

Cleveland State University
EngagedScholarship@CSU



Cleveland-Marshall
College of Law Library

Cleveland State Law Review


Law Journals

2011

Novel Neutrality Claims against Internet Platforms: A Reasonable Framework for Initial Scrutiny

Jeffrey Jarosch

Follow this and additional works at: <https://engagedscholarship.csuohio.edu/clevstrev>

 Part of the [Antitrust and Trade Regulation Commons](#), [Computer Law Commons](#), and the [Internet Law Commons](#)

How does access to this work benefit you? Let us know!

Recommended Citation

Jeffrey Jarosch, *Novel Neutrality Claims against Internet Platforms: A Reasonable Framework for Initial Scrutiny*, 59 Clev. St. L. Rev. 537 (2011)

available at <https://engagedscholarship.csuohio.edu/clevstrev/vol59/iss4/5>

This Article is brought to you for free and open access by the Law Journals at EngagedScholarship@CSU. It has been accepted for inclusion in Cleveland State Law Review by an authorized editor of EngagedScholarship@CSU. For more information, please contact library.es@csuohio.edu.

NOVEL “NEUTRALITY” CLAIMS AGAINST INTERNET PLATFORMS: A REASONABLE FRAMEWORK FOR INITIAL SCRUTINY

JEFFREY JAROSCH*

I.	INTRODUCTION	538
II.	ECONOMICS OF PLATFORMS.....	541
III.	BACKGROUND: THE NETWORK NEUTRALITY DEBATE AND ATTEMPTS TO APPLY NETWORK NEUTRALITY TO INTERNET-BASED PLATFORMS.....	545
	A. <i>Rules and Cases Establishing and Testing the Bounds of Network Neutrality</i>	545
	B. <i>Economic Views of Network Neutrality</i>	548
IV.	ANTITRUST SCRUTINY OF TYING ARRANGEMENTS AND RECENT ATTEMPTS TO APPLY ANTITRUST TO INTERNET PLATFORMS	553
	A. <i>The Basics of Tying Doctrine</i>	554
V.	APPLICATION OF NETWORK NEUTRALITY AND ANTITRUST FRAMEWORKS TO THREE INTERNET PLATFORMS.....	560
	A. <i>Unique Characteristics of Internet Platforms</i>	561
	B. <i>Search Neutrality</i>	562
	1. <i>Neutrality-Based Scrutiny of Search</i>	566
	2. <i>Antitrust Scrutiny of Search</i>	567
	C. <i>API Neutrality</i>	572
	1. <i>Neutrality Principles Applied to API</i>	576
	2. <i>Antitrust Analysis of API Neutrality Claims</i>	577
	D. <i>Online Marketplace Neutrality</i>	580
	1. <i>Neutrality-Based Analysis of Discriminating Online Market Platforms</i>	582
	2. <i>Antitrust Scrutiny of Online Markets’ Discriminatory Terms</i>	584
VI.	RECOMMENDATIONS AND CONCLUSION	585

This Article examines a recent trend in which the Federal Trade Commission and other enforcement agencies investigate Internet platforms for behavior that is

* MA, JD, Law Clerk to the Honorable Alan E. Norris, United States Court of Appeals for the Sixth Circuit, 2011-2012. This Article was substantially completed while the author was the Searle Law and Public Policy Scholar, Searle Center on Law, Regulation, and Economic Growth, Northwestern University School of Law.

insufficiently “neutral” towards users or third parties that interact with the platform. For example, Google faces a formal FTC investigation based on allegations that it has tinkered with search results rather than presenting users with a “neutral” result. Twitter faces a formal investigation after the social media service restricted the ways in which third party developers could interact with Twitter through its application programming interface (“API”). These investigations represent a new attempt to shift the network neutrality debate to higher-level Internet platforms. Rather than focusing on providing basic Internet access neutrally, these novel neutrality claims look to platforms that are built upon the Internet, and seek to ensure that they, too, behave “neutrally.” Unfortunately, network neutrality principles do not transition well from Internet service providers to search engines and social media sites. Ultimately, the network neutrality debate serves as a poor tool for scrutiny of higher-level Internet platforms. This Article demonstrates that network neutrality cannot be applied to higher-level Internet platforms and then examines another possible method of analyzing novel neutrality claims using antitrust law. It re-frames novel neutrality claims as tying arrangements, the subject of extensive antitrust law and scholarship. In applying tying doctrine to novel neutrality claims, this Article demonstrates that it, too, is insufficient for examining novel neutrality claims on Internet platforms. The Article closes by proposing a different analysis to examine these novel neutrality claims, an analysis based on Justice O’Connor’s attempt to reform tying doctrine.

I. INTRODUCTION

In today’s Internet, the most important players are not manufacturers, designers, or programmers, but platforms. The big names in the Internet and computing—Google, Apple, Facebook, Microsoft—all offer more than a product or set of products. They offer an *environment* in which users operate, a starting point for them to interact, work, network, and be entertained.¹ These platforms build upon the infrastructure of the Internet. For example, Google began as a search engine but now offers a group of websites, each of which links prominently to the others and provides a different service to users including maps, e-mail, a social networking service, a photo-sharing service, and dozens of others. It also offers a mobile environment through its Android operating system. Even Facebook is not simply a social-networking website but a platform upon which users can play games, share photos, and engage in a number of other social activities. Countless other websites and services allow users to post their activity to Facebook (or tweet it on Twitter). For example, a user of the social check-in service Foursquare has the option of

¹ See Hanno F. Kaiser, *Are “Closed Systems” an Antitrust Problem*, 7 *COMP. POL’Y INT’L* 91, 99-101 (2011). According to Nokia CEO Stephen Elop:

The battle of devices has now become a war of ecosystems, where ecosystems include not only the hardware and software of the device, but developers, applications, e-commerce, advertising, search, social applications, location-based services, unified communications and many other things. Our competitors aren’t taking our market share with devices; they are taking our market share with an entire ecosystem. This means we’re going to have to decide how we either build, catalyze or join an ecosystem.

Id. (quoting Elop in an e-mail).

posting a check-in to their Facebook wall. Similarly, a user of DailyFeats, a social media site for cataloguing daily accomplishments, has the option of posting their feats to Facebook.² These platforms interact with each other and at times blur the lines between them.³

The next chapter in the story of competition and innovation on the Internet will rely on these platforms. Many Internet platforms have recently faced criticism, legal complaints, and formal investigations for being insufficiently “neutral.” The network neutrality debate has expanded. Neutrality advocates are no longer focused simply on physical gatekeepers to the Internet, but want to ensure that platforms that are built upon the Internet infrastructure themselves behave neutrally. This has resulted in a number of novel neutralities, some of which have become widely known. This article focuses on three such neutralities: search neutrality; API neutrality; and online marketplace neutrality. Generally, these novel neutrality claims seek to require platforms to treat all users and platform applications the same, without blocking or tolling some subset of disfavored applications, users, or uses.

This policy debate and the manner in which Internet platforms’ relationships with each other and their users are scrutinized by the FTC and other enforcement agencies may radically influence how Internet platforms grow, innovate, and compete—in positive or negative ways. This Article considers two methods that the FTC or other enforcers may use to scrutinize violations of neutrality principles by Internet platforms, one based on network neutrality rules, and the other based on antitrust law. The Article demonstrates that neither of these methods is reasonable for analyzing the behavior of Internet platforms, and instead proposes a different method, loosely based on Justice O’Connor’s proposed reforms to tying doctrine.⁴

A vital area in which public policy may constrain Internet platforms is in how they interact with other platforms, services, and applications. Some platforms may choose to be very open and neutral towards applications built upon and services using the platform, others may wish to stop third-party uses of the platform, or limit interactions with the platform. Based on these different platform policies, Internet-based platforms face claims that they must behave neutrally towards applications or platform users. Importantly, these neutrality claims are not limited to scholars and commentators—instead, major Internet platforms including Google, Twitter, and Apple have faced recent investigations or threats of investigation by the FTC or another antitrust or telecommunications enforcement agencies. These investigations, spanning several forms of neutrality, raise the possibility of widespread scrutiny of Internet platforms that could radically influence the development of the Internet landscape. This paper considers the methods by which scrutiny of Internet platforms should proceed in order to identify harmful arrangements without penalizing competitive behavior.

² DAILY FEATS, www.dailyfeats.com (last visited Jan. 20, 2012).

³ Users of the program Tweet deck, for example, might see and respond to items from several social media sites without distinguishing one from another. See Jaymar Cabebe, *HootSuite, TweetDeck, or Seismic?*, THE DOWNLOAD BLOG (Aug. 5, 2011, 4:43 PM), http://download.cnet.com/8301-2007_4-20088869-12/hootsuite-tweetdeck-or-seismic/ (“For Android users, there are basically three apps to choose from when it comes to one-stop social networking: HootSuite, TweetDeck, and Seismic.”).

⁴ See *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 32 (1984) (O’Connor, J. concurring).

For the most part, when platforms run afoul of neutrality principles, it is because they have discriminated between platform applications in a way that limits the ways in which the platform can be used. Oftentimes, a platform will want to give access to some applications but not others, or give some applications access on more favorable terms. For example, iTunes screens apps before granting them access to the exclusive marketplace for iOS devices and iTunes, and imposes terms on products that filter some products out of the iTunes market. This discrimination between applications, giving access to some but not others, has raised an alarm in some quarters.⁵ Some commentators have advocated expansion of network neutrality principles to these higher-level Internet platforms⁶—a platform that is not open equally to all is a violation of neutrality principles that some argue must be legally addressed.⁷ Others have proposed scrutinizing discriminatory platform actions under the antitrust laws.

We know a great deal about how platforms behave. Economists have examined situations in which it is efficient and pro-competitive for platforms to allow open access or to discriminate between potential platform applications, and when platform owners are likely to make an anticompetitive choice to open or close platforms. Unfortunately, the two frameworks that are likely candidates for analysis of novel neutrality claims aimed at Internet platforms are out of touch with developed economic principles. If applied to these Internet-based platforms, network neutrality rules will achieve nonsensical and harmful results, and antitrust scrutiny of discriminatory platform actions as tying arrangements would impose a quasi-per se rule forcing platforms open without adequate evidence that a closed platform is harmful.

This Article applies these two methodologies to three examples of Internet platforms that discriminate in some way against platform applications: search neutrality; API neutrality; and online marketplace neutrality. I propose amendments to these frameworks to bring them into line with current economic understanding of platform behavior. Specifically, I propose the adoption of a rule similar to Justice O'Connor's proposed alterations to the Court's tying doctrine, beginning with an analysis that considers the market position of the platform and considers the likely effects of discriminatory action towards platform applications. Part II examines our current knowledge of the economics of platforms. Parts III and IV examine network neutrality and antitrust frameworks and the attempts to apply these frameworks to fears that Internet platforms are insufficiently neutral in their interactions with platform applications. Part V applies each framework to three Internet platforms that have faced novel neutrality claims, demonstrating that neither the network neutrality nor the antitrust framework are suitable methods for scrutinizing the ways in which Internet-based platforms may discriminate against applications. Part VI concludes by proposing a reasonable way to engage in scrutiny of novel neutrality claims.

⁵ See *infra* Section V.d, considering neutrality claims directed at online marketplaces.

⁶ I refer the Internet platforms discussed here as "higher-level" Internet platforms because they are not directly tied to any single physical connection that allows individuals to connect to the Internet, rather, they are built upon the diffuse platform that is the Internet.

⁷ See *infra* Section V, examining efforts to apply neutrality principles to three Internet platforms.

II. ECONOMICS OF PLATFORMS

Over the past several decades, there has been a great deal of scholarship on the economics of platform behavior. Though there are ongoing debates about how platforms, especially Internet platforms function, there are areas of general consensus. This section identifies a small number of generally accepted principles regarding how platforms behave and when they may have negative effects on competition. The following Sections demonstrate that the likely methods for analyzing novel neutrality claims on Internet platforms are not in line with the economic realities of platform behavior.

The first generally accepted principle is that neither an open platform nor a closed one is inherently more efficient or better for competition than the other. Some level of discrimination may be optimal for competition, the competitors, and consumers. Whether it is better for the platform owner to open or close their platform, or whether either option can harm the competitive process is specific to the situation.

Platform owners may face legitimate incentives to select an open or closed platform policy.⁸ Neutrality claims generally seek to require platforms to be more open and not to discriminate between potential platform applications. But some closed platforms achieve desirable results through discrimination. At times, careful discrimination in allowing access to the platform may be necessary to successful market competition. Professors Joseph Farrell and Philip Weiser identify a number of well-known situations where platforms achieve desirable results by remaining closed. For example, an innovative and rapidly evolving platform may wish to have greater control over platform applications in order to ensure that applications keep pace with the innovative platform as it competes with other platforms.⁹ Similarly if a platform exerts control over a small number of available applications, rather than allowing a large competitive applications market to flourish, consumers may be assured that applications will work well with the platform, and may face smaller search costs in selecting applications.¹⁰ Similarly, distinguishing between high and low quality applications may be a particular problem for consumers in a totally open platform—a problem that may cause consumers to lose confidence in the platform after exposure to a few low-quality applications. Lack of control over platform applications was the downfall of the Atari gaming system which faced a deluge of low-quality games from many game designers—the game market was diluted and consumers became disenchanted with the platform after experiences with low-quality games. This encouraged competition from other, more tightly controlled systems, like the Nintendo, with its own set of games available only on the Nintendo, which Atari could not offer on its system.¹¹ As a result, later gaming

⁸ See Joseph Farrell & Philip J. Weiser, *Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation in the Internet Age*, 17 HARV. J. L. & TECH. 85, 97 (2003).

⁹ See *id.* at 99.

¹⁰ *Id.*; see also Kaiser, *supra* note 1, at 99-101. This is the route taken by Apple, which imposes specific requirements on apps’ access to the platform. See *App Store Review Guidelines*, APPLE, <http://developer.apple.com/appstore/guidelines.html> (last visited Aug. 24, 2011).

systems have maintained different levels of tighter control over their applications markets.¹² Following this model, Apple screens the apps that are available on iPhones and iPads, barring, among others, apps that add little or nothing to the user experience.¹³ One justification for this limitation could be to make it easier for users to find quality apps—and this is consistent with Apple’s general (and oft-criticized) “walled garden” philosophy, where it offers a more curated group of applications.¹⁴

There are good reasons for some platforms to limit application access. But on the other hand, by allowing vigorous competition in an applications market, an open platform can ensure that a wide range of applications will be available to consumers as cheaply as possible.¹⁵ According to Farrell and Weiser, platform owners can generally be relied upon to select a degree of openness that will allow the platform to provide the most value to consumers. They call this concept “internalizing complementary efficiencies,” or ICE:

“[I]n choosing how to license interface information, certify complementors, and otherwise deal with developers, . . . a firm has a clear incentive to choose the pattern that will best provide it or its customers with applications. . . . [T]he unintegrated platform monopolist has an

¹¹ See Philip J. Weiser, *The Internet, Innovation, and Intellectual Property Policy*, 103 COLUM. L. REV. 534, 607 (2003) (“By not affording Atari an intellectual property right to play Nintendo games on its console, the court encouraged rivals to build up their own systems, which Sega, Sony, and Microsoft later did successfully.”).

¹² A current example of platforms facing a similar problem can be found in competition between mobile operating systems. Google’s Android allows any designer to create apps that function on the operating system. See ANDROID MARKET, <http://market.android.com> (last visited Nov. 15, 2011). Apple requires apps to be approved before they are available to consumers in the App Store. See *App Store Review Guidelines*, APPLE, <http://developer.apple.com/appstore/guidelines.html> (last visited Nov. 15, 2011) (“The app approval process is in place to ensure that applications are reliable, perform as expected, and are free of explicit and offensive material. We review every app on the App Store based on a set of technical, content, and design criteria.”). While Apple faces criticism that it is insufficiently open to allow for innovative apps, it has hedged against the risk that consumers will lose confidence in the platform due to low-quality or harmful apps. In fact, Android, but not iOS, has been occasionally plagued by malicious apps that do harm consumers or their devices. See *Android Market a Breeding Ground for Malicious Mobile Apps*, SECURITY WEEK (Aug. 12, 2010), <https://www.securityweek.com/android-market-breeding-ground-malicious-mobile-apps/>.

¹³ See *Apple removes \$1,000 featureless iPhone application*, L.A. TIMES, Aug. 7, 2008 (stating Apple removed an app called ‘I Am Rich’ that cost the maximum allowed price of \$999.99 and did almost nothing).

