter P2P piracy, partially because the DMCA was drafted before P2P reached prominence and before legislators could consider its infrastructure in relation to the statute.¹³⁵ As part of that problem, "the DMCA was designed to deal with providers serving a centralized file-storage function, it has proven a poor fit in cases involving P2P, where the service provider functions only as a pass-through or conduit for the transfer of infringing material."136 Conduit providers benefit from exemption from the DMCA's notice and take-down provision under § 512(h).¹³⁷ As a result of P2P infrastructure and the DMCA's limited thrust of authority over P2P networks' distributed content model, copyright holders have struggled to "sue to enforce their copyrights and, for that matter, even to figure out whom to sue."¹³⁸ Facing a faceless foe, copyright holders turn to suing the "small fish," the thousands of "John Does" in the P2P file sharing pool.¹³⁹ The DMCA attempted to stop copyright infringement by providing a mechanism for copyright owners to remove copyrighted copies as soon as an owner could find their protected works online, but it does not go far enough in the current state of piracy.¹⁴⁰ To stop a file that had been takendown from reappearing on another site, broadband providers should either obstruct the access of those secondarily liable torrent sites and impede the ability for users to upload or download the torrent, or obstruct the process of a P2P download and upload.

III. INTERFERING WITH ILLEGAL ACTIVITY

A. THE ROAD TO NET NEUTRALITY

For the last ten years, the FCC refined and litigated its Net Neutrality rules before the policy could be implemented as law.¹⁴¹ In 2007, after several Comcast subscribers discovered that Comcast was slowing its service to BitTorrent, a P2P networking application, non-profit groups filed a complaint

^{133.} Id.

^{134.} Lenz, 572 F. Supp. 2d at 1156.

^{135.} See Annemarie Bridy, Is Online Copyright Enforcement Scalable?, 13 VAND. J. ENT. & TECH. L. 695, 719 (2011).

^{136.} Id. at 717.

^{137.} See 17 U.S.C. § 512(h) (2012).

^{138.} Bridy, *supra* note 135, at 719.

^{139.} See UMG Recordings, Inc. v. Does, No. 06-0652 SBA (EMC), 2006 U.S. Dist. LEXIS 32821, at *1 (N.D. Cal. Mar. 6, 2006) (UMG Recordings sought immediate discovery using a subpoena to seek each John Doe's name, contact information, and Media Access Control (MAC) address.).

^{140.} See Bridy, supra note 135, at 719.

^{141.} See Shiva Stella, A Timeline of Net Neutrality, PUB. KNOWLEDGE, http://whatisnetneutrality .org/timeline (last visited Jan. 17, 2018).

with the FCC.¹⁴² Comcast believed that because the site consumed "significant amounts of bandwidth," interfering with such service was "necessary to manage scarce network capacity."¹⁴³ The FCC determined that Comcast acted too broadly by discriminating against BitTorrent, and that the site did not have a sole purpose of facilitating digital piracy.¹⁴⁴ The FCC issued an order directing Comcast to cease its practices, claiming that Comcast did not have the right to compromise consumer access to "lawful Internet content of their choice."¹⁴⁵ Comcast then challenged the FCC's order on the basis of the agency's lack of jurisdiction over its "network management practices."¹⁴⁶ Unfortunately for the analysis in this Note, Comcast did not challenge the FCC on the legality of the class of content it was blocking. Instead, the case was construed primarily with regard to the FCC's jurisdiction, and the order was vacated after the court found that the FCC did not have authority to regulate Comcast as it did.¹⁴⁷

Following *Comcast v. FCC*, the FCC issued the 2010 Open Internet Order, claiming that it had authority under Section 706 of the Telecommunications Act "to enact measures encouraging the deployment of broadband infrastructure."¹⁴⁸ The FCC's order to require network transparency and ban the blocking of lawful content was imposed on both fixed and mobile broadband providers, whereas the anti-discrimination provision was imposed only on fixed broadband providers.¹⁴⁹ The FCC's justification for the order was to "preserve and facilitate the 'virtuous circle' of innovation that has driven the explosive growth of the Internet."¹⁵⁰ In yet another challenge to the FCC's jurisdiction treating broadband providers as common carriers, *Verizon v. FCC* vacated the anti-discrimination and anti-blocking rule.¹⁵¹ Once again, the FCC returned to the drawing board to reformulate its regulation over a neutral Internet.