¹⁴ Notably, though Apple is heavily criticized for its controlled approach, more apps are available for iOS than for Android, though there are more free apps on Android. See *Shocker! Free Android apps outnumber free iPhone apps*, ENGAGET (Apr. 28, 2011, 10:04 PM), <http://www.engadget.com/2011/04/28/shocker-free-android-apps-outnumber-free-iphone-apps/>.

¹⁵ See Kaiser, *supra* note 1, at 101.

incentive to favor whichever form of organization of applications is most efficient (or delivers the most value to users).”¹⁶

There are well-known exceptions to ICE—if we could simply rely on a platform to always make the most efficient decision as to whether to open their platform to outside developers or not, there would be no need for neutrality principles or antitrust scrutiny to push for either an open framework or a closed one. The most notable of these well-known exceptions where a platform owner may not select the value-maximizing option are: when the platform price is regulated; when the platform owner fears platform competition from application developers; when the platform owner fears losing the option of returning to a closed platform; and when complementarity is incomplete between the platform and the applications, the platform owner may keep the platform closed in order to occupy a greater portion of the applications market.¹⁷

A second area of general consensus is that market power is a necessary condition for competitive harm to stem from a platform’s decision to close, to remain closed, or to discriminate between platform applications. Antitrust law has incorporated this general agreement into its standards.¹⁸ The reasons behind it are clear. Without market power, a platform owner that has a closed or discriminatory policy towards platform applications will simply drive blocked applications to competing platforms. To the extent that these applications benefit consumers, the competing platforms will gain an advantage. Though limits on applications may force applications out of the market or raise barriers to their entry, a single platform in a competitive platform market cannot alone cause such effects.¹⁹

Though market power is necessary for a platform to cause competitive harm in an applications market, it is generally recognized that a platform with market power deciding to move towards a more closed platform model or discriminating against some applications is not necessarily anticompetitive. As discussed above, there are many efficient, pro-competitive reasons for a platform to close or restrict the market for platform applications—for example to maintain a rapid pace of innovation for an innovating platform, to maintain quality control or security among applications, or to lower consumer search costs. In some situations, a platform, even one with market power, may be less attractive to consumers if it is open and non-discriminatory.

Though market power is not sufficient to demonstrate an anticompetitive effect, such an effect is possible when a platform with market power chooses to close or to discriminate against applications.²⁰ Generally, these anticompetitive effects will take

¹⁶ Farrell & Weiser, *supra* note 8, at 101-02 (“That is, a firm will *internalize complementary efficiencies* arising from applications created by others.”).

¹⁷ *See id.* at 105-19.

¹⁸ *See* Kaiser, *supra* note 1, at 104 (“Without significant market power and the threat of a high level of market foreclosure, there is no basis for imposing antitrust liability on a platform sponsor’s ‘intra-platform legislation.’”).

¹⁹ *See* Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, 123 HARV. L. REV. 397, 401 (2009) (emphasizing the appropriateness of a market power requirement in analyzing tying arrangements).

²⁰ *See generally id.* at 400. Professor Elhauge identifies five harms that may stem from tying arrangements, most relevant here is that “tying can impair tied rival competitiveness in ways that increase tied product prices and profits.” *Id.*

two forms—foreclosing existing market competitors from a market that is then overall less competitive; and excluding would-be competitors from a market, keeping that market at some lower level of competition.

The basic model demonstrating that a monopolist has no incentive to tie in an inefficient way (Farrell and Weiser's "obvious ICE"²¹) only holds when the two goods are generally consumed together. But if, for example, there is a second market in which the platform application is useful, the platform with market power may favor one set of applications for its platform, in order to give the favored applications an edge in this other market. Specifically, a disfavored application could be foreclosed from this market or excluded from attempting to enter it by virtue of its exclusion from the platform with market power. For example, if some of the same video game titles are available for mobile device platforms (for example Android, iOS, and Blackberry) and home gaming systems (for example Wii, Playstation, and Xbox), one mobile platform with market power might exclude a set of games from its platform in order to allow favored games to benefit in the related home gaming market.²² The harm that occurs here is the foreclosure of existing firms not simply from the platform, but from the gaming market. They could, for example, lose the opportunity to gain positive feedback and buzz between the mobile and home gaming markets—in some instances availability on multiple platforms might be important for marketing, or for added functionality. In this situation, the platform's exclusivity could also have exclusionary effects on potential video game designers, if joining the discriminatory platform is vital to enter the video game market, then platform exclusivity or discrimination will raise barriers to entering the applications (video game) market generally.

Though some platform discrimination may cause exclusion and foreclosure in other markets, it may also have the pro-competitive effects described above, allowing the platform to better compete and be more efficient. Anticompetitive effects must be considered against the pro-competitive effects of a more controlled platform that increase the overall value of the platform to consumers and increase consumption of the final product. Competitive gains or the necessity of discrimination to successful competition may offset the limitations that the platform could cause in applications markets. In some cases, the platform's core business may not be possible without some application discrimination.²³

In summary: neither an open nor a closed platform is necessarily more efficient and both can be positive forms of competition; market power is necessary for a discriminatory platform to cause competitive harm, but it is not sufficient to demonstrate such harm; and the harms to competition that are likely to be caused by platforms non-neutral behavior are foreclosure and exclusion from related markets that are then less competitive. Though much of antitrust law is generally in line with these areas of economic agreement,²⁴ the two most often promoted methods for

²¹ *Id.* at 101.

²² See Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837 (1990); see also Elhauge, *supra* note 19, at 401.

²³ This could be true of Internet search, where the very product offered is a list of relevant results to a search term. Discrimination based on usefulness is what users want and expect of a search engine.

²⁴ See Farrell & Weiser, *supra* note 8, at 128 ("Substantively, the Justice Department's case against Microsoft relied on the potential competition exception to ICE. The DOJ

analyzing novel neutrality claims of Internet-based platforms are far out of touch with them. Network neutrality principles, especially those enshrined in the FCC's Network Neutrality Order, either prohibit too much pro-competitive conduct or are simply nonsensical when applied to higher-level Internet platforms. Antitrust's tying doctrine comes closer to an appropriate standard, yet is imperfect because it imposes per se illegality on a number of platform activities that have strong pro-competitive effects. Parts III and IV examine each of these frameworks before Part V applies them to a set of Internet platforms facing neutrality claims to demonstrate the deficiencies of each of these frameworks.

III. BACKGROUND: THE NETWORK NEUTRALITY DEBATE AND ATTEMPTS TO APPLY NETWORK NEUTRALITY TO INTERNET-BASED PLATFORMS

Network neutrality is a simple idea: that Internet gatekeepers should not discriminate between Internet users or applications based on their intended use of the network. Instead, advocates argue, the Internet should be neutral as to the use to which it is put. An extensive debate has defined the bounds of this simple principle, and has considered whether it should be enforceable by some body of law. Recently, that debate has expanded in scope.

The Internet is a communications platform, but it is also a platform upon which platforms are built. Network neutrality debates to date have focused on the lowest level of the Internet infrastructure—access to the Internet itself, not the platforms built upon it. Identified violations of the net-neutrality principle have tended to block, slow, or toll specific uses of the Internet. The legal rules that have developed to analyze these simple violations may be applied in a relatively straightforward way. Recently, however, the terms and principles of the network neutrality debate have been applied not just to access to the Internet, but also to higher-level platforms built upon it. Application of these principles, described below, to higher-level Internet platforms creates problems and questions that are difficult to answer within the network neutrality debate. Without careful consideration of how network neutrality problems should apply to higher-level Internet platforms, policy results will be nonsensical and potentially harmful.

A. Rules and Cases Establishing and Testing the Bounds of Network Neutrality

Network neutrality law has rapidly evolved over the past several years—though there is no consensus that this evolution has resulted in a better regulatory environment. Since December of 2010, both traditional fixed and mobile broadband Internet providers have been governed by the Federal Communications Commission under its Report and Order "Preserving the Open Internet."²⁵ The FCC Order sets out three general principles that it will enforce: 1) transparency; 2) no blocking; and 3) no unreasonable discrimination.²⁶ Transparency requires broadband providers to

developed evidence that Microsoft itself and others in the industry viewed the development of strong independent 'middleware' as a threat to Microsoft's monopoly in operating systems.").

²⁵ Preserving the Open Internet, 25 F.C.C.R. 17905 (Dec. 21, 2010). These network neutrality rules have recently faced an unsuccessful legislative challenge. See Cecilia Kang, *Senate Votes Against Net Neutrality Killer*, Post Tech (Nov. 10, 2011), http://www.washingtonpost.com/blogs/post-tech/post/senate-votes-against-net-neutrality-killer/2011/11/10/gIQAdSc9M_blog.html.

²⁶ *Id.* at ¶ 1.

disclose “network management practices, performance characteristics, and terms and conditions”²⁷ The “no blocking” principle prohibits fixed broadband providers from blocking “lawful content, applications, services, or non-harmful devices.”²⁸ “No blocking” is applied less stringently to mobile broadband providers who may block applications, services, or devices, but may not block “lawful websites, or . . . applications that compete with their voice or video telephony services.”²⁹ The “no unreasonable discrimination” principle applies equally to fixed and mobile broadband providers and prohibits discrimination in “transmitting lawful network traffic.”³⁰ This principle prohibits providers from disfavoring some sites in ways that fall short of blocking them. For example, a broadband provider could not slow down disfavored sites, or offer favored sites, applications, or services (or those that are willing to pay for it) premium services. Each of these prohibitive principles is tempered by an allowance for “reasonable network management.”³¹ The order allows broadband providers to take reasonable steps to “(1) reduce or mitigate the effects of congestion . . . ; (2) address traffic that is unwanted by users or harmful; (3) prevent the transfer of unlawful content; or (4) prevent the unlawful transfer of content.”³² The Order establishes that network management justifications will be balanced against its neutrality principles.³³

These rules and principles are generally in line with the vision of net neutrality that the FCC has espoused in net neutrality challenges leading up to the Order. In an early precursor to the FCC Net-Neutrality Order, the agency investigated Madison River Communications, a regional provider of voice and DSL service, for blocking its customers from using voice-over-IP services such as Skype.³⁴ The FCC and the company reached a consent decree in which Madison River agreed to pay \$15,000 and to stop blocking VOIP services.³⁵ Though the *Madison River* investigation occurred five years prior to the Net-Neutrality Order, it is squarely one of the types of behavior that the FCC seeks to curb. Madison River blocked a specific Internet

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.* The Order explicitly gives more leeway to wireless broadband providers than to fixed providers because mobile broadband “is at an earlier stage in its development than fixed broadband and is evolving rapidly.” *Id.* at ¶ 8. The no-blocking restrictions that the order establishes for wireless providers appear to allow them to continue controlling the devices that may be used on their networks and the specific types of services, but if they offer web service, they may not selectively block some disfavored websites. *Id.* This is in line with the FCC’s arguments in *Madison River Communications* where it challenged (and ultimately entered a consent decree with) a regional wireless provider that blocked Voice-over-IP services that competed with its own voice services. See *In re Madison River Communications*, 20 F.C.C.R. 4295 (2005).

³⁰ Preserving the Open Internet, *supra* note 25, at ¶ 1.

³¹ *Id.*

³² *Id.* at ¶ 81.

³³ *Id.*

³⁴ See *In re Madison River Communications*, 20 F.C.C.R. 4295 (2005).

³⁵ *Id.*

application, an action that today would violate the no-blocking provision.³⁶ Though mobile broadband providers have more leeway to block than fixed providers, they may not block applications that compete with their voice or telephony services as VOIP does for a mobile phone network.³⁷

Madison River was a small company that was engaging in a violation of network-neutrality principles that was relatively small and at the time was novel. The FCC instituted a much larger case against a major player just a few years later. In *Comcast v. FCC*, the FCC identified and challenged another violation of the principles that it would later enshrine in the Report and Order. The FCC challenged Comcast's decision to interfere with Internet traffic related to the peer-to-peer file sharing service Bittorrent.³⁸ Following a formal investigation, the FCC found that Comcast "significantly impeded consumers' ability to access the content and use the applications of their choice."³⁹ Comcast changed its network management practices to comply with FCC policy, but subsequently challenged the FCC's authority to order it to change its network management under the Communications Act of 1934, which allows the FCC to "perform any and all acts, make such rules and regulations, and issue such orders . . . as may be necessary in the execution of its functions."⁴⁰ The FCC based its order on this ancillary authority in the absence of any direct grant of authority to order Internet service providers to alter their network management practices.⁴¹ The D.C. Circuit held that the congressional policy statements on which the FCC relied to support its authority were insufficient to grant ancillary jurisdiction over Comcast in the case.⁴²

³⁶ Preserving the Open Internet, *supra* note 25, ¶ 88:

We make clear that, for the singling out of any specific application for blocking or degradation based on harm to the network to be a reasonable network management practice, a broadband provider should be prepared to provide a substantive explanation for concluding that the particular traffic is harmful to the network, such as traffic that constitutes a denial-of-service attack on specific network infrastructure elements or exploits a particular security vulnerability.

Further, Madison River sought to block VOIP services because they were in competition with its voice services. Blocking of competing services receives special attention in the rules. Wireless broadband providers receive more leeway than fixed providers, but they are specifically prohibited from blocking competing services. *Id.*

³⁷ *See id.*

³⁸ *See Comcast Corp. v. Fed. Commc'ns Comm*, 600 F.3d 642, 644-45 (D.C. Cir. 2010); Cecilia Kang, *Court Rules for Comcast over FCC in 'net neutrality' case*, WASH. POST. (Apr. 7, 2010), <http://www.washingtonpost.com/wp-dyn/content/article/2010/04/06/AR2010040600742.html>. Bittorrent is notable for high-volume Internet usage. *See BitTorrent*, WIKIPEDIA, <http://en.wikipedia.org/wiki/BitTorrent> (last visited Nov. 15, 2011).

³⁹ *In re Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications*, 23 FCC Rcd. 13,028, at 13,054 (2008).

⁴⁰ 47 U.S.C. § 154(i) (2006).

⁴¹ *See Comcast*, 600 F.3d at 646.

⁴² *Id.* at 661. Such authority requires the Commission "to tie its . . . ancillary authority . . . to . . . 'statutorily mandated responsibility'" *Id.* By finding this mandate absent, the Court vacated the FCC's order.

The FCC's loss in *Comcast* led directly to the Net-Neutrality Order in which it simultaneously attempts to establish net-neutrality principles as clear-cut rules, and its authority to engage in such rulemaking. The long-term fate of the Order is yet unclear.⁴³ The FCC takes pains to establish its jurisdiction in ways that are different from those that the D.C. Circuit rejected in *Comcast*. Rather than relying on ancillary jurisdiction, the FCC claims direct authority to implement net-neutrality rules under its statutory grant of authority to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans"⁴⁴

The FCC justifies the substance of its Network Neutrality Order as necessary to protect "innovation, investment, job creation, economic growth, competition, and free expression."⁴⁵ In addition to these general goals, the FCC Report announcing the Order identifies several more specific harms that it believes will occur in the absence of net-neutrality enforcement. For example, the Report argues that broadband providers will limit free and open access to the Internet in harmful ways and that they have already begun to do so.⁴⁶ The Report and Order portrays a level of certainty regarding the likely outcome of an absence of net-neutrality regulation that is belied by the economic and legal literature. There is significant debate as to whether innovation and Internet openness would decline in the absence of the net neutrality order.

B. Economic Views of Network Neutrality

The FCC Net Neutrality Report and Order give the impression that economic scholarship is clearly in favor of the type of regulation that the FCC seeks to impose. But there is a great deal of disagreement. Some economists argue that net neutrality is necessary, others argue that the innovation and competition that the FCC seeks to protect is best served without net neutrality regulation.

One group of commentators generally concludes that though network neutrality principles may be good, rules enforcing those principles are unnecessary. A leading voice in this group is Professor Christopher Yoo. Yoo considers network neutrality principles in the context of the chain of production between creators of Internet

⁴³ There have been challenges to the FCC Order's basis in the legislature and in courts. Shortly after the Order was approved by the FCC and before it was implemented, Verizon challenged the FCC's authority to issue it. Steve Augustino, *Court Dismisses Verizon Net Neutrality Appeal—For Now*, TELECOM LAW MONITOR (Apr. 5, 2011, 11:40 AM), <http://www.telecomlawmonitor.com/2011/04/articles/broadband-1/court-dismisses-verizon-net-neutrality-appeal-for-now/print.html>. This challenge has yet to reach a substantive decision. The order also faces political opposition. In April 2011, the House passed a bill that would revoke the FCC's Net-Neutrality Order. See Larry Downes, *House Votes to Nullify Net Neutrality: What's Next?*, TECHNOLOGY LIBERATION FRONT (Apr. 12, 2011), http://techliberation.com/2011/04/12/house-votes-to-nullify-net-neutrality-whats-next/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+techliberation+%28Technology+Liberation+Front%29. This move is unlikely to have any practical effect as the bill is unlikely to pass in the Senate or be signed by President Obama, but it demonstrates the politicization of the net-neutrality debate.

⁴⁴ 47 U.S.C. § 1302(a) (2006).

⁴⁵ Preserving the Open Internet, *supra* note 25, ¶ 1.

⁴⁶ *Id.* at 11-22.

applications and content, and consumers.⁴⁷ Yoo sees vigorous competition between Internet applications—in part because network neutrality norms have allowed applications easy market entry. For last-mile Internet connectivity, however, there is much less competition and network neutrality rules may make small-scale entry impossible. Given this state of competition between applications and much less competition between last-mile providers, Yoo finds it anomalous that proposals to regulate network neutrality norms would reduce the ways in which last-mile providers may compete in order to promote and protect the already vigorous competition between applications.⁴⁸ “[M]andating interoperability commodifies bandwidth in ways that sharply limit opportunities to compete on dimensions other than price, which reinforces the advantages enjoyed by the largest and most established players.”⁴⁹ In the absence of network neutrality rules, Yoo argues, there may be new opportunities to compete to provide the last mile of Internet connectivity. “Providers confronting cost disadvantages inherent in the smaller scale of their operations can survive by tailoring their networks to the needs of subgroups who value a particular type of network services particularly highly in much the same manner that specialty stores [s]urvive in a world dominated by one-stop shopping.”⁵⁰ In short, Yoo sees in network neutrality regulation the potential for a forced homogenization of Internet service providers, a process that allows the smallest possible range of providers of last-mile service. If policy can encourage competition there, Yoo is relatively unconcerned that the current, robust competition in applications will be harmed—if there are multiple, competing access points to the Internet, violations of network neutrality principles will have little negative effect on competition.⁵¹

Economist Gary Becker and colleagues reach a similar conclusion to Yoo, though they do not share his focus on a lack of competition in last-mile service. Instead, they find that “there is [already] significant and growing competition among broadband access providers,” and because of that competition, network neutrality regulation is unnecessary.⁵² At baseline, they see a competitive Internet access

⁴⁷ Christopher S. Yoo, *Would Mandating Broadband Network Neutrality Help or Hurt Competition? A Comment on the End-to-End Debate*, 3 J. TELECOMM. & HIGH TECH. L. 23, 26-27 (2004) (“[A]ny chain of production is only as efficient as its least competitive link, which in the case of the Internet is undoubtedly the last mile.”).

⁴⁸ *Id.*

⁴⁹ *Id.* at 28.

⁵⁰ *Id.* at 27.

⁵¹ See Tim Wu & Christopher S. Yoo, *Keeping the Internet Neutral?: Tim Wu and Christopher Yoo Debate*, 59 FED. COMM. L.J. 575, 584 (2007) (“Once a sufficient number of last-mile options exists, it would matter little if one network chose to make Yahoo! its preferred search engine.” (Yoo)); see also Adam Thierer, *Are “Dumb Pipe” Mandates Smart Public Policy? Vertical Integration, Net Neutrality, and the Network Layers Model*, 3 J. TELECOMM. & HIGH TECH. L. 275, 278 (2005) (“As broadband service providers (BSPs) and other Internet service and applications providers seek to expand and diversify their range of consumer offerings by integrating into other network layers, policymakers should not proscribe such layer-jumping. Rather, they should be agnostic with regard to the intelligence of broadband networks in general.”).

⁵² Gary S. Becker, Dennis W. Carlton, & Hal S. Sider, *Net Neutrality and Consumer Welfare*, 6 J. COMPETITION L. & ECON. 497, 498-99 (2010).

market that has strong incentives to invest in new technology and network upgrades. “[F]irms compete to attract new customers and retain existing ones by attempting to be the first to offer higher service quality as well as through price competition.”⁵³ Like Yoo, they see network neutrality regulation as an impediment to that competition: “Net neutrality . . . is properly considered a form of price regulation because it limits the form of pricing that can be practiced. Such regulations thus limit a broadband provider’s revenue opportunities and its ability to differentiate itself from competitors, and thereby stifle incentives to invest and innovate.”⁵⁴ Like Yoo, Becker and colleagues believe that in the absence of network neutrality regulation, service providers will not discriminate against specific Internet applications in the way that the FCC and other network neutrality advocates fear: “[A]ttempts by a broadband access provider to limit access to Internet content would likely result in the loss of subscribers that prefer unrestricted access, which, in turn, provides a competitive constraint that limits incentives for such actions.”⁵⁵

Professors Thomas Hazlett and Joshua Wright approach the problem from a slightly different angle, but also conclude that the Network Neutrality rules may harm innovation and competition.⁵⁶ They identify a host of network neutrality violations that have long been a part of the Internet.⁵⁷ The potential harm of these network neutrality violations is anticompetitive foreclosure.⁵⁸ “Actions by firms resulting in this outcome are already illegal under the antitrust laws, where the ‘rule of reason’ is employed to separate socially beneficial practices from those that are harmful. [Network Neutrality] goes far further than existing law, categorically prohibiting various forms of economic integration in a manner equivalent to antitrust’s per se rule In this case . . . conduct that is typically highly efficient, promoting investment and innovation”⁵⁹ For Hazlett and Wright, innovation stems not simply from trying to open a neutral Internet to all comers, but from allowing firms with an innovative product to enter into relationships to get that product to the masses. For example, Hazlett and Wright identify an early source of Google’s growth: “[A] fledgling Google wagered its future by paying dominant ISP AOL to feature its search utility as a default application on its subscribers’ start-up page”⁶⁰ It was only through a network neutrality violation that this Internet innovator was able to grow.

⁵³ *Id.* at 503-06.

⁵⁴ *Id.* at 513.

⁵⁵ *Id.* at 502. In other words, access providers will leave access to the platform alone when it is efficient to do so. If it would be more efficient to sell limited Internet access at a lower price, then they will do that. Becker *et al.* argue that Farrell and Weiser’s ICE will function, leading to the most efficient outcome.

⁵⁶ Thomas W. Hazlett and Joshua D. Wright, *The Law and Economics of Network Neutrality* 6 (George Mason University Law and Economics Research Paper Series 11-36, Sept. 12, 2011).

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Id.*

Another group of commentators takes the opposite approach. Instead of seeing the potential for innovation to grow from business arrangements between existing Internet players, they see the source of innovation as Internet applications’ nearly costless access to the basic Internet platform. Professor Tim Wu is a leading voice in this camp. Wu fears that Internet service providers do have a monopoly on access to the Internet, and that they face a strong temptation to block or slow disfavored sites and applications—providing what he calls “access tiering.” “[T]here are several problematic sides to access tiering. You have, say, AT&T with a monopoly over broadband in a given area. AT&T makes an exclusive deal with Yahoo! to provide preferred searches on AT&T’s network. As a consequence, the Yahoo! engine loads faster than any of its competitors.”⁶¹

In a recent book, Wu proposes a “Separations Principle” to protect innovation and easy and cheap entry to the Internet as a platform:

A Separations Principle would mean the creation of a salutary distance between each of the major functions or layers in the information economy. It would mean that those who develop information, those who own the network infrastructure on which it travels, and those who control the tools or venues of access must be kept apart from one another.⁶²

Returning to the focus of this Article, the Separations Principle would also mean that platform providers could not discriminate between or make special deals with some content providers or platform applications. This Separations Principle is functionally very similar to network neutrality principles.

Wu identifies three broad justifications for the Separations Principle which he draws from his historical examinations of communications industries. First, Wu sees power that spreads across multiple levels of a communications industry as inherently corrupting. “You cannot serve two masters, and the objectives of creating information are often at odds with those of disseminating it.”⁶³ Second, and related, Wu justifies the separations principle as necessary to “prevent[] stagnation and repression of business innovation, especially repression abetted by the state. [The Separations Principle] also promotes vitality and innovation in different parts of the information economy by preventing one layer from smothering the others.”⁶⁴ This “smothering” is Wu’s primary fear related to the Internet—that gatekeepers to the platform will limit competition in platform applications. However, as Farrell and Weiser point out, in many situations, platform owners may not have an incentive to do that, and in others, it may be useful for the platform to limit applications in order to remain competitive a platforms market.⁶⁵ Further, it seems odd that his focus is

⁶¹ Wu & Yoo, *supra* note 51, at 582.

⁶² TIM WU, *THE MASTER SWITCH* 304 (2010).

⁶³ *Id.* at 305.

⁶⁴ *Id.* at 306.

⁶⁵ *See supra* text accompanying notes 9-17. This third justification seems to have the possibility to cut against network neutrality. For example, according to Yoo, network neutrality serves to aid platform applications at the expense of diversification and competition in the Internet access market. But because of Wu’s focus on protecting innovation and competition exclusively—or at least primarily—in the Internet applications market, he glosses over the potential competitive losses that network neutrality could cause elsewhere. Wu

on potential smothering of the vibrant applications market, rather than on restrictions on competition in the more limited market for Internet access.

Wu's perspective does not square well with Farrell & Weiser's concept of internalizing complementary efficiencies. ICE suggests that Internet service providers will not discriminate against some applications unless it will be efficient to do so, perhaps by allowing the service provider to lower prices and attract more customers. Wu, however, has a host of counterarguments for why platform owners might not follow an efficient path, arguments that align neatly with the exceptions to ICE identified by Farrell & Weiser. One exception to ICE is where the platform owner does not want applications to compete with some other source of revenue. Wu argues that this example is directly relevant: "If a product being offered over the network—say, Internet voice ("VoIP") for \$5 a month—competes with an established revenue source (telephone service, offered at \$30 a month), the temptation to block it is strong."⁶⁶ Wu is also concerned that Internet service providers will fail to take the rational, efficient strategy suggested by ICE because they are not rational actors. In the wireless network context, networks may limit technology that may be used on the network because they are following a harmful cultural model of how a network should operate.⁶⁷ This model is one that was learned from the Bell telephone company, and it entails the company seeking, even against its best interest in attracting customers, to dominate every facet of its network.⁶⁸

Wu and Yoo present two extremes of the debate over network neutrality, but several commentators occupy a middle ground with less sweeping proposals. For example, Professor James Speta argues that networks should be required to interconnect, but the details of the relationships between them should not be regulated.

This proposed approach would require interconnection between backbones and other Internet carriers and between both Internet and telephone carriers It would not, however, require the fundamental unbundling associated with cable open access demands. The interconnection requirement . . . ensures that the Internet remains a single

comes out soundly in favor of network neutrality. "[A] vibrant information economy cannot countenance discrimination at a level so basic as transmission on a public network. If the carrier is determined to capture greater profits, the carrier ought to be obliged to do so by expanding his capacity . . ." Wu, *supra* note 62, at 311. Wu explicitly rejects the benefits of competition other than uniform-product price competition. Internet service providers may be better or worse, but they may not experiment with different offerings or pricing patterns.

⁶⁶ Wu & Yoo, *supra* note 51, at 578. Wu acknowledges that in the presence of network neutrality regulation, the service provider could simply raise Internet connection prices to \$25/month, making VoIP and telephone service the same price to the consumer. But this is not a desirable outcome from a policy standpoint. It stops the provider from charging different prices for phone and data services, which likely have very different demands, and mandates an inefficient, one-size-fits-all model.

⁶⁷ See Tim Wu, *Wireless Net Neutrality: Cellular Carterfone and Consumer Choice in Mobile Broadband 27* (New Am. Found.: Wireless Future Program, Working Paper No. 17, 2007), available at http://www.newamerica.net/files/nafmigration/WorkingPaper17_WirelessNetNeutrality_Wu.pdf.

⁶⁸ *Id.*

network, while limiting the threat that heavy-handed regulation would pose to the Internet's vibrancy.⁶⁹

While Speta gives Internet service providers much more leeway than Wu, he would include a requirement that interconnection not be "unreasonably discriminatory."⁷⁰ This might allow an Internet gatekeeper to offer its customers special speed or services for some types of applications, or offer higher speeds to applications that were willing to purchase it. It most likely would not, however, allow an Internet service provider to select one search engine exclusively, blocking access to others.

Though commentators are split on whether network neutrality principles are valuable and should be expanded, they have been well developed. Those who argue that they should be expanded to cover higher-level Internet platforms draw on a set of rules that is stable enough to consider what that application might mean. However, network neutrality is not the only potential method of analysis for considering novel neutrality claims on Internet platforms. The next section examines antitrust tying doctrine and its possible application to novel neutrality claims.

IV. ANTITRUST SCRUTINY OF TYING ARRANGEMENTS AND RECENT ATTEMPTS TO APPLY ANTITRUST TO INTERNET PLATFORMS

The principles established in the FCC's Network Neutrality Order do not create the only framework for examining discriminatory behavior by Internet-based platforms.⁷¹ In many cases, non-neutral behavior can be framed as tying arrangements or similar restraints. Legal and economic scholars have long considered and developed tying doctrine. Though the doctrine itself is imperfect, the

⁶⁹ James B. Speta, *A Common Carrier Approach to Internet Interconnection*, 54 FED. COMM. L.J. 225, 229 (2002).

⁷⁰ *Id.* at 276.

⁷¹ Although network neutrality challenges to date have been based on the FCC's regulatory authority, it is possible that network neutrality advocates could base a challenge on antitrust law. Part IV examines ways in which antitrust law could be used to mount a neutrality-type challenge against Internet platforms. Such an antitrust-based analysis is likely to be available and unaffected by the FCC's Order. In *Verizon v. Trinko*, the plaintiff purchased telephone service from Verizon, over lines owned by AT&T. He claimed that AT&T discriminated against Verizon customers in providing access to the lines, in violation of the Telecommunications Act of 1996 and the Sherman Act. See *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, L.L.P.*, 540 U.S. 398, 402-05 (2004). The parallel to network neutrality here is clear. Importantly, the 1996 Telecommunications Act at issue in *Trinko* is the Act on which the FCC bases its authority for the Network Neutrality Report and Order. See *Preserving the Open Internet*, *supra* note 25, ¶ 64. The antitrust claim hinged on whether local-exchange-carrier duties imposed by the 1996 Act can form the basis for an antitrust claim. The Court held that they cannot: "[J]ust as the 1996 Act preserves claims that satisfy existing antitrust standards, it does not create new claims that go beyond existing antitrust standards . . ." *Trinko*, 540 U.S. at 407. While the immediate effect of *Trinko* was to stop a neutrality-type claim from moving forward, a broader lesson from the case is that where neutrality claims fit within an existing antitrust framework, other neutrality regulations will not stop an antitrust case that touches on neutrality issues. See Geoffrey Manne, *Net Neutrality and Trinko*, TRUTH ON THE MARKET (Apr. 4, 2011), <http://truthonthemarket.com/2011/04/04/net-neutrality-and-trinko/>.

framework is well-suited to balance competing effects on competition and innovation that are at the heart of neutrality claims.

It is not immediately obvious that neutrality claims focused on Internet platforms are attempts to restrict tying arrangements, but they can easily be re-framed as such. In a tying arrangement, a seller agrees to sell one product (the tying product) only if the purchaser will also buy a second product (the tied product). In a famous example, a seller of canning machines and canning salt tied its machines to its salt, so that users of its machines could not purchase salt from its competitors.⁷² This framework is easily applied to the Internet platforms discussed in Part V. For example, in blocking some apps that compete with its own proprietary app, Twitter has attempted to tie its own microblogging service to its app for creating and reading microblog posts.⁷³ From the opposite perspective, traditional tying arrangements can be re-framed in terms of neutral access to a platform. In the canning salt example above, the canning machine represents a canning platform that could potentially be used in conjunction with software (salt) from the platform owner or from other salt companies. But the canning machine manufacturer, as the platform owner, closed the platform to outside developers (salt sellers), allowing only its own salt to interface with the machines.

A. *The Basics of Tying Doctrine*

Courts analyze tying arrangements under what is known as the “quasi-per se rule.”⁷⁴ It is similar to a per se rule in that a plaintiff is not required to identify specific anticompetitive effects of the tying arrangement, but three market conditions must be demonstrated before this per se illegality is triggered.⁷⁵ A tying arrangement is per se illegal if and only if a substantial amount of interstate commerce is involved,⁷⁶ the seller offers two products exclusively as a unit,⁷⁷ and the seller has “economic power” in the market for the tying product.⁷⁸ If these conditions are not

⁷² See *Int'l Salt Co. v. United States*, 332 U.S. 392, 396 (1947).