To guarantee consumers equal internet connectivity, the FCC issued the 2015 Open Internet Order. In the Order, the FCC proposed "five open internet rules" which applied to traditional and mobile broadband providers.¹⁵² The 2015 Open Internet Order, built upon the 2010 Open Internet Order, originally called for the bright line rules of anti-blocking, anti-discrimination,

^{142.} See Formal Complaint of Free Press & Pub. Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Application, 23 FCC Rcd. 13028, 13029 (2008).

^{143.} See Comcast Corp. v. FCC, 600 F.3d 642, 644 (2010).

^{144.} See Formal Complaint of Free Press & Pub. Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Application, 23 FCC Rcd. 13028, 13030 (2008).

^{145.} See Comcast, 600 F.3d at 644 (citation omitted).

^{146.} See id. at 645.

^{147.} See id. at 661.

^{148.} Verizon v. FCC, 740 F.3d 623, 628 (2014).

^{149.} See id. at 633.

^{150.} Id. at 628.

^{151.} See id. at 659.

^{152.} See U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 696 (D.C. Cir. 2016).

and increased transparency.¹⁵³ The 2015 Order's three "bright line rules" banned blocking, throttling, and paid prioritization of content: "[t]he antiblocking and anti-throttling rules prohibit broadband providers from blocking 'lawful content, applications, services, or non-harmful devices' or throttling-degrading or impairing-access to the same."154 The "anti-paid prioritization rule," essentially an anti-bribery rule, "barred broadband providers from" boosting or favoring traffic to a third party after accepting money from that third party.¹⁵⁵ The anti-paid prioritization rule also barred a broadband provider from favoring traffic at the expense of another to "benefit an affiliated entity."¹⁵⁶ The fourth rule, the FCC's General Conduct Rule, forbids broadband providers from engaging in conduct that "unreasonably interfere[s] with or unreasonably disadvantage[s] (i) end users' ability to select, access, and use broadband Internet access service or the lawful Internet content, applications, services, or devices of their choice, or (ii) edge providers' ability to make lawful content, applications, services, or devices available to end users."157

The fourth rule required broadband providers to operate with "enhanced transparency" in their services.¹⁵⁸ The FCC provides several factors to guide in the analysis of "what constitutes unreasonable interference with, or disadvantaging of, end-user or edge-provider access [such as]: end-user control; competitive effects; consumer protection; effect on innovation, investment, or broadband deployment; free expression; application agnosticism; and standard practices."¹⁵⁹ The FCC supplies additional information on each factor.¹⁶⁰

Whereas *Verizon* struck down the anti-blocking and anti-discrimination rules "on the ground that they amounted to common carrier regulation without any accompanying determination that broadband providers should be regulated as common carriers," in *United States Telecom Ass'n v. FCC*, the court upheld the FCC's classification of broadband providers as common carriers, effectively approving the anti-blocking and anti-throttling rules.¹⁶¹ In the *Telecom* decision, the 2015 Open Internet Order became law.¹⁶² The new Net Neutrality rules sought to limit broadband providers from manipulating internet traffic speeds for paid prioritization and against

157. Id. at 5660.

- 160. See id.
- 161. See id. at 733.
- 162. See generally id.

^{153.} See id.

^{154.} *Id*.

^{155.} See id.

^{156.} See Protecting & Promoting the Open Internet, 30 FCC Rcd. 5601, 5608 (2015).

^{158.} See U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 696 (D.C. Cir. 2016).

^{159.} Id. at 736.

competitors' content, while promoting increased network transparency for the public.¹⁶³

B. THE REPEAL AND STATE EFFORTS

The FCC repealed Net Neutrality rules after experiencing a change in administration and approach to regulation. The Repeal reclassifies broadband internet access services from common carriers to "information services," which effectively negates the validity of the Open Internet Order and *Telecom* decision.¹⁶⁴ But state-level lawmakers are charging ahead with Net Neutrality rules of their own.¹⁶⁵ New York's governor signed an executive order which states that internet service providers "may not block lawful content, applications, services, non-harmful device, or applications that compete with other services provided" by the internet service provider.¹⁶⁶ Montana's executive order is virtually the same.¹⁶⁷ Both orders adopt the views and general rules of the former FCC and its Open Internet Order, resulting in a state-level analysis similar to this Note's analysis of the FCC's former rule.