⁷³ In that case, a user need not use any mobile app, but if they use one, they must use the Twitter app, or some other app that Twitter has not blocked from its API.

⁷⁴ See, e.g., *U.S. Healthcare, Inc. v. Healthsource, Inc.*, 986 F.2d 589, 593 n.2 (1st Cir. 1993) (“Tying is sometimes also described as a per se offense but, since some element of power must be shown and defenses are effectively available, ‘quasi’ per se might be a better label.”); see also, e.g., Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, 123 HARV. L. REV. 397, 400 (2009).

⁷⁵ See *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 11–12 (1984) (“It is clear . . . that every refusal to sell two products separately cannot be said to restrain competition. If each of the products may be purchased separately in a competitive market, one seller’s decision to sell the two in a single package imposes no unreasonable restraint on either market, particularly if competing suppliers are free to sell either the entire package or its several parts.”).

⁷⁶ See *id.* at 16 (“If only a single purchaser were ‘forced’ with respect to the purchase of a tied item, the resultant impact on competition would not be sufficient to warrant the concern of antitrust law.”).

⁷⁷ See *id.* at 12.

⁷⁸ See *id.* at 12–15.

met, a tying arrangement may be analyzed under the default antitrust standard, the rule of reason.

The simplest of the three prongs of the quasi-per se rule is the substantial amount of interstate commerce requirement which is easily met and seldom stops cases from moving forward.⁷⁹ The Court has set a very lenient bar to establishing substantial volume: “normally the controlling consideration is simply whether a total amount of business, substantial enough in terms of dollar-volume so as not to be merely de minimis, is foreclosed to competitors by the tie”⁸⁰ In applying tying doctrine to Internet platforms, even those that offer free services, the substantial amount interstate commerce element is likely to be easily met by advertising or any sales that are associated with the platform or platform applications.

The two-product requirement is somewhat more challenging.⁸¹ The Court has been clear that simply because a product may be split into its constituent parts, does not mean that it is two products, rather than one. This distinction can be especially difficult in the Internet platform context where the value of the platform is often found largely or partly in its applications. To make this distinction, the Court has established a general standard that a tying arrangement involves two products when there is demand for the tying and tied products to be purchased separately. For example, in *Jefferson Parish*, the Court faced the question of whether anesthesia services and surgical services that require anesthesia are one or two products.⁸² The Court focused “not on the functional relation between [the two services], but rather on the character of the demand for the two items.”⁸³ The Court framed this question as whether consumers consider and purchase anesthesiological services separately from the surgical services with which they are necessarily used. The Court found that they do, and that surgery and anesthesia are different services operating in different markets.⁸⁴ This element could present a special challenge in application to

⁷⁹ For example, in *Fortner I*, the Court did not discuss the possibility of denying a claim that involved less than \$4 million in annual sales. *Fortner Enters., Inc. v. U.S. Steel Corp.*, 394 U.S. 495, 502 (1969) [*Fortner II*].

⁸⁰ *Id.* at 501. Notably, the foreclosure rationale for scrutinizing tying arrangements is based on a tenuous rationale and has been largely abandoned by both economists and courts. See Jeffrey Paul Jarosch, *Reassessing Tying Arrangements at the End of AT&T's iPhone Exclusivity*, 2011 COLUM. BUS. L. REV. 297, 357-60 (2011).

⁸¹ At times, the two-product requirement is obviously met. For example, in *Northern Pacific Railway Co. v. United States*, 356 U.S. 1 (1958), the Court did not question whether the land (the tying product) and shipping services (the tied product) were separate goods.

⁸² *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 6 (1984). In that case, a hospital had agreed that all anesthesia services would be provided by a single anesthesiology practice. *Id.* If hospital services are a single product that is made up of both surgical services and anesthesiological services, this agreement would not constitute a tying arrangement. Instead, the agreement would simply shape the nature and value of the single service provided by the hospital. *Id.* at 18–19. If, on the other hand, surgery and anesthesia are two different services, the agreement effectively tied surgical services provided by any physician in the hospital to anesthesiology services provided by the selected anesthesiologists. *Id.*

⁸³ *Id.* at 19.

⁸⁴ *Id.* at 22–23. It based this holding on findings that surgery and anesthesia are billed separately, and that “patients or surgeons often request specific anesthesiologists to come to a hospital and provide anesthesia, and that the choice of an individual anesthesiologist separate

some Internet platforms. For example, it is not entirely clear if the Twitter platform and the apps with which users interact with the platform are one or two products.⁸⁵ Some users may only use Twitter with these apps, never without them, while others may not use these apps at all.

The third element of a tying case, economic power, once required “a monopolistic position,”⁸⁶ but today’s standard allows a showing of economic power through a market share falling far short of monopoly,⁸⁷ or by showing that the tying good is sufficiently unique to confer some power.⁸⁸ The Court describes this economic power as

from the choice of a hospital is particularly frequent in respondent’s specialty.” *Id.* at 22; *see also* *Times-Picayune Pub. Co. v. United States*, 345 U.S. 594 (1953) (showing that the majority and the dissenters disagreed about whether advertisements in morning and evening papers occupied the same or different markets).

⁸⁵ *See infra* Section V.c. for further application of tying doctrine to API neutrality.

⁸⁶ *See, e.g., Times-Picayune*, 345 U.S. at 608–09. In *Times-Picayune*, the Court found that the tying arrangement was not anticompetitive because the defendant lacked “dominance” over the tying advertising market. *Id.* at 612–13. However, as the dissent notes, this result was nearly certain given the excessively broad manner in which it defined the market. *Id.* at 628; *see also id.* at 612–13 (describing the broad market definition to which the dissent refers).

⁸⁷ Early cases did require the tying seller to occupy a “monopolistic position.” *See, e.g., Times-Picayune*, 345 U.S. at 608–09. However, later cases required only “economic power.” A large market share is one way to demonstrate market share, but the Court has established other ways. “Market dominance . . . is by no means the only test of whether the seller has the requisite economic power. Even absent a showing of market dominance, the crucial economic power may be inferred from the tying product’s desirability to consumers or from uniqueness in its attributes.” *United States v. Loew’s, Inc.*, 371 U.S. 38, 45 (1962).

⁸⁸ *See, e.g., Fortner Enters., Inc. v. U.S. Steel Corp.*, 394 U.S. 495, 502-03 (1969):

The standard of “sufficient economic power” does not, as the District Court held, require that the defendant have a monopoly or even a dominant position throughout the market for the tying product. Our tie-in cases have made unmistakably clear that the economic power over the tying product can be sufficient . . . even though the power exists only with respect to some of the buyers in the market As we said in the Loew’s case: “Even absent a showing of market dominance, the crucial economic power may be inferred from the tying product’s desirability to consumers or from uniqueness in its attributes.” (citation omitted).

In *Fortner II*, the Court refined this test to require that

[T]he seller has the power, within the market for the tying product, to raise prices or to require purchasers to accept burdensome terms that could not be exacted in a completely competitive market. In short, the question is whether the seller has some advantage not shared by his competitors in the market for the tying product.

U.S. Steel Corp. v. Fortner Enters., Inc., 429 U.S. 610, 620 (1977) [hereinafter “*Fortner II*”]. The Court recently (and wisely) abandoned one indicator of market power, the presence of a patent. *Ill. Tool Works, Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 31 (2006) (“We conclude that the mere fact that a tying product is patented does not support . . . a presumption [of market power.]”).

[T]he power, within the market for the tying product, to raise prices or to require purchasers to accept burdensome terms that could not be exacted in a completely competitive market. In short, the question is whether the seller has some advantage not shared by his competitors in the market for the tying product.⁸⁹

Though the Court’s tying doctrine has been unchanged for years,⁹⁰ it may not be as stable as it appears. Justice O’Connor openly challenged the quasi-per se rule in her concurrence in *Jefferson Parish*.⁹¹ The Court sees the potential for a weak product to be protected by the power of a strong product in another, tied market. But the Court fails to consider the negative effects that such an arrangement could have on the competitors engaging in it. If a strong product does indeed allow a weak product to gain market share on its coattails, the attachment of the weak product will reduce the strong product’s draw. This undercuts the Court’s assumption that tying is used to protect tied products from competition, and the very basis for the quasi-per se rule. Instead, gains made by the tied product are likely to be offset by losses to the tying product.⁹² Though the Court has not resolved this tension, several dissents and concurrences have attempted to identify other rationales and methods for antitrust scrutiny of tying arrangements. This debate mirrors the economic debate, discussed in Part II, over whether and when a closed platform or one that discriminates between applications may cause competitive harm.

The first example of this is in Justice White’s dissent to *Fortner Enterprises v. United States Steel* (“*Fortner I*”).⁹³ Justice White sought to identify specific economic harms that tying may cause. He identified two primary harms that may stem from tying arrangements where the tying product has economic power: “the use of power over one product [(1)] to attain power over another, [and (2)] otherwise to distort freedom of trade and competition in the second product.”⁹⁴ Justice White thought that tying could allow a monopolist to use one monopoly to gain another, or could cause “distortions” in the tied market by forcing non-tied competitors out of the tied market or by making it difficult to enter the tied market.

⁸⁹ *Fortner II*, 429 U.S. at 620.

⁹⁰ Cf. *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 9–10 (“It is far too late in the history of our antitrust jurisprudence to question the proposition that certain tying arrangements pose an unacceptable risk of stifling competition and therefore are unreasonable ‘per se.’ The rule was first enunciated in *International Salt Co. v. United States* . . . and has been endorsed by this Court many times since. The rule also reflects congressional policies underlying the antitrust laws.”).

⁹¹ *Id.* at 35.

⁹² The Court attempted to get around this paradox by imposing the market power requirement. The only products that may shelter tied products from the forces of competition are those with market power. The problem is that the seller still faces a tradeoff between raising prices, which ordinarily raises no competitive concern, and tying, which does. Without some theory as to why imposing a tying arrangement is worse for consumers or for competition than simply raising prices, there is no justification for condemning tying arrangements.

⁹³ *Fortner Enters., Inc. v. U.S. Steel Corp.*, 394 U.S. 495, 510 (1969) (White, J., dissenting).

⁹⁴ *Id.* at 512.

The idea that one monopoly may be “leveraged” into another using a tying arrangement has been extensively considered and for the most part discredited.⁹⁵ Market “distortions,” however, are where most commentators now look for harm from tying arrangements—this is the angle taken by Justice O’Connor in her concurrence in *Jefferson Parish*.⁹⁶ O’Connor attempts to reform tying doctrine under the rule of reason, focusing on the economic consequences of potentially anticompetitive business practices.

O’Connor begins by carefully spelling out the distortions that ties can have on a market. She then lays out a doctrine that aims to identify those arrangements that will have such negative effects. The basic harm that O’Connor sees in tying arrangements, (or in exclusive, closed platforms) is that they may “have a demonstrable exclusionary impact in the tied product [(or applications)] market”⁹⁷ This is only a problem when the impact is to make the tied market less competitive.⁹⁸ O’Connor sees this possibility in two situations—in neutrality terms, exclusivity can be a problem when: the closing of a platform either drives out existing application makers, or meaningfully raises barriers to entry to an applications market.⁹⁹ In other words, a closed platform alone is not sufficient to demonstrate anticompetitive harm. It obviously raises the barriers to entry into the applications market for that platform, but O’Connor’s tying analysis is not implicated unless it makes a broader applications market, including other platforms, less competitive. Notably, these are the same types of harms identified by economists focusing on platform decisions to open or close. As Farrell and Weiser demonstrate with ICE, when only a single platform and the applications associated with that platform are involved, the platform owner is likely to open the platform when it is efficient to do so.

O’Connor proposes specific rules for the analysis of tying arrangements. Her analysis overlaps with, but is meaningfully different from the quasi-per se rule, and is easily applied to novel neutrality claims on Internet platforms. First, she adopts

⁹⁵ See, e.g., RICHARD A. POSNER, *ANTITRUST LAW* 199 (2d ed. 2001) (“It may seem obvious that two monopolies are better than one, but since the products are used in conjunction with one another to produce the final product or service in which the consumer is interested . . . , it is far from obvious.”); ROBERT H. BORK, *THE ANTITRUST PARADOX* 372–75 (1978); Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 *YALE L.J.* 19, 20–23 (1957); Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 *NW. U.L. REV.* 281, 290–92 (1956).

⁹⁶ See *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 36 (1984) (O’Connor, J., concurring).

⁹⁷ *Id.*

⁹⁸ See *id.* at 36 (“Tying may be economically harmful primarily in the rare cases where power in the market for the tying product is used to create *additional* market power in the market for the *tied* product.”).

⁹⁹ Note that if the platform does not have market power, its discrimination is unlikely to cause barriers to entry that extend to a broader applications market. Nor does each platform have a distinct applications market separate from applications markets associated with competing platforms. Cf. *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 471 (1992) (holding that Kodak may have market power in a parts and repair market for its machinery, where its machines do not have power in the market for that type of machine).

two of the three requirements of the quasi-per se rule: the two product requirement and market power requirements.¹⁰⁰

In addition to these two requirements drawn from the quasi-per se rule, O’Connor also requires evidence of a likely negative effect on competition from the tying arrangement.

[T]here must be a substantial threat that the tying seller will acquire market power in the tied-product market. No such threat exists if the tied-product market is occupied by many stable sellers who are not likely to be driven out by the tying, or if entry barriers in the tied-product market are low.¹⁰¹

This requirement is especially important in the common situation where applications makers provide applications over several platforms. A single platform excluding disfavored or competing applications makers from one platform in a competitive market can have no real harm, so long as the other platforms remain available.¹⁰² In a less competitive platform market, the risks to the tied applications market targeted by O’Connor’s analysis are the potential for competition in that market to be reduced by the tied good obtaining market power and forcing other competitors out, or obtaining market power and significantly raising barriers to entry for other would-be participants in the tied applications market. These foci—requiring market power in the tying platform market and watching the tied applications market for foreclosure and exclusion—are consistent with the platform economics discussed in Section II.

By focusing on actual effects of an arrangement, O’Connor departs from the quasi-per se rule. Rather than leading to a conclusion of illegality, her requirements are threshold questions for an analysis of potential illegality. “The ultimate decision whether a tie-in is illegal under the antitrust laws should depend upon the demonstrated economic effects of the challenged agreement. It may, for example, be entirely innocuous that the seller exploits its control over the tying product to ‘force’ the buyer to purchase the tied product.”¹⁰³ In applying tying analyses to neutrality

¹⁰⁰ See *Jefferson Parish*, 466 U.S. at 37-39. She does not adopt the substantial amount of interstate commerce requirement, but it has very seldom had teeth in analyzing tying arrangements. Her market power requirement basically adopts the Courts existing rule, but she puts her own emphasis on the two-product requirement:

For products to be treated as distinct, the tied product must, at a minimum, be one that some consumers might wish to purchase separately *without also purchasing the tying product*. When the tied product has no use other than in conjunction with the tying product, a seller of the tying product can acquire no *additional* market power by selling the two products together.

Id. at 39. This standard is significantly more demanding than the Court’s two market standard, and would make direct application of O’Connor’s tying analysis to platform neutrality claims difficult, since by definition, a platform application cannot be used without the platform, regardless of whether the two are available in a single or separate markets. For this reason, the analysis proposed in Section VI draws on both the Court’s doctrine and O’Connor’s framework to reach a slightly less stringent two-product analysis.

¹⁰¹ *Id.* at 38.

¹⁰² This situation is especially relevant to digital markets and API. See *infra* Sections V.c and V.d.

¹⁰³ *Jefferson Parish*, 466 U.S. at 41 (O’Connor, J., concurring).

claims, this is an especially important insight. Though commentators disagree on whether and when platform neutrality is necessary, the debate strongly suggests that the value of neutrality and platform openness is context specific, and that actions that violate neutrality principles may have value.

V. APPLICATION OF NETWORK NEUTRALITY AND ANTITRUST FRAMEWORKS TO THREE INTERNET PLATFORMS

Network neutrality debates began with a firm connection to the physical pipes and basic access points on which the Internet is built. The debate was a reaction to the potential for the owners of infrastructure to block, slow, or toll parts of the Internet for some portion of users. Network neutrality advocates urge that policies governing access to the Internet itself must be neutral. But recently, the concept of neutrality has reached beyond the ways in which consumers access the Internet to the Internet platforms and services that they use once they get there. Instead of focusing on access to Internet platforms and services being in some way neutral, the new debate is over whether Internet-based platforms must themselves be neutral. Some of these platform neutrality debates have become familiar terms—including those specifically addressed here: search neutrality, API neutrality, and online marketplace neutrality.