In addition to the rulemaking flip, the Repeal attempts to preempt states from passing their own version of Net Neutrality.¹⁶⁸ The FCC argues that varying state-level regulation would impose too much of a burden on broadband providers.¹⁶⁹ However, a loophole may exist. In several states, broadband and internet service providers have contracts with the state itself in order to operate there.¹⁷⁰ Those states argue that they have the right to compel providers to adopt Net Neutrality rules as a condition of such contracts.¹⁷¹ It remains to be seen if the FCC will litigate against those states adopting Net Neutrality, but a prolonged fight is almost certain to follow, as the state-level Net Neutrality movement is gaining momentum, and its supporters do not appear to be backing away any time soon.

^{163.} See generally Protecting & Promoting the Open Internet, 30 FCC Rcd. 5601, 5660 (2015).

^{164.} *See* Restoring Internet Freedom, 83 Fed. Reg. 7852 (Feb. 22, 2018) (to be codified at 47 C.F.R. pts. 1, 8, & 20); *U.S. Telecom Ass'n*, 825 F.3d at 733–35. The FCC's classification of broadband providers as common carriers granted the commission more regulatory power to pass anti-discrimination laws.

^{165.} See Caughill, supra note 19.

^{166.} N.Y. Exec. Order No. 175, Ensuring Net Neutrality Protections for New Yorkers (Jan. 24, 2018).

^{167.} See Mont. Exec. Order No. 3-2018, Executive Order Providing for Internet Neutrality Principles in State Procurement (Jan. 22, 2018).

^{168.} See Restoring Internet Freedom, 83 Fed. Reg. at 7888-89.

^{169.} See id.

^{170.} See Colin Lecher, New York Governor Signs Executive Order to Keep Net Neutrality Rules After the FCC's Repeal, THE VERGE (Jan. 24, 2018, 12:52 PM), https://www.theverge.com/2018/1/24/16928494/new-york-governor-net-neutrality-cuomo-executive-order.

^{171.} See id.

C. DISTINGUISHING BETWEEN LAWFUL AND UNLAWFUL CONTENT ON THE INTERNET

While the FCC has not explicitly released guidelines as to what may constitute "unlawful activity," the FCC made clear that the Open Internet Order's no-blocking rule is not meant "to protect copyright infringement . . . nor should it protect child pornography."¹⁷² The FCC has clarified that no part of the 2015 Open Internet Order "prohibits reasonable efforts by a provider of broadband Internet access service to address copyright infringement or other unlawful activity."¹⁷³ The FCC acknowledges that this rule may promote "the widespread use of intrusive packet inspection technologies by broadband providers to filter objectionable content" and jeopardize consumer privacy.¹⁷⁴ But consumers can defend themselves from such inspection; consumers have "many tools at their disposal to protect their privacy against deep packet inspection—including SSL encryption, virtual private networks, and routing methods like TOR."¹⁷⁵ Ultimately, the FCC will determine the reasonableness of the broadband provider's efforts to combat copyright infringement or other lawful activity.¹⁷⁶

The five rules generally prohibit broadband service providers from slowing internet speeds to "legal" content and sites.¹⁷⁷ This implies that broadband providers may slow speeds to "illegal sites" or "unlawful content." The FCC's 2015 Open Internet Order does not offer a definition for the phrase "unlawful content." As with many other terms in our jurisprudence, the phrase may be construed in many different ways. The court in Telecom analyzed the FCC's general conduct rule for ambiguity and vagueness, which calls for no unreasonable interference of "lawful Internet content," and found that the rule was not too vague as written.¹⁷⁸ Upon that determination, it would appear that the court thought the term was fairly straightforward. The phrase "unlawful content" may be dissected into two parts. Starting with the simpler term, "[c]ontent may be any number of things-family photos, poems, . . . even sound clips and movies."179 "Unlawful" is more difficult to define. A strict definition of "unlawful content" may include only the most offensive content, such as child pornography.¹⁸⁰ At the other end of the spectrum, a lax definition of "unlawful content" could include false advertising or tortious content.¹⁸¹ The

176. See id.

^{172.} Protecting & Promoting the Open Internet, 30 FCC Rcd. 5601, 5733 (2015).