Each of these novel neutrality claims focuses on a platform that is built upon the Internet platform.¹⁰⁴ One of the most prominent of these new neutralities focuses on Internet search—whether search engines must remain neutral to all Internet content or may promote or hold back some sites in their search algorithms. This section examines search neutrality, API neutrality, and online marketplace neutrality claims. It considers each neutrality type and the platforms to which they are applied under both network neutrality and antitrust principles. For each of these “higher-level” Internet platforms there have been specific calls to extend network neutrality principles. For example, even as the FCC Network Neutrality Rule was proposed, the founder of the specialized search engine Foundem argued that their focus only on broadband providers was too narrow:

The Federal Communications Commission has proposed “network neutrality” rules, which would prohibit Internet service providers from discriminating against or charging premiums for certain services or applications on the Web. The commission is correct that ensuring equal access to the infrastructure of the Internet is vital, but it errs in directing its regulations only at service providers like AT&T and Comcast.¹⁰⁵

¹⁰⁴ For this reason I refer to these platforms as higher-level Internet platforms.

¹⁰⁵ Adam Raff, Op-Ed., *Search, but You May Not Find*, N.Y. TIMES, Dec. 28, 2009, at A27, available at <http://www.nytimes.com/2009/12/28/opinion/28raff.html>. Raff continued to argue that major search engines, too, should be covered by neutrality rules.

Today, search engines like Google, Yahoo and Microsoft’s new Bing have become the Internet’s gatekeepers, and the crucial role they play in directing users to Web sites means they are now as essential a component of its infrastructure as the physical network itself. The F.C.C. needs to look beyond network neutrality and include “search neutrality”

Id.

In examining these novel neutrality claims on Internet platforms, I demonstrate that neither of these frameworks works well for analyzing novel neutrality claims. Section VI proposes reforms to these frameworks.

A. Unique Characteristics of Internet Platforms

These higher-level neutralities have meaningful structural and substantive differences from typical network neutrality. These differences make it impossible or harmful to apply network neutrality values to them and demonstrate the imperfection of antitrust rules for analyzing them. There are three key differences between the Internet gatekeepers to which network neutrality principles are applied and these higher-level platforms—these characteristics also distinguish them from the goods and services to which antitrust laws have most frequently been applied.

First, use of one Internet platform usually does not preclude a user from also using a competing platform. This is much less true of broadband providers, the targets of the FCC Neutrality Rule. A consumer who purchases broadband service from one company may switch to a direct competitor, but is very unlikely to patronize more than one fixed provider at a time, or more than one wireless broadband provider at a time. Search engines provide the opposite extreme. If a user is dissatisfied with the results returned by one search engine, they can quickly re-run the search on another. Most search engines have extremely low learning costs to a user who has used *any* search engine. For other Internet platforms, switching costs may be higher—for example switching between social networks may be difficult, and may require convincing others to also migrate to a new platform. However, unlike broadband providers, a user can reasonably use multiple social networks, and thus can transition gradually between them or use them simultaneously for different purposes. Facebook and Twitter provide a useful example. It is common for users to belong to both social networks. Some users may use one for some purposes and another for others. Many applications are available that allow a user to use both networks at once without clearly distinguishing between the two.¹⁰⁶

Second, because switching costs between higher-level Internet platforms tend to be low, an inferior platform is unlikely to be able to maintain market power for long. In some ways, switching costs are able to imitate market power by locking customers in. To overtake a competitor, a platform or service must not only be better, but must be sufficiently better to justify incurring the costs of the switch.¹⁰⁷ This can slow down the effects of competition. Because competition generally is likely to be more efficient in higher level Internet platforms than in broadband

¹⁰⁶ A cottage industry has sprung up around social networks for the major purpose of facilitating use of multiple social networks. For example, there are a number of apps and services that allow users to post or read messages from many social networks at once. See Jaymar Cabebe, *HootSuite, TweetDeck, or Seismic?*, THE DOWNLOAD BLOG (Aug. 5, 2011, 4:43 PM), http://download.cnet.com/8301-2007_4-20088869-12/hootsuite-tweetdeck-or-seismic/.

¹⁰⁷ See Joseph Farrell & Paul Klempner, *Coordination and Lock-in: Competition with Switching Costs and Network Effects*, in 3 HANDBOOK OF INDUSTRIAL ORGANIZATION 1974 (Mark Armstrong & Robert Porter eds., 2007) (1967) (“[S]witching costs can segment an otherwise undifferentiated market as firms focus on their established customers and do not compete aggressively for their rivals’ buyers, letting oligopolists extract positive profits.”).

providers, it is difficult to justify application of neutrality principles to higher-level platforms without identifying specific harms caused by their violation. Though switching costs are likely to be low, the platforms examined here each have some level of network effects making market entrance more difficult by giving larger platforms an advantage over less-established platforms. There is also variation in the switching costs imposed by Internet platforms. Search engines have low switching costs—users of one search engine generally can immediately switch to another. But social networks may have higher switching costs, since part of the value of the network is not its technical superiority, but the fact that a user's friends also use it. Importantly, though these network effects may make market entry more difficult, an effect that makes a popular service *better* does not inherently harm consumers in any obvious way.

Third, higher-level Internet platforms are more likely than broadband providers to rely on violations of neutrality principles for their basic business models. Though Professor Yoo argues that allowing broadband providers to violate network neutrality principles can foster competition between them, it is possible for them to compete transparently without blocking or unreasonably discriminating between Internet applications. For search engines, on the other hand, discrimination between search results is the very service on which they compete—the best search engine is the one that best discriminates between potential search results.¹⁰⁸ Similarly, enforcing a strong transparency principle would hamper competition by reducing engine's ability to differentiate—anyone could copy the most successful search engines. Search engines would then have to compete on some factor other than the service that is at the heart of what they do—*search*.

The remainder of this Section examines three of these higher-level Internet platforms that have faced novel neutrality claims and applies network neutrality and antitrust frameworks to them.

B. Search Neutrality

Calls for neutrality-based regulation of search engines have recently become common. In the United States, as in much of the world, regulation of search means regulation of the currently dominant search engine, Google. While other search engines occupy meaningful shares of the market, none have faced the threat of regulation that Google does. That threat has recently become very real. In June, 2011, the FTC launched a broad probe into Google's search and advertising practices.¹⁰⁹ It is uncertain if this probe will result in any action against Google, but it demonstrates that a major U.S. enforcement agency is looking closely at Google and search neutrality.¹¹⁰ Two United States Senators have also urged the FTC to

¹⁰⁸ This fact requires search neutrality to focus on the more difficult question of whether the discrimination between search results is appropriate, rather than simply aiming to identify whether there is such discrimination.

¹⁰⁹ See Joe Mullin, *Google Defends Itself on Antitrust as States Pile On*, PAIDCONTENT.ORG (June 24, 2009, 12:24 PM), <http://paidcontent.org/article/419-google-defends-itself-on-antitrust-as-states-pile-on/>.

¹¹⁰ Commissioner Thomas Rosch has indicated that the FTC might like to challenge Google under its authority to regulate unfair methods of competition rather than under more traditional antitrust standards because a "Section 5" case would not require any demonstration of harm to competition. See Geoffrey Manne & Joshua Wright, *The FTC Makes its Google*

investigate whether Google favors its own products in its search results.¹¹¹ In Europe, where Google occupies a larger share of the market than it does in the United States, the case against Google is well underway.¹¹²

The FTC investigation and the EU case follow a series of calls, from both commentators and Google competitors, for search neutrality enforcement. As with other Internet neutralities, search neutrality fears tend to focus on the possibility that the platform will favor some content providers over others, giving users a product that is harmfully non-neutral. Some companies have made specific complaints that Google disfavors or de-lists their websites, and such complaints have led to a formal investigation in the EU. In the U.S., TripAdvisor.com, WebMD.com, Yelp.com, and Citysearch.com have complained that their sites have been pushed down in Google Searches as Google-owned products have been introduced at the top of search results.¹¹³ Google has responded to these concerns by attempting to focus on search users, not the content providers that may appear in search results: "We built Google for users, not websites, and our goal is to give users answers . . ." ¹¹⁴ Nonetheless, businesses built upon websites argue that being prominent among the returns to a common search on Google is essential for some business models to succeed.¹¹⁵ In this environment, search engine optimization, or simply SEO,¹¹⁶ has become a cottage industry.¹¹⁷

Concerns over the potential harm caused by search engine tinkering have led commentators to argue that neutrality principles should be applied to search engines, and to Google in particular. Not surprisingly, claims that network-neutrality

Investigation Official, now What?, TECHNOLOGY LIBERATION FRONT (June 24, 2011), http://techliberation.com/2011/06/24/the-ftc-makes-its-google-investigation-official-now-what/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+techliberation+%28Technology+Liberation+Front%29.

¹¹¹ Matt McGee, *US Senators Call for FTC Investigation into Google's Search Results*, SEARCH ENGINE LAND (Dec. 19, 2011), <http://searchengineland.com/us-senators-call-for-ftc-investigation-into-googles-search-results-105131>.

¹¹² See Rob D. Young, *Report: Google EU Antitrust Expands, Up to 9 Complainants*, SEARCH ENGINE WATCH (Aug. 3, 2011), <http://searchenginewatch.com/article/2098919/Report-Google-EU-Antitrust-Expands-Up-to-9-Complainants>; Mathew Ingram, *Google Fights Growing Battle Over "Search Neutrality"*, GIGAOM (Dec. 17, 2010, 8:30 AM), <http://gigaom.com/2010/12/17/google-antitrust-search-neutrality/>.

¹¹³ See Amir Efrati, *Rivals Say Google Plays Favorites*, WALL ST. J., Dec. 12, 2010, available at <http://online.wsj.com/article/SB10001424052748704058704576015630188568972.html>.

¹¹⁴ *Id.*

¹¹⁵ See *id.* ("The complaints underscore how crucial Google searches are to virtually every business online, and the increasingly close scrutiny of how Google operates.").

¹¹⁶ Search engine optimization, often referred to simply as "SEO" is a euphemism for "getting a prominent listing on Google."

¹¹⁷ See *What is SEO / Search Engine Optimization?*, SEARCH ENGINE LAND, http://searchengineland.com/guide/what-is-seo?utm_source=s&utm_medium=home&utm_campaign=nav (last visited Nov. 15, 2011).

principles should be applied to search engines have been led by Internet service providers to whom network neutrality is already applicable. Comcast has argued that “If the [FCC] were to conclude that an interventionist regulatory regime is needed to preserve the ‘neutrality’ of the Internet, it could not defensibly apply that regime to broadband providers but not to Google.”¹¹⁸ Similarly, AT&T has argued that search engines “determine the information . . . that customers access online through algorithms that highlight some information, favor certain websites, and even omit some sites altogether.”¹¹⁹

Following these concerns, some commentators have argued that direct oversight of the neutrality of search algorithms is necessary. For example, Professors Benjamin Edelman and Benjamin Lockwood find evidence consistent with the existence of search bias and argue that

[A]s Google becomes even more dominant, we envision substantially greater investigation of the effect of Google's linking policies, ultimately including deeper outside verification and oversight In the long run, just as Windows source code and APIs are subject to outside scrutiny, we expect that search algorithms will require similar external review.¹²⁰

Edelman and Lockwood find that search engines, particularly Google, are likely to include their own sites and services as the first or one of the first returns to a set of typical searches.¹²¹ However, as Edelman and Lockwood acknowledge, it is not obvious that these results indicate bias. If search engines attempt to provide useful results, it is possible that Google users find Gmail to be a useful return to “mail,” while Yahoo users find Yahoo Mail to be a useful return.¹²² Though their results suggest the possibility of but do not demonstrate bias, Edelman and Lockwood fear that search engines bias their results “to expand into new sectors, to grant instant free traffic to their own new services, and to block competitors and would-be competitors. The incentive for bias is all the stronger because the lack of obvious benchmarks makes most bias would be difficult to uncover.”¹²³

Edelman and Lockwood are not alone in envisioning agency oversight of search. A 2010 New York Times editorial suggested that Google should “explain with some specified level of detail the editorial policy that guides its tweaks. Another [possibility] would be to give some government commission the power to look at

¹¹⁸ Nate Anderson, *Regulating Google's Results? Law Prof Calls “Search Neutrality” Incoherent*, ARS TECHNICA (Jan. 19, 2011, 6:40 PM), <http://arstechnica.com/tech-policy/news/2011/01/regulating-googles-results-law-prof-calls-search-neutrality-incoherent.ars>.

¹¹⁹ *Id.* (internal quotation marks omitted).

¹²⁰ Benjamin Edelman & Benjamin Lockwood, *Measuring Bias in “Organic” Web Search*, <http://www.benedelman.org/searchbias/> (last visited Nov. 15, 2011).

¹²¹ *Id.*

¹²² Edelman and Lockwood find that the first few results in any search tend to be the links on which users click. This, again, is consistent with search result patterns representing either usefulness or bias.

¹²³ *Id.*

those tweaks.”¹²⁴ Professors Oren Bracha and Frank Pasquale explicitly call for such a “Federal Search Commission.”¹²⁵ They focus as much on the need to protect the Internet as a forum for democratic speech as on protecting economic competition and conclude that either “application and adaptation of common law duties to public utilities, or the creation of a regulatory framework” to regulate search engines is necessary to protect against search engine manipulation.¹²⁶ Elsewhere, Pasquale has spelled out the bounds of search neutrality that he believes should be enforced by such a federal agency. His search neutrality principles are generally more modest and less intrusive than the network neutrality rules.¹²⁷ Specifically, Pasquale argues that search engines should not engage in two behaviors:

- 1) Stealth marketing (secretly taking cash or other consideration in exchange for elevating the profile of sites in organic search results)[; and]
- 2) De-indexing without notice and explanation (removing legal, non-spam sites from the index after they have been included in the search engine’s corpus, and failing to give some explanation to the removed site as to why it was removed)[.]¹²⁸

As Professor James Grimmelmann points out, much of Pasquale’s proposal fits neatly under the transparency principle.¹²⁹ Stealth marketing and de-indexing are roughly analogous to unreasonable discrimination and no-blocking, but Pasquale’s criticism of each of these rests not on the search engine’s ability to block or discriminate against a potential search return, but on its ability to do so opaquely.

Others argue that even the more modest search neutrality principles are unnecessary. For example, Grimmelmann identifies eight search neutrality principles¹³⁰ and finds that they are “unusable as bases for sound search

¹²⁴ *The Google Algorithm*, N.Y. TIMES, July 14, 2010, at A30, available at <http://www.nytimes.com/2010/07/15/opinion/15thu3.html>. The Times Editorial only considered this as a possibility, and importantly recognizes that any oversight must be balanced against a need “not to stifle [Google’s] ability to innovate.” *Id.*

¹²⁵ Oren Bracha & Frank Pasquale, *Federal Search Commission? Access, Fairness, and Accountability in the Law of Search*, 93 CORNELL L. REV. 1149 (2008).

¹²⁶ *Id.* at 1208.

¹²⁷ Frank Pasquale, *Search Neutrality as Disclosure and Auditing*, CONCURRING OPINIONS (Feb. 19, 2011, 11:16 AM) <http://www.concurringopinions.com/archives/2011/02/search-neutrality-as-disclosure-and-auditing.html>.

¹²⁸ *Id.*

¹²⁹ James Grimmelmann, Comment to *Search Neutrality as Disclosure and Auditing*, CONCURRING OPINIONS (Feb. 19, 2011, 11:16 AM) <http://www.concurringopinions.com/archives/2011/02/search-neutrality-as-disclosure-and-auditing.html>.