^{173.} Id.

^{174.} Id.

^{175.} Id.

^{177.} See U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 733-35 (D.C. Cir. 2016).

^{178.} See id. at 736.

^{179.} UMG Recordings, Inc. v. Shelter Capital Partners LLC, 718 F.3d 1006, 1018 (9th Cir. 2013).

^{180.} See Protecting & Promoting the Open Internet, 30 FCC Rcd. at 5649.

^{181.} See Jones v. Dirty World Entm't Recordings LLC, 755 F.3d 398, 413 (6th Cir. 2014).

question posed, then, is does copyright infringement count as "unlawful content"?

D. MORE BENEFITS OF NET NEUTRALITY

The FCC's purpose for enacting the 2015 Open Internet Order was to (1) ensure a free-market Internet for consumers and (2) to promote the "virtuous cycle" of innovation.¹⁸² In its anti-throttling and anti-blocking definitions, the FCC states that no broadband provider shall degrade, impair, or block access to "lawful content, applications, services, or non-harmful devices."¹⁸³ In the 2015 Open Internet Order, the FCC stated that it intended these rules to prohibit an internet "fast lane" where broadband providers favor content with faster speeds in exchange for monetary consideration.¹⁸⁴ The court in Verizon recognized the strong incentive broadband providers would have to accept fees as paid prioritization.¹⁸⁵ The FCC feared that such paid prioritization would create "slow lanes" where access to the non-fee-paying content providers would be throttled, or slowed, as a result of the compromised broadband provider's "fast lane" deal with a competing, fee-paying content provider.¹⁸⁶ In a scandalous example of these concepts at play, a 2012 OTI report found that AT&T, Verizon, and T-Mobile blocked access to the Google Wallet e-payment application in order to favor their "own mobile payment application, a competitor to Google Wallet."¹⁸⁷

The FCC acknowledges broadband providers as "gatekeepers" of the Internet, and as "gatekeepers, they can block access altogether; they can target competitors, including competitors to their own video services; and they can extract unfair tolls."¹⁸⁸ This, the FCC argued, would "reduce the rate of innovation . . . and, in turn, the likely rate of improvements to network infrastructure."¹⁸⁹ Broadband providers could argue that by blocking and throttling access to digital piracy, its network congestion problem would be dealt with as well, benefiting consumers with valuable bandwidth to enjoy lawful content as they see fit.¹⁹⁰ Bandwidth is a limited, finite resource.¹⁹¹ Allowing digital piracy to consume bandwidth could restrict availability of that resource and impede innovation over the Internet.

188. Id. at 5608.

^{182.} See U.S. Telecom Ass'n, 825 F.3d at 690.

^{183.} See id. at 696.

^{184.} See Protecting & Promoting the Open Internet, 30 FCC Rcd. at 5607-08.

^{185.} See Verizon v. FCC, 740 F.3d 623, 645–46 (D.C. Cir. 2014).

^{186.} See Protecting & Promoting the Open Internet, 30 FCC Rcd. at 5608.

^{187.} See id. at 5640.

^{189.} Id.

^{190.} See Nate Anderson, Verizon: Comcast P2P Blocking Was Wrong, We Won't Do It, ARS TECHNICA (June 16, 2010, 10:10 PM), http://arstechnica.com/tech-policy/2010/06/verizon-comca st-p2p-blocking-was-wrong-we-wont-do-it/.

^{191.} See Stacey Higginbotham, Spectrum Shortage Will Strike in 2013, GIGAOM (Feb. 17, 2010, 1:00 PM), https://gigaom.com/2010/02/17/analyst-spectrum-shortage-will-strike-in-2013/.