¹³⁰ The eight principles map roughly onto the three principles underlying the FCC’s Network Neutrality Rules. They are: equality; objectivity; bias; traffic; relevance; self-interest; transparency; and manipulation. James Grimmelmann, *Some Skepticism About Search Neutrality*, in *THE NEXT DIGITAL DECADE: ESSAYS ON THE FUTURE OF THE INTERNET* 435, 438 (Berin Szoka & Adam Marcus, eds. 2010).

regulation.”¹³¹ Grimmelman argues generally that neutrality is incompatible with the enterprise of search, which has the very purpose of helping users discriminate between websites.¹³²

1. Neutrality-Based Scrutiny of Search

In the context of this rigorous debate surrounding search neutrality, it is clear that straightforward application of network neutrality principles—transparency, no blocking, and no unreasonable discrimination—to search neutrality makes little sense. Transparency raises serious problems for businesses competing in the search market. No commercial search engine will be willing to disclose anything more than general information regarding the algorithm and code that it uses to select, prioritize, and sort possible returns to a search. To require such a disclosure to users would be to enable copying of the algorithm, which is a primary asset of a search engine. Ultimately, such a requirement could make search an untenable business. It might be possible for a search engine to disclose some information to regulators, rather than directly to consumers, but this would not serve the purpose behind the transparency principle—to provide consumers with information about the search engines between which they are choosing. In search, it may be necessary for consumers to choose between search engines based on the results that they obtain from using an engine, rather than transparency of the algorithm that creates those results. Given the low costs to consumers to switch between search products and the ability to experiment cheaply with different products, a lack of transparency should not allow one search engine to gain an edge over others, or harm consumers in some other way. The results of a search, rather than the process that creates them, are the real product in which consumers are interested. These results are inherently transparent.

Blocking and unreasonable discrimination also pose a problem. Discrimination between different possible search results is the primary basis on which search engines compete. *Ceteris paribus*, the search engine that returns more useful results will attract the most users. It is possible, however, that search engines could discriminate in less desirable ways¹³³—critics have identified two types of discrimination and blocking that they argue are unreasonable: discrimination on behalf of websites affiliated with the search engine and arbitrary blocking or demotion of a site in the search algorithm.

¹³¹ *Id.* Grimmelman notes the limits of his argument: “Just because search neutrality is incoherent, it doesn’t follow that search engines deserve a free pass under antitrust, intellectual property, privacy, or other well-established bodies of law.” *Id.* This Article attempts to define the bounds of scrutiny of Internet platforms, including search engines. See *infra* Section VI.

¹³² See generally Grimmelman, *supra* note 129, at 442-47 (considering the neutrality principles of equality, objectivity, and bias); see also Geoffrey A. Manne, *The Problem of Search Engines as Essential Facilities: An Economic and Legal Assessment*, in THE NEXT DIGITAL DECADE, *supra* note 130; Joshua Wright, *Search Bias and Antitrust*, TECH. LIBERATION FRONT (Mar. 24, 2011), <http://techliberation.com/2011/03/24/search-bias-and-antitrust/>.

¹³³ Edelman and Lockwood provide evidence suggesting (but not demonstrating) that Google provides unfairly biased search results. See *supra* text accompanying notes 120-123.

Edelman and Lockwood argue that the potential bias created by surreptitious discrimination and blocking justifies government review. While there are legitimate arguments for targeting specific types of discrimination, the network neutrality principles provide no principled way to separate necessary discrimination from bad discrimination.¹³⁴ Instead, they distinguish between reasonable and unreasonable discrimination in ways that are not usefully applicable to search. For example, the Report and Order allows for “reasonable network management,”¹³⁵ and “[u]se-agnostic discrimination[.]”¹³⁶ Network management simply does not apply in any clear way to search results. Use-agnostic discrimination allows “[d]ifferential treatment of traffic that does not discriminate among specific uses of the network or classes of uses Use-agnostic discrimination . . . does not interfere with end users’ choices about which content, applications, services, or devices to use.”¹³⁷ Every search engine aims not to “interfere with end users’ choices” but to facilitate those choices. Of course, the difference between facilitation and interference is only one of success vs. failure. This process, the process in which search engines necessarily engage, explicitly treats different uses differently. Everyone using a search engine wants to search, but a person wanting to search for shoes will be treated differently by a successful search engine than a person searching for driving directions. The results of the two searches could be usefully arrived at in different ways. There is no reason for the mechanism underlying the search engine not to recognize that terms in each search should lead to different sets of results (products for one and maps for the other). Thus, search has a valuable element that is *not* use-agnostic. Network neutrality principles suggest that this pro-competitive process of arriving at individualized and useful search results should lead to strong scrutiny of search engines. But that they target pro-competitive practices that make search better for consumers suggests that these principles are missing something when transferred to search.

2. Antitrust Scrutiny of Search

Search neutrality borrows the terms of network neutrality, but it fits more easily into the framework of an antitrust tying analysis. Under such an analysis, when a search engine favors some results over others, especially when it favors its own products or those of its business partners, the search engine functions as the tying good (and the platform for specific search results) and the products and websites that receive favored treatment are the tied good (and the platform application or software). The analogy is imperfect because the tie is not exclusive. If a search engine favors one search result, it does not do so to the absolute exclusion of other potential results—websites are more likely to be discriminated against in their ranking than to be absolutely blocked. But this may be a distinction without a

¹³⁴ Further, it is possible that there is no such distinction. Discrimination that favors websites affiliated with a search engine may in fact be more valuable to the users that choose that search engine. See Wright, *supra* note 132 (“That search engines compete for the attention of those consumers, including through search bias, should not be surprising. But it does not make out a coherent claim of consumer harm.”).

¹³⁵ Preserving the Open Internet, *supra* note 25, ¶ 69.

¹³⁶ *Id.* ¶ 73.

¹³⁷ *Id.*

difference. There is a limit to how far into search results a user will look, and lower results are less likely to be clicked.¹³⁸ Any loosening of the tying arrangement makes competitive harm less likely, because rather than being required to take a single search result in exchange for using a search engine, search discrimination just makes it easier and more likely that a user will choose the favored result with a more prominent listing.¹³⁹ Nonetheless, analysis of search neutrality under a tying framework provides valuable insights into when search neutrality claims have merit. Recall that under the basic tying doctrine, the quasi-per se rule is triggered upon a showing that there are two products, that the tying product has economic power, and that a substantial portion of commerce is involved.¹⁴⁰

A search engine as the tying platform and search results as tied good likely would satisfy the two product requirement. The two markets are the market for whatever the user is searching for and the market for search engines. Both are vigorously competitive.¹⁴¹ There can be little doubt that users generally see the two market decisions as separate and make each decision separately.¹⁴² A user looking for a website that reviews shoes is unlikely to expect that they will end up at a much different site based on the search engine they use—in fact they are likely to choose the search engine that they think will most easily lead them to the most useful website. Clearly there are separate markets for search engines, and for the web pages that compete to get users' attention, often through good placement in popular search engines.

The next question is whether the tying platform—here a search engine—has market power. This, of course, is a specific inquiry for the competitor at issue, but today, a Court would be likely to find that Google has market power in search. Given Google's hefty share of the web search market, it would likely be difficult for it to argue that it does not have market power—but it is not clear that this is the correct result under the doctrine established by the Court. The Court looks not for some market share, but for economic power. It defines market power as “[T]he power, within the market for the tying product, to raise prices or to require purchasers to accept burdensome terms that could not be exacted in a completely competitive market. In short, the question is whether the seller has some advantage

¹³⁸ Bing Pan et al., *In Google We Trust: Users' Decisions on Rank, Position, and Relevance*, 12 J. COMPUTER-MEDIATED COMM. 3 (2007).

¹³⁹ While this may not mitigate the harm to the specific, disfavored competitor when ambivalent consumers click on a link simply because it is higher on the page, it does reduce the harm to consumers. A consumer seeking a specific search result or who prefers a lower ranked page will still be able to find it through most search engines. See Wright, *supra* note 132.

¹⁴⁰ The substantial volume of commerce prong is seldom determinative and is clearly met for major search engines. It will not be further discussed here.

¹⁴¹ This may depend on what the user is actually searching for—it is of course possible to use a search engine to find a product that has a monopoly over its market.

¹⁴² There may be exceptions to this generality. For example, a user trying to find a map of a specific place and wanting to use Google maps may go to Google and search for “Map of Minneapolis, MN,” knowing that a Google map of the location will likely be the first search result. (As of this writing, it is).

not shared by his competitors in the market for the tying product.”¹⁴³ Google’s power to raise prices or to impose burdensome terms is limited. As Google is fond of emphasizing, its “[c]ompetition is just one click away.”¹⁴⁴ The thing that keeps Google in its market share is its lack of burdensome terms and the usefulness of its results, not a special ability to keep users locked into an inferior search engine.

However, Google does have two advantages not shared by its competitors. First, it offers a wide variety of services that draw users in to its ecosystem, including Maps, Gmail, Google+ and many others. By offering all of these services, some of which incur costs if a user decides to switch to another service, Google is able to keep users within its site for multiple services, simply because it is easier to keep using a trusted Google service than to try an upstart.¹⁴⁵ Furthermore, Google may benefit from network effects inherent in search whereby the more users that patronize a single search engine, the more search data that engine has to improve its services making it harder for competitors to catch up.¹⁴⁶ These effects may soften competition in Internet search, and combined with its market share, it is likely that a court would find Google to possess the market power necessary to a tying claim.

A challenge that sought to apply tying doctrine to search neutrality could be successful against Google if it was able to demonstrate that the search engine’s algorithm systematically favored certain search results in other markets. But like the result obtained by application of neutrality principles, it is not clear that this is the right result. Search bias, even if it favors the search engine’s own products or those of its partners, may be a method of competition. As Professor Joshua Wright argues, such “bias” could increase the value of search engines by becoming a factor on which they compete—the winner might not be the engine with the least bias, but the one with the most useful bias.¹⁴⁷ In other words, in what Edelman and Lockwood call bias, Wright sees search engines providing users with useful results.

¹⁴³ U.S. Steel Corp. v. Fortner Enters., Inc., 429 U.S. 610, 620 (1977).

¹⁴⁴ Adam Kovacevich, *Google’s approach to competition*, GOOGLE PUB. POL’Y BLOG (May 8, 2009, 9:24 AM), <http://googlepublicpolicy.blogspot.com/2009/05/googles-approach-to-competition.html>.

¹⁴⁵ Nonetheless, switching costs from Google to Bing or from Google Maps to Mapquest are very low whether a user has a Gmail account or not.

¹⁴⁶ It is unclear how much of Google’s success is actually due to its size. Compare Benjamin Edelman, *In Accusing Microsoft, Google Doth Protest Too Much*, HBR BLOG NETWORK (Feb. 3, 2001, 2:47 PM), <http://blogs.hbr.org/hbsfaculty/2011/02/in-accusing-microsoft-google.html> (“Of course the reality is that Google’s high market share means Google gets far more searches than any other search engine So Google is far better equipped to figure out what results users favor and to tailor its listings accordingly.”) with Geoffrey Manne, *Microsoft undermines its own case*, TRUTH ON THE MARKET (Feb. 4, 2011), <http://truthonthemarket.com/2011/02/04/microsoft-undermines-its-own-case/>:

Perhaps Google is “better equipped to figure out what users favor.” But it seems to me that only a trivial amount of this advantage is plausibly attributable to Google’s scale instead of its engineering and innovation. The fact that Microsoft can (because of its own impressive scale in various markets) and does take advantage of accessible data to benefit indirectly from Google’s own prowess in search is a testament to the irrelevance of these unfortunately-pervasive scale and network effect arguments.

¹⁴⁷ Wright, *supra* note 132.

Importantly, Google is not the only search engine in which Edelman and Lockwood find bias: “Evidence that other search engines with much smaller market shares . . . exhibit similar bias would suggest to most economists that the practice certainly has some efficiency justifications.”¹⁴⁸ Tying doctrine has been criticized for allowing successful challenges to business activities that are themselves forms of competition, without evidence that they are causing competitive harm.¹⁴⁹ Here, it is not clear that any competitive harm will actually arise from the type of search bias that search neutrality advocates accuse Google of engaging in.

Justice O’Connor’s extra steps of analysis prove useful in considering this possibility. She proposes a tying analysis that begins with the steps of the quasi-per se rule, but then considers the likely effects of the tie and any pro-competitive effects. Application of this extra analytical step demonstrates that search neutrality is not a major competitive concern and that regulation of search is unfounded as a method to promote competition. The first question posed in O’Connor’s additional analysis is whether the non-neutral action by the platform owner (here the alleged favoring of some search results over others) is likely either to force some competitors out of the market, making that market less competitive, or meaningfully raise barriers to entering the searched market. The answer to this question is no.

Though Google and other popular search engines have the potential to harm an individual website or Internet-based business, and may even force them out of business, this does not mean that they have the potential to make the market itself less competitive. By manipulating the position of third parties within search results, some sites will end up winners and others losers, but this cannot make the market overall less competitive—it simply tinkers with who the top competitors are. Under any search method, whether completely content neutral or a full payola system, there will be winners and losers. The losers, websites that are more difficult to find via search engines, may be more likely to go out of business. Making one site more likely to be in that position rather than another is not inherently anticompetitive.¹⁵⁰ Such a practice is unlikely to harm consumers unless it demotes consumers’ desired search results in a way that makes them less accessible and promotes less-desired results, but this would ultimately make the search engine less useful to the user. If search engines are tinkering with search results, and even accepting payments for secret search promotion, it is possible that they are promoting one search result over another for which consumers’ preferences are roughly the same. This does not make the market less competitive, it only creates shifts in who the competitors are—a question to which antitrust law is ambivalent.¹⁵¹ If, on the other hand, a search

¹⁴⁸ *Id.*

¹⁴⁹ *See, e.g.,* Jarosch, *supra* note 80, at 357-62.

¹⁵⁰ Competition law, after all, aims to protect *competition*, not *competitors*. *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962). This is not a value shared by Network Neutrality principles which at times appear aimed to protect competitors.

¹⁵¹ This may be a primary point on which search neutrality advocates are not willing to accept that antitrust is a valuable field to guide neutrality inquiries. The basic *unfairness* of Google selecting one website rather than another for top billing seems unfair to the loser—especially if Google has some pecuniary interest in the winner. However, parsing the details of how a successful firm became successful and whether their methods were fair seems a potentially arbitrary task on which to hang neutrality based scrutiny, especially considering that even discriminatory promotion of some competitors over others may have pro-

engine has some profit motive to promote less useful results, the search engine itself will become less useful. Because of low switching costs and the ease with which consumers may experiment with different search engines, even a dominant search engine is not likely to be able to tinker with results in this way for long without beginning to lose share to competitors.¹⁵²

Search bias is unlikely to reduce the number of competitors in searched markets, but the question remains whether it may meaningfully raise the price of entry into the searched markets. For some such markets, search engines may be the primary method for connecting with consumers. If firms must expend resources to get access to that platform, these expenditures seem wasteful—a fee that competitors must pay just to get access to the Internet. This neutrality-based argument is anomalous to the Internet. In no other context are resources that firms choose to expend to reach customers wasteful. Print advertising cannot reasonably be seen as a violation of newspaper neutrality, though in the past that platform has been as important (or more important) to gaining access to customers as the Internet is today. The question is not whether search engine practices erect barriers to entry that are higher than they would be given a costless membrane that perfectly connected web surfers with the ideal site for their desires, but whether a search engine’s discriminatory placement of its own or another’s services raises barriers to entry compared to a world without that search engine. For Google, the answer is unambiguously no. Compared to any current alternative, Google provides a cheap and efficient way for competitors in the map, e-mail, or online-shoe-shopping markets to connect with their customers. Even if allegations that its search algorithm violates neutrality principles are true, this does not provide evidence of consumer harm or a justification to penalize violations of search neutrality. Given that the first step of Justice O’Connor’s analysis suggests that the behavior targeted by search neutrality advocates is benign, there is no need to balance anticompetitive harm against pro-competitive benefits, but in individual cases this may be important.

Ultimately, neither neutrality principles nor current antitrust rules provide a convincing method for analyzing search neutrality. Neutrality principles would

competitive effects. *See* R.H. Coase, *Payola in Radio and Television Broadcasting*, 22 J.L. & ECON. 269, 312 (1979):

What has been promoted by payola has always depended on what the public would buy (sheet music earlier and records more recently) after they had heard the music Although there has to be a receptivity to a type of music if it is to be successfully promoted, without promotional activity (which includes payola), the movement towards a new type of music would undoubtedly be slower (because the opportunity of hearing it would be less).