E. THE MEDIA INDUSTRY'S RESPONSE TO NET NEUTRALITY

When a broadband provider throttles or blocks service to unlawful internet content such as digital piracy platforms, it does not impede on the open nature of the Internet. Limiting consumer access to BitTorrent or illicit streaming sites does not negatively affect the free market, nor does it limit innovators from developing novel internet content or infrastructure. Digital piracy is, by its very definition, unlawful.¹⁹² The FCC's Open Internet order provides for transparency, ensuring that if a broadband provider did block or throttle unlawful content, the public could access the provider's records.¹⁹³

A major hurdle in the solution to allow broadband providers to restrict access to unlawful content lies in who has authority to determine which content is unlawful. Our justice system does not allow for private parties to deem behavior as unlawful. That power lies with the courts, and it is up to the judiciary to determine an act's lawfulness after either a prosecutor or a civilian raises the issue before a court. The DOJ, however, exists as a quasi-executive, quasi-judicial federal agency.¹⁹⁴ The DOJ may find it is time to issue a list of copyright-infringing, digital piracy-inducing sites to broadband providers. This would be a simple solution that would unite the private and public sectors as cooperating forces. Whether the DOJ executes such an order through an executive order or in an evidentiary showing through the judiciary is up to the agency.

Copyright holders may continue to issue DMCA notices for takedown in the meantime. Under the DMCA, when a copyright holder issues notice to a service provider of infringement of its protected work, the service provider does not have an obligation to check the validity of the alleged copyright infringement.¹⁹⁵ Essentially, the notice and take-down provision of the DMCA operates on the honor system. When actual infringement occurs and a service provider successfully removes the content from the Internet, the statute presumes that the removed material committed an "infringement of copyright" absent any proper judicial review or analyses by a legal professional.¹⁹⁶ Does this infringing activity rise to the level of "unlawful content" described by the FCC's anti-throttling and anti-blocking order?

Perhaps notice of copyright infringement via digital piracy to a broadband provider would trigger a DMCA-like suspension of access to the infringing content. Rather than removing individual files, one at a time, from service providers such as file-sharing sites or streaming sites, it would be more cost-effective for broadband providers to limit access via throttling or blocking to those sites hosting "unlawful content."

^{192.} See Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 961-62 (2005).

^{193.} See Protecting & Promoting the Open Internet, 30 FCC Rcd. at 5609.

^{194.} See generally About DOJ, U.S. DEP'T OF JUST., https://www.justice.gov/about (last visited Oct. 24, 2016).

^{195.} See Seltzer, supra note 128, at 204–06.

^{196.} See 17 U.S.C. § 512(j) (2012).

It is important to remember that within the Net Neutrality rules there is no requirement for broadband providers to restrict access to unlawful content. To impose that requirement would be to return to the days of the SOPA and PIPA bills.¹⁹⁷ A main point of contention in the protest of those bills was the mandatory requirements by all internet service providers to block infringing content.¹⁹⁸ A federal regulation permitting optional action by broadband providers is very much a different idea. Under this theory, broadband providers will likely target unlawful content posing a threat to their business. It is more unlikely that a broadband provider would seek out minor targets publishing unlawful content due to the costs associated with this action.¹⁹⁹ Broadband networks are often strained by large data transfers required when streaming video, and video piracy sites such as Popcorn Time, Admit Me, and Pirate Bay are likely first-priority targets to alleviate network congestion and reduce copyright infringement.²⁰⁰ Further, it is more economical for a broadband provider, say Comcast, to block or throttle access to entire piracy platforms rather than individual programs. Broadband providers appear to have the capacity to block whole sites dedicated to streaming pirated content.²⁰¹ Recently, a UK court ordered internet service providers operating in the United Kingdom to block those sites.²⁰² Microsoft has gone so far as to block links to the torrent site, The Pirate Bay, sent via its instant messaging app due to fears over malware and security breaches stemming from the site.203

Broadband providers possess abundant resources to track digital piracy and impede access to unlawful content. Where federal agencies struggled with their limited resources against an infinite problem, broadband providers have direct access to the infrastructure and data of their services.²⁰⁴ A broadband provider can monitor digital traffic and determine where large amounts of bandwidth are being diverted. Customers who are known to frequent piracy sites may tip off broadband providers to new sites. In determining what to block, broadband providers may be limited in the scope

^{197.} See Stop Online Piracy Act, H.R. 3261, 112th Cong. (2011); see Protect Intellectual Property Act, S. 968, 112th Cong. (2011).