¹⁵² The same analysis applies to a search engine discriminatorily promoting not third-party products, but its own services. This would only be possible if a search engine had the economic power to push users towards its own product (for example a map or an e-mail service) that was inferior to other available products, without losing its share in the market for the underlying search platform. This situation appears unlikely for several reasons. First, discriminatory listing does not eliminate competition between the application and its competitors—someone doing a Google search for a “map of Indianapolis” need only go to the second search result to view a MapQuest map, rather than a Google map. It would only require a very slight preference for MapQuest to take that step. (And in the absence of any such preference, there is no consumer harm in making the MapQuest map one step lower than the Google map).

condemn almost any discrimination engaged in by search engines when discrimination is at the heart of what search engines do. These principles provide no justification for focusing on specific types of discrimination that search neutrality advocates find most troubling. Antitrust's quasi per-se rule for analyzing tying arrangements proves little more help. It too casts a very wide net, potentially imposing intense scrutiny on pro-competitive practices when engaged in by firms with market power. Justice O'Connor's proposed reform of the quasi-per se rule brings restraint to the rule by requiring a demonstration either that the discrimination will decrease competition or raise barriers to entry in the market affected by the platform's discrimination. Application of this rule demonstrates that though it could meet the letter of the quasi-per se rule, it would be a mistake to enshrine search neutrality rules. This is especially true in today's search market which is dominated by a single firm, but allows users to easily experiment with multiple search engines and easily switch between them. Regulating Google alone is likely to provide an edge to its competitors, but not in any pro-competitive way. Instead, the most likely result of search neutrality is to serve as a dead weight on the search market leader, slowing down the growth and usefulness of the overall market.

C. API Neutrality

Search neutrality is one of the most prominent applications of the concept of neutrality to Internet platforms, and perhaps the most likely to result in regulation, but this potential regulation is largely limited to a single market leader in search, Google. Another larger group of Internet platforms has recently faced the possibility of neutrality regulation focused on a different type of activity. Websites that allow programs, applications, users, and other websites access to their Application Programming Interfaces ("API") have recently faced claims that they must keep their interfaces open and may not restrict them once they have chosen to open them. An API is basically a method that applications and programs can use to communicate with and draw functionality from a given website or service.¹⁵³ The API for a social media site, for example, may be entirely closed or broadly open. A closed API means that a website is fully self-encapsulated—users can only interact with the site directly, or through applications that are within the direct control of the site owner. Sites with more open API allow users to interact with the website using other sites or applications created by third parties. For example, Facebook users may post Foursquare check-ins to their Facebook walls through a number of apps¹⁵⁴ that allow users to make Foursquare check-ins. Foursquare itself has a fairly open API, thus users may check-in on Foursquare and post that check-in to Facebook all while using a single app designed by a third party.¹⁵⁵ Both Foursquare and the app may be using the Facebook API.

¹⁵³ See generally *Application programming interface*, WIKIPEDIA, <http://en.wikipedia.org/wiki/API> (last visited Nov. 15, 2011).

¹⁵⁴ Both proprietary Foursquare apps and third-party apps are available. These apps use API from both Foursquare and Facebook.

¹⁵⁵ See, e.g., Noah Sloan, *AppBrain, Check-in Droid 2*, <http://www.appbrain.com/app/check-in-droid-2/com.noahsloan.checkin.android> (last visited Nov. 15, 2011).

Open APIs often lead to a proliferation of ways to interact with a particular platform. For example, those using the Android operating system on a mobile device can download several independently designed apps that allow users to interact with the social media service Twitter. These apps may easily create new tweets or aggregate a twitter feed with updates from a Facebook account.¹⁵⁶ Similarly, other social media websites can take advantage of open application programming interfaces to make both services more useful. Websites and social media services have discretion in how open or closed to make their API. A fully open API will allow any programmer to make a website, program, or app that will interact with the service. Most major social media services select some degree of openness, and third-party applications have often made them more user friendly and have allowed a greater range of uses for the service.¹⁵⁷

Neutrality claims focused on API are relatively recent. In 2008, Professor Jonathan Zittrain coined the term “API neutrality” as “a parallel debate that is not taking place at all.”¹⁵⁸ Since then, the API neutrality claims that have appeared look somewhat similar to the neutrality claim considered a decade ago in the *Microsoft* case. That case was largely about the degree to which the Microsoft Windows operating system had to be open to outside developers, particular developers of web browsers that competed with Microsoft’s Internet Explorer.¹⁵⁹ In the API context, there have been claims that the platforms on which programmers have built, sometimes in competition with the platform owners themselves, must be kept open. Instead of Windows as the platform at issue, it is platforms accessed via the Internet.

Professor Zittrain sees platform openness as a sort of legal one-way ratchet. Once a platform has benefitted from the benefits of an open platform, it can not then close its platform—closed systems may remain closed, but once opened, they may not close.¹⁶⁰

So when should we consider network neutrality-style mandates for applanicized systems? The answer lies in that subset of applanicized systems that seeks to gain the benefits of third-party contribution while reserving the right to exclude it later. Those in favor of network neutrality suggest, often implicitly, how foundational the Internet is for the services offered over it. If downstream services cannot rely on the

¹⁵⁶ See, e.g. TWEETDECK, www.tweetdeck.com (last visited Nov. 15, 2011).

¹⁵⁷ The board gaming website www.boardgamegeek.com’s interface with Twitter is an example that has allowed a specialty use of Twitter. There, users can record their boardgaming activity and share that activity through Twitter, without leaving boardgamegeek.com. See Boardgame Geek, www.boardgamegeek.com (last visited Jan. 19, 2012). This niche functionality is likely not valuable enough to Twitter that the platform would have created it on its own, but it does provide some use to the boardgamegeek community and may lead to wider use of both sites.

¹⁵⁸ JONATHAN ZITTRAIN, *THE FUTURE OF THE INTERNET AND HOW TO STOP IT* 181 (2008).

¹⁵⁹ See generally, Op-Ed., *Did the Microsoft Case Change the World*, N.Y. TIMES, May 14, 2011.

¹⁶⁰ Farrell and Weiser identify a one-way legal regime as a reason that a platform might remain closed to outside developers when it would be more efficient to remain open—simply because it is harder to close than it is to open. See Farrell & Weiser, *supra* note 8, at 117.

networks they use to provide roughly equal treatment of their bits, the playing field for Internet activities can shift drastically.¹⁶¹

This argument that platform-benefitting innovation will not occur without some guarantee that the platform will remain open to innovators would be unique as the basis for market regulation. Seldom do businesses receive governmental guarantees that the conditions under which they enter a market will remain. Instead, they must negotiate such stability with their business partners, or earn longevity by providing a service or product better than others can.¹⁶² Nor would such a mandate be obviously a positive development. As established in Part II, it may be optimal for a platform like Twitter to be either open or closed, and platforms usually have incentives to follow the optimal path.¹⁶³

Others have made more directed claims, arguing that a specific API must be forced or kept open for developers. For example, some have argued that online platforms, often social media sites, have become so important to daily interaction that they are like utilities and thus must be regulated to ensure their neutral availability.¹⁶⁴ This perspective may have gained influence within a regulatory agency. The FTC has recently engaged in an investigation focused on Twitter's API policy, following a recent restriction in that policy. Twitter has sought to exert greater control over its platform.¹⁶⁵ It has simultaneously begun to increase the amount of advertising on its site and proprietary apps, providing a rationale for the site to want to direct users to its site and apps rather than letting them access the service and network from third party apps.¹⁶⁶ These efforts have resulted in a clash with at least one firm that designs third party apps for viewing and creating tweets. UberMedia is the owner of Twidroid, a leading Twitter app for Android devices.¹⁶⁷ In February, 2011, according to the Wall Street Journal, "UberMedia . . . said Twitter shut off its access to tweets because it believed UberMedia had violated 'several provisions of their terms of service.'"¹⁶⁸ Some have suggested that

¹⁶¹ ZITTRAIN, *supra* note 158, at 183.

¹⁶² See GRIMMELMAN, *supra* note 129, at 448 ("A right to continued customer traffic would be a legal anomaly; offline businesses enjoy no such right. Some Manhattanites who take the free IKEA ferry to its store in Brooklyn eat at the nearby food trucks in the Red Hook Ball Fields. The food truck owners would have no right to complain if IKEA discontinued the ferry or moved its store.") (footnote omitted).

¹⁶³ See *supra*, text accompanying notes 16-17 (describing Farrell & Weiser's ICE concept).

¹⁶⁴ See, e.g., Danah Boyd, *Facebook Is a Utility; Utilities Get Regulated*, APOPHENIA (Mar. 15, 2010), <http://www.zephorio.org/thoughts/archives/2010/05/15/facebook-is-a-utility-utilities-get-regulated.html>:

If Facebook is a utility – and I strongly believe it is – the handful of people who are building cabins in the woods to get away from the evil utility companies are irrelevant in light of all of the people who will suck up and deal with the utility to live in the city. This is going to come down to regulation, whether we like it or not.

¹⁶⁵ See Amir Efrati, *Antitrust Regulator Makes Twitter Inquiries*, WALL ST. J., July 1, 2011.

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

UberMedia is the target of Twitter’s API constriction because Twitter views it as a potential competitor.¹⁶⁹ During this same time period, Twitter acquired another very popular app for using Twitter and other social media sites in a mobile environment, Tweetdeck. Both Twitter and UberMedia sought to purchase Tweetdeck, a contest that Twitter ultimately won.¹⁷⁰ UberMedia recently acknowledged that it had received requests for information from the FTC as a part of an inquiry related to its relationship with Twitter.¹⁷¹ As with the Google inquiry, it is not yet clear that anything will come of the FTC’s seemingly more narrow Twitter inquiry, but it raises the possibility of a widespread, coordinated, neutrality-motivated examination of Internet platforms.

Others believe that regulatory action is not necessary. Mathew Ingram argues that while Twitter may provide a service that is unique and valuable enough to survive without third party developers, cutting them off will provide a boost to Twitter’s nascent competitors.¹⁷² Thus there may be no anticompetitive effect for regulation to address—instead, by restricting its API, Twitter could create an opportunity for more competition in the submarket that it currently dominates. Adam Thierer identifies a different danger in premature regulation. His argument focuses on innovation: “If we apply API neutrality or adverse possession principles forcibly, it sends a horrible signal to entrepreneurs that basically says their platforms are theirs in name only and will be forcibly commoditized once they are popular enough. That’s a horrible disincentive to future innovation and investment.”¹⁷³ His disagreement with Zittrain and other API neutrality advocates comes down to a differing focus on the locus of innovation. Thierer would preserve the incentive to come up with innovative new platforms by allowing platform owners traditional property rights in the platform. Zittrain on the other hand focuses on innovation on the edge of the platform. Thierer counters that this focus puts the very platform in jeopardy, and most platforms are remarkably open anyways.¹⁷⁴ This debate parallels the debate between Professors Wu and Yoo in which Yoo argues that competition should be fostered and protected where it is least present, not where it is already robust.

Despite these critics’ objections, the recent FTC investigation into Twitter raises the strong possibility of a wider focus on applying the concept of neutrality to

¹⁶⁹ See *id.* This theory fits neatly with one of the exceptions to Farrell & Weiser’s ICE. A platform may not select the optimal level of openness if it fears that the application will become a platform competitor. See Farrell & Weiser, *supra* note 16, at 109-10. However, here, it is possible that UberMedia is not a realistic competitor in the micro-blogging platform market, but simply for the advertising revenue that is available for services that connect users to the service.

¹⁷⁰ See *id.*; Joe Mullin, *Disharmony in Twitter-Land? FTC Has Questions for Company’s Developers*, PAIDCONTENT (July 1, 2011, 2:34 PM), <http://paidcontent.org/article/419-disharmony-in-twitter-land-ftc-has-questions-for-companys-developers/>.

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ Adam Thierer, *A Vision of (Regulatory) Things to Come for Twitter?*, TECHNOLOGY LIBERATION FRONT (Mar. 13, 2011), <http://techliberation.com/2011/03/13/a-vision-of-regulatory-things-to-come-for-twitter/> (emphasis omitted).

¹⁷⁴ *Id.*

Internet platforms. Such a movement, spread across many Internet-based markets and services, could promote or stunt the growth and usefulness of the Internet for years to come. It is important that any such widespread scrutiny proceed under a rational framework, one that identifies non-neutral behaviors that are actually harmful and allows those that are innovative or pro-competitive to proceed. Unfortunately, in API neutrality, as in search neutrality discussed above, neither of the two likely candidates for analyzing neutrality violations does a good job of identifying harmful methods of competition.

1. Neutrality Principles Applied to API

Principles drawn from the network neutrality context, especially the FCC's Network Neutrality order, are unlikely to be helpful in analyzing API neutrality claims. They provide little guidance in distinguishing between API that is sufficiently open or excessively closed. Transparency is not the major problem that proponents of API neutrality seek to address. Transparency issues may arise, but they tend to be short lived. For example, when Twitter blocked apps by the developer UberMedia, the developer quickly brought its apps into line with Twitter's existing policies, and acknowledged that the company had already been in negotiations with Twitter to ensure continued access to Twitter's API and to bring UberMedia apps within Twitter's API policy.¹⁷⁵ Most major platforms offering outside developers API access have published policies on what developers may do.¹⁷⁶ When there are conflicts or misunderstandings over these policies, the conflict is transparent—the developer knows that their product has been blocked. Not only do conflicts quickly become transparent, but they are robustly discussed in the blogosphere making competition between platform owners for developers possible.

The no blocking and no unreasonable discrimination principles would also be difficult to apply to API. No blocking would require a sea change, either forcing all Internet-based platforms to close to third party developers, or forcing platforms to choose between an entirely-open or entirely-closed model. As Farrell and Weiser's ICE demonstrates, forcing all platforms open to third party developers would not be wise. In some instances, the most efficient and productive path is for the platform owner to control all platform applications, for example, when third-party developers might offer a lower quality product that would harm the reputation of the platform, or when security of the platform is more important to users than a diversity of applications.¹⁷⁷

In order to apply the non-discrimination rules in any rational way, it would be necessary to identify some method to distinguish between reasonable and unreasonable discrimination. There will always be some potential third-party application that will be foreclosed by any specific API policy—the challenge is to

¹⁷⁵ See Ingram, *supra* note 112.

¹⁷⁶ See, e.g., Twitter, *Developer Rules of the Road*, TWITTER DEVELOPERS (June 1, 2011), http://dev.twitter.com/pages/api_terms; Facebook, *Facebook Platform Policies*, FACEBOOK DEVELOPERS (Oct. 10, 2011), <http://developers.facebook.com/policy/>.

¹⁷⁷ Zittrain has drawn one possible line between platforms that may be closed and those that must be open. Platforms may choose to be closed, but once they open and take advantage of third party developers' efforts, they may not re-close. See *supra*, text accompanying notes 160-163.

identify acceptable and unacceptable foreclosure. Neutrality principles provide little guidance in that endeavor.

It might be possible to apply a non-discrimination policy, allowing platforms to select their own preferred degree of openness to third-party developers, but requiring that policy to be applied neutrally. Such a policy could be in line with the FCC rules by allowing discrimination between types of uses, but not between individual users.¹⁷⁸ This, for example, would allow Twitter to decide to allow or not allow third parties to design mobile apps to create tweets, but it would not permit it to allow some app developers to proceed while blocking apps created by a potential competitor like UberMedia.¹⁷⁹

Most calls for API neutrality, however, do not focus on neutrality between developers, but between developers and the platform’s own products. Such discrimination against competing applications would clearly violate the Network Neutrality Report and Order if applied to Internet platforms. For example, much of the consternation over Twitter’s constriction of API openness was based on the fact that some of the apps cut off were competitors with Twitter’s own products. The problem for developers was not that Twitter chose to discriminate between them, giving preference to some over others, but that it chose to restrict its API for all developers in order to promote its own proprietary products. But Farrell and Weiser’s ICE principle cautions against forcing a platform to allow third-party developers to compete with its own products—which is to force platform openness. In some situations an open platform will allow innovation and competition in the applications market, but in others, applications may simply free-ride on an innovative platform without providing additional value to users. According to Farrell and Weiser, platforms will generally open and close when it is efficient for them to do so.¹⁸⁰ The type of balancing analysis that this distinction requires is not promoted by neutrality principles but is typical of antitrust principles, even if the current quasi-per se rule itself is not particularly suitable to the task.

2. Antitrust Analysis of API Neutrality Claims

Tying doctrine has somewhat more to offer a neutrality-motivated analysis of API. The platform and tying good is the website or service to which third-party programmers would like to connect—and may have an open or closed API. The tied

¹⁷⁸ If the FCC’s Report and Order were applied to Internet platforms, even this policy might run afoul of the non-discrimination principle if the fixed rather than wireless broadband rules were applied.

¹⁷⁹ The concept of API seems to imply some level of neutrality or openness. If a platform decides to allow just a single third-party to develop and publish an app to interact with the platform, that’s not really an API, it’s an outsourcing contract.