^{198.} See Pepitone, supra note 112.

^{199.} See Bridy, supra note 135, at 736 (The larger infringer is likely the torrent site hosting the files for download; thus, the more efficient target is the torrent site).

^{200.} See id.

^{201.} See generally Comcast Corp. v. FCC, 600 F.3d 642, 642 (D.C. Cir. 2010).

^{202.} See Doug Bolton, Putlocker Blocked in the UK by Internet Service Providers After High Court Order, THE INDEP. (May 26, 2016), http://www.independent.co.uk/life-style/gadgets-and-te ch/news/putlocker-blocked-down-virgin-media-sky-internet-streaming-watch-online-videos-a7050056.html.

^{203.} See Iain Thompson, *Microsoft Censors Pirate Bay Links from IM*, THE REG. (Mar. 26, 2012), http://www.theregister.co.uk/2012/03/26/microsoft_censors_pirate_bay_im/.

^{204.} See Thomas Gryta & Shalini Ramachandran, Broadband Data Caps Pressure 'Cord Cutters', WALL ST. J. (Apr. 21, 2016, 12:57 PM), http://www.wsj.com/articles/broadband-data-ca ps-pressure-cord-cutters-1461257846.

of that power. In its 2007 order against Comcast, the FCC recognized BitTorrent's threat to Comcast's Video on Demand service.²⁰⁵ The FCC hinted that BitTorrent could allow users to share files of television shows for free, which they would otherwise normally pay for.²⁰⁶ Placing potential for large-scale copyright infringement aside, the FCC determined that the BitTorrent application itself had legal uses.²⁰⁷ The FCC uses the example of an independent filmmaker using BitTorrent to distribute his or her work to a wide audience, only to find that he or she could not effectively do so due to throttled service by a broadband provider.²⁰⁸ Such an argument is often taken by supporters of file-sharing who view P2P networks as a way for independent artists to legally promote their work.²⁰⁹ Because of the available legal uses of broadband provider throttling. Throttling or blocking the entire application's access to neutral internet speeds is likely overbroad. A broadband provider's aim then, must be at the sites hosting infringing files.

So, what has changed in the five years following the SOPA and PIPA bills' defeats? Undoubtedly, the problem recognized by bipartisan legislators and industry leaders remains. Piracy still poses a threat to big media companies. The large cable companies are becoming increasingly more vertically integrated.²¹⁰ As of the time of the *Telecom* decision, the top two broadband cable providers were Comcast and Time Warner, two highly vertically integrated companies.²¹¹ Broadband provider Comcast is the parent company of NBCUniversal, with a portfolio including Universal Pictures and NBC.²¹² The ongoing merger between AT&T and Time Warner, which includes the Warner Brothers movie studio and cable programmers such as HBO, Turner Broadcasting, and CNN, seeks to create a vertically integrated "media giant" linking supplier and distributer.²¹³ The Trump administration's DOJ sued to block the merger on antitrust claims, but the case remains in litigation.²¹⁴ The new AT&T, who recently absorbed DirecTV, plans to roll

^{205.} See Formal Complaint of Free Press & Pub. Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Application, 23 FCC Rcd. 13028, 13030 (2008).

^{206.} See id.

^{207.} See id.

^{208.} See id. at 13031.

^{209.} See Jon Healey, Some See Benefits of File Sharing, L.A. TIMES (June 3, 2005), http://articles.latimes.com/2005/jun/03/business/fi-p2p3.

^{210.} See Ray Sheffer, Cost Is Main Reason for Vertical Integration in Media Industry, MKT. REALIST (Mar. 9, 2015, 3:47 PM), http://marketrealist.com/2015/03/cost-main-reason-vertical-integration-media-industry/.

^{211.} See U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 753 (D.C. Cir. 2016) (Williams, J., dissenting).

^{212.} See Company Overview, COMCAST, http://corporate.comcast.com/news-information/compa ny-overview (last visited Oct. 7, 2016).

^{213.} See Gryta, supra note 11.

^{214.} See Brett Kendall & Drew FitzGerald, AT&T Targets DOJ Antitrust Chief in Time Warner Fight, WALL. ST. J. (Feb. 14, 2018, 4:20 PM), https://www.wsj.com/articles/at-t-lays-groundwork-

out "an online-video-bundle" to compete with the traditional cable TV model.²¹⁵ Coming off the heels of the AT&T and Comcast deals, content providers appear to be trending toward mergers, causing speculation that 21st Century Fox and Disney may consider similarly large deals.²¹⁶ Following his company's merger, Time Warner's CEO, Jeff Bewkes, speculated that "[y]ou're going to see all kinds of distributors following . . . you're going to see a kind of revolution in the TV world."²¹⁷ Content providers suffering from lost profit can now turn to their big brothers for help. These increasingly diversified broadband providers have direct incentives to curb digital piracy and arguably, they have a duty to prevent the profit losses associated with digital piracy.

Opponents will argue that media and technology corporations should not involve themselves in internet oversight for privacy reasons. The point is valid, and some trepidation is understandable. But the private sector is already involved via the DMCA, and opponents of large government, weary of micro-managing oversight and heavy-handed regulation, make similar arguments. It is likely that litigation will follow against broadband companies that do choose to throttle. Broadband providers and their media conglomerates have the resources, the incentive, and the legal ability to take the reins against chronic copyright infringement.

CONCLUSION

Net Neutrality, at the federal and state level, promises an open Internet for the preservation of freely exchangeable information and a "'virtuous cycle' of innovation."²¹⁸ Fair internet use is guaranteed to both individuals and businesses using the Internet. Permitting broadband providers to block and throttle access to sites harboring digital piracy and unlawful content does not stop the flow of innovation or fair internet use. Broadband providers who check access to unlawful content only strengthen the foundation of the lawful and free sections of the Internet. Digital piracy also subjects consumers and businesses to economic strain and rising cyber security concerns stemming from P2P piracy networks. Current regulation, via the DMCA's complex regime and the inefficient speed of the DOJ and other federal agencies, does not cut it against digital piracy. Courts have denied agencies such as the ITC

to-challenge-antitrust-lawsuits-legitimacy-1518606832. At the time this Note was written, the DOJ and AT&T remain in litigation.

^{215.} See Gryta, supra note 11.

^{216.} See Brian Stelter, AT&T Acquires Time Warner in Media Mega-Deal, CNN MEDIA (Oct. 23, 2016, 12:22 PM), http://money.cnn.com/2016/10/22/media/att-time-warner/.

^{217.} See Mike Snider & Roger Yu, AT&T-Time Warner Deal Could Spur More Mergers, Scrutiny, USA TODAY (Oct. 23, 2016, 12:24 PM), http://www.usatoday.com/story/tech/news/2016/10/23/t-time-warner-deal-could-spur-more-mergers-scrutiny/92590758/.

^{218.} See U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 734 (D.C. Cir. 2016).

387

from exercising jurisdiction over digital infringement of intellectual property and Congress has not supplied guidance on who should carry that role.

By implementing then repealing the Open Internet Order, the FCC created uncertainty for consumers and broadband providers. While the current FCC's intentions are clear through the Repeal, the next administration may decide to reverse once again. In the event that the Net Neutrality rules are repealed or cease to exist at the state level in the future, media and broadband companies could use the actionable plan outlined in this Note to combat digital piracy. But under the current iteration of Net Neutrality law, without an explicit rule barring the action of blocking unlawful content, broadband providers can position themselves on the right side of the fight against digital piracy.

Aaron Lerman*

^{*} B.A., University of Colorado, 2015; J.D. Candidate, Brooklyn Law School, 2018. I would like to thank the Brooklyn Journal of Corporate, Financial & Commercial Law and its staff of present and past for their time and effort, especially Kieran Meagher and Drita Dokic for prepping this Note for publication. A special thanks to Professor Harold Furchtgott-Roth for helping me navigate through telecommunications history and the FCC's record. To my friends and family, this Note is one of many products of your support; this Note is dedicated to you.