¹⁸⁰ In the Twitter example, one of the apps that was cut off was “Twidroid,” an app for Android devices that competed with Twitter’s own Android app. Ingram, *supra* note 112. If cutting that app off from the Twitter API were to decrease Twitter usage or make Twitter less valuable to its users, the platform would likely allow it continued access. API neutrality advocates argue that access is necessary for continued platform innovation, but such innovation is in the platform’s interest as well. There may be situations where the platform will not follow the path that will lead to greatest platform consumption. See text accompanying note 17, *supra*, discussing the exceptions to ICE, but the non-discrimination principle is ill-suited to identify such situations.

good is either the proprietary services that are the only choice if a platform has chosen a closed API, or the favored applications if the platform selects an API policy that is in some way discriminatory. To the extent that the platform restricts the developers who may use the API or the uses to which third-party applications may be put, it ties use of the underlying platform to a specific set of applications which may be built upon that platform. The Twitter example is illustrative. By restricting the ways that apps may use its API, Twitter tied use of its micro-blogging service to use of a specific set of favored apps, including (but not exclusively) its own apps.

The two-product requirement cannot be applied generally to API-neutrality claims; in some cases the platform and the applications that connect to it will be a single product, and in others they will be two products. If the platform never opens its API to outside programmers and all related services are provided by the platform owner, no demand for third-party services may develop, and the platform and its applications will remain a single product. However, many platforms follow a pattern of opening their API initially, then closing it later. In this way, when a platform is attempting to gain a foothold in the market, it may use third-party developers to rapidly expand the services available on the platform and improve its usability.¹⁸¹ Later, once the platform has gained a foothold in the market, it may be tempted to restrict the use of its API in order to promote its own services and to gain more control over its successful platform.¹⁸² Once a platform's API has been opened to some third-party development, if developers take advantage of that access, it is likely that the market for applications that work with the platform is separate from the market in which the platform itself competes. Applications built on platforms in this way may compete with each other (for example competition between apps to view tweets) or with applications on other platforms (for example, interactive online games that use Facebook's API to connect players may compete with games on other forums). Either way, if there is any meaningful response to the platform opening its API, that will be sufficient to meet the two-product requirement.

For the market power test, some platforms will have power while others will not. The basic question is whether the platform can impose a tie or other onerous terms without losing market share. In the example of Twitter, this seems doubtful. While it is dominant among its direct competitors in micro-blogging, these are not its true competition. Twitter competes more generally with a huge range of other services: social networking sites; blogs; blog aggregators; news websites; and more. As Adam Thierer notes, "[f]or me, Twitter is a partial substitute for blogging, IMs, email, phone calls, and my RSS feed. Yes, like most others, I continue to use all those other technologies and those technologies continue to pressure Twitter to innovate."¹⁸³ Given a demand that reaches across several partially interchangeable services and platforms, it appears unlikely that Twitter has the sort of economic power that would allow it to impose an inefficient tying arrangement. But it is possible that if the market is narrowly defined as micro-blogging, it might. In other

¹⁸¹ It is this scenario that Zittrain argues should lead to a sort of adverse possession rule, forcing platforms that open to remain open. *See supra*, text accompanying notes 160-163.

¹⁸² Some find this pattern to be unfair, and argue for a rule that prohibits it. This Article does not assume that this pattern is bad, but argues that it may cause harm only when the platform has market power and that use of that market power is likely to either make the tied market less competitive, or raise barriers to entering that market.

¹⁸³ Thierer, *supra* note 173.

situations, it will be clear that the platform does not have market power; in such situations the analysis may end here.

Under the quasi-per se rule, demonstrating two products, market power, and a substantial volume of commerce would be sufficient to invoke per se condemnation. But given that the only platform to face an API-neutrality related investigation is unlikely to have that power, it is worthwhile to examine the likely effects of an API-neutrality violation in greater depth. The relevant questions are whether the platform's use of its market power will either make the application market meaningfully less competitive or raise barriers to entering that market. For both questions, the likely answer is that it will not. First, if the platform has market power but the applications market cuts across several platforms, then the tying arrangement is unlikely to force any competitors out, making the applications market less competitive.¹⁸⁴ Two examples are illustrative. First, several firms design apps that allow users to participate in several social networks from the same interface. These apps are widely used and make it especially easy for social media users to engage with the service via their mobile devices. If one social media site, Twitter, for example, closed its API to some or all of these social media coordination apps, it would risk losing users who value the coordinating app more than the single service that Twitter offers. Others of course will switch to another third-party app, or will use Twitter's own app in addition to the app that was cut off. Twitter may have an incentive to try to force all users to use its own app, but doing so may risk incurring the same behavior from other social networks. If Facebook, Foursquare, Google+, and other social networks all limit their interface to their own apps, then the aggregating market will disappear, users will have to use many apps, and each network will be used by a smaller proportion of all social media users. A similar dynamic is at work for online games. Games are available everywhere—on social media sites like Facebook, on specialty sites like boardgamegeek.com, on mobile device apps, and in any number of other places. Game developers and popular games cut across all of these platforms. A site that benefits from this market (as Facebook does) has very little incentive to block a group of them from its API. Even if it were to decide to do so, it would have very little impact on the competitive conditions in the overall gaming market. In short, even if Facebook does have market power in the social media market, it does not necessarily have that power in the applications market which may be broader than the platform market. Of course, in some cases, an applications market will develop that is absolutely platform-specific. This is rare. In the recent controversial example of Twitter narrowing access to its API, the apps that were cut off were for the most part not Twitter-specific. Though there are apps and other uses of API that are specific to the platform, these are unlikely to be the source of API-neutrality claims.¹⁸⁵

¹⁸⁴ By the same token, when the applications market cuts across several platforms, the platform owner is unlikely to cut those applications off from the API. For example, if several firms offer many competing online games, which may be played through several social networking or gaming sites, it is unlikely that one of these platforms will cut these games off from its API because to do so would reduce the popular content that the platform offers.

¹⁸⁵ Harmful barriers to entry into the application market are also unlikely to result from a platform narrowing access to its API and tying to its own or a select few applications. If the applications market cuts across several platforms, the others may remain open. But if it is the rare case that the applications market is specific to or dominated by a single platform, then the decision to close it to new competitors will be an efficient one—made when the platform

This analysis demonstrates not only that the FTC's Twitter inquiry should likely not result in any API-neutrality enforcement, but also that the two likely candidates for methods of neutrality analysis are inadequate. Network neutrality principles provide little guidance for examining API neutrality claims, and antitrust's quasi-per se rule would condemn actions that are unlikely to have any negative effects.

D. Online Marketplace Neutrality

Another area on which neutrality claims have recently focused is on specialized online markets. Platform-specific marketplaces often interact with content providers and customers in non-neutral ways. For example, Apple recently announced a digital media subscription service available through its App Store. Through this service, iPhone and iPad users can easily purchase subscriptions to newspapers, magazines, and other media like music and video subscriptions.¹⁸⁶ Within one day, Google had announced a similar service, the One Pass.¹⁸⁷ Though Apple's new service holds the potential to connect customers to content in a new, convenient, and likely profitable way, some have balked at the terms that publishers must accept to gain access to the platform. When Apple announced the subscription service, it required publishers to pay a 30% fee to Apple; it required publishers of iOS Apps to abstain from selling subscriptions directly through their apps without going through the App Store (and paying Apple's 30% fee); it required any digital content available to purchase in an app to also be available for sale in iTunes; and it required any publisher selling subscriptions through the App Store to sell those subscriptions at a price as low or lower than digital subscriptions available anywhere else.¹⁸⁸ These terms funnel publishers and users into a walled garden with high fees, and away from the previous system in which publishers had the ability to freely sell subscriptions through their own less-controlled apps or uncontrolled websites.

Not surprisingly, publishers and neutrality advocates immediately criticized the new terms. In particular, publishers of music streaming services claimed that their business model was unsustainable under Apple's rules.¹⁸⁹ A number of magazine

owner believes that more user satisfaction can be obtained through a closed system than through an open one. *See supra* text accompanying notes 15-17. Though neither situation raises significant concerns here, barring new entrants from an applications market is generally not as concerning to neutrality advocates as forcing existing competitors out.

¹⁸⁶ Press Release, Apple, Apple Launches Subscriptions on the App Store (Feb. 15, 2011), available at <http://www.apple.com/pr/library/2011/02/15appstore.html>.

¹⁸⁷ *A Simple Way for Publishers to Manage Paid Access Online*, GOOGLE EUROPEAN PUBLIC POLICY BLOG (Feb. 16, 2011, 5:14 PM), <http://googlepolicyeuropa.blogspot.com/2011/02/simple-way-for-publishers-to-manage.html>; *see also Google One Pass*, GOOGLE, <http://www.google.com/landing/onepass/> (last visited Nov. 15, 2011).

¹⁸⁸ Apple Launches Subscriptions on the App Store, *supra* note 186. Publishers may continue to sell subscriptions through their websites and other services, they just cannot connect users to them through iOS apps. *Id.* The 30% fee only applies to new customers—publishers may sell digital subscriptions to existing subscribers (for example, subscribers to the print version of a newspaper or magazine) through the App Store, without Apple taking a cut. *Id.* In competition, Google's One Pass charges only 10% of the subscription fee.

¹⁸⁹ *See* Thomas Catan and Nathan Koppel, *Regulators Eye Apple Anew*, WALL ST. J., Feb. 18, 2011. This appears to be a good test of Farrell and Weiser's ICE. If, in fact, the music

and newspaper publishers also criticized the new terms.¹⁹⁰ These content providers criticized the high fees they were now required to pay to sell subscriptions on iOS and the policies that made it difficult to circumvent those fees. But the harshest iteration of Apple's new policy was short-lived. It was countered immediately by a mixture of technological innovation, competitive pressure, and the threat of administrative action.

The Financial Times reacted to the subscription service's terms by shifting emphasis from its iOS app to a state-of-the-art web app that provides similar functionality to its iOS app without requiring download of an approved app through the App Store.¹⁹¹ In this way it was able to circumvent some of the new rules, because it no longer was bound to Apple's rules for downloadable apps.¹⁹² Apple also immediately faced competitive pressure—the day after it announced the subscription service, Google announced its own similar service, charging only a 10% fee.¹⁹³ Though no formal investigation was announced, Apple did face an informal threat of antitrust enforcement by either the Department of Justice or the Federal Trade Commission.¹⁹⁴ Online marketplaces thus enter the list of Internet-based platforms and services to face legitimate threats of enforcement action stemming from neutrality concerns. As with search neutrality and API neutrality, an examination of both antitrust and neutrality principles identifies no convincing rationale for restricting these arrangements.

In the face of competition, innovation, criticism, and potential legal action, Apple quickly backed down on some of its subscription service terms. Four months after announcing its service, Apple announced that it would allow publishers to offer iOS subscriptions at higher prices than offered elsewhere in order to cover the App Store's 30% fee.¹⁹⁵ Apple also decided to allow publishers to offer read-only apps, providing free or pre-paid content not available in the App Store.¹⁹⁶ Apple's

streaming model is untenable, Apple faces the choice of allowing third parties to continue streaming, to provide competing content, or risk losing customers who want to stream music.

¹⁹⁰ *See id.*

¹⁹¹ *See The New FT App for iPad and iPhone*, FINANCIAL TIMES, <http://apps.ft.com/ftwebapp/> (last visited Nov. 15, 2011).

¹⁹² Notably the network neutrality Report and Order could bar Apple or mobile carriers from blocking the Financial Times web page. Preserving the Open Internet, *supra* note 25, ¶ 88.

¹⁹³ *A Simple Way for Publishers to Manage Paid Access Online*, *supra* note 187; *see also* GOOGLE ONE PASS, *supra* note 187.

¹⁹⁴ Catan and Koppel, *supra* note 189.

¹⁹⁵ Robert Andrews, *Apple Lets Subscription Providers Hike iOS Prices to Absorb its 30 Percent*, PAIDCONTENT.ORG (June 9, 2011, 7:48 AM), <http://paidcontent.org/article/419-apple-lets-publishers-raise-ipad-price-to-absorb-its-30-percent/>; *see also* Jerry Brito, *Turns out Apple's Walled Garden Susceptible to Market Pressure and Political Pressure*, TECHNOLOGY LIBERATION FRONT (June 9, 2011), <http://techliberation.com/2011/06/09/turns-out-apples-walled-garden-susceptible-to-market-pressure-and-political-pressure/>.

¹⁹⁶ *Id.*; *see also* Jason Kincaid, *Apple Backpedals on App Store Subscription Rules*, TECHCRUNCH (June 9, 2011), <http://techcrunch.com/2011/06/09/apple-backpedals-on-app-store-subscription-rules/>.

revision of its policy suggests that the company does not have unlimited power to force unattractive terms on the application creators that provide much of the content that makes the iOS platform attractive.

Though Apple's iTunes terms are the most notable current example of an online marketplace facing neutrality-based claims, there are other marketplaces that may lead to similar claims. For example, for e-book publishing, there are several major online stores that offer both e-readers and e-books. Amazon has a relatively closed platform—the e-books it sells can only be read on its own Kindle devices or apps, and those devices and apps can only support the e-book format provided by Amazon.¹⁹⁷ Barnes and Noble, on the other hand, sells e-readers that can support e-books from Barnes and Noble some other sources of e-books.¹⁹⁸ These differing policies could cause neutrality advocates to attempt to challenge a platform under neutrality principles or antitrust laws.¹⁹⁹

1. Neutrality-Based Analysis of Discriminating Online Market Platforms

Apple's subscription service and its Google competitor One Pass do not have obvious transparency problems. The terms of each are clearly laid out and they compete on those terms.²⁰⁰ Following network neutrality principles, a lack of transparency between competing marketplaces would be a problem if users did not know before adopting the iOS platform that digital content providers face harsh terms in making digital content available to iOS users. In this case, however, the terms are public, and in line with Apple's general philosophy and business strategy of maintaining a more controlled mobile environment.

This leads directly to the other two of the FCC's network neutrality principles—no blocking and no unreasonable discrimination. The App Store's subscription service appears to run afoul of these principles which focus specially on not blocking or discriminating against competing services. Here, the App Store wholly blocks other iOS marketplaces that might sell digital subscriptions, including publishers' own apps, and requires publishers to use iTunes to sell digital subscriptions or not do so through apps at all.²⁰¹ In the basic network neutrality context, this would be nearly unthinkable (but not necessarily harmful). If an Internet service provider were to only give customers access to the websites that paid it for access to the platform, the FCC would likely take immediate action for violating the no-blocking

¹⁹⁷ See *Frequently Asked Questions About Kindle*, AMAZON, http://www.amazon.com/gp/help/customer/display.html/ref=sv_kinc_9?ie=UTF8&nodeId=200127470#FAQs (last visited Nov. 15, 2011).

¹⁹⁸ See *Nook Specs*, BARNES & NOBLE, <http://www.barnesandnoble.com/nook/compare/index.asp?PID=38254> (last visited Nov. 15, 2011).

¹⁹⁹ Currently, vigorous competition in e-readers and e-books would make such a challenge groundless.

²⁰⁰ However, the App Store itself has faced some transparency-related criticism from app designers who have had their apps rejected from the AppStore, or have had to wait longer than average times for approval. See J. R. Raphael, *Rejected! 10 iPhone Apps That Didn't Make Apple's App Store*, PCWORLD (Feb 22, 2009, 8:00 pm), http://www.pcmag.com/article/159887/rejected_10_iphone_apps_that_didnt_make_apples_app_store.html.

²⁰¹ This difficulty has been somewhat alleviated recently, since Apple has allowed publishers to raise subscription prices to cover its 30% fee.

rule.²⁰² Here, it is apps that function in certain ways that are blocked. In fact, a network neutrality complaint was filed against a small wireless network that sought to bundle a special YouTube service with one of its mobile phone plans, without offering this special connection to every other website on the Internet.²⁰³ This offering was politically impossible for the regional budget network that tried to make it.

But it is not so clear that similar actions are a problem when engaged in by higher-level Internet platforms. For online markets like the App Store and One Pass, the very enterprise would be impossible without the ability to support publishers who are willing to pay the commission and block those that are not. Apple and Google can only offer their respective subscription services because of their ability to sell the service to publishers. Digital marketplaces would not be a plausible business model if they could not charge fees and impose terms that allow them to monetize the service they provide in easily connecting users and content.²⁰⁴ There is a clear reason why network neutrality principles misfire when applied to online marketplaces. Network neutrality developed in the context of low levels of competition and high switching costs. For online marketplaces that face marketplace-neutrality claims, especially marketplaces for digital subscription services, users can choose between platforms that have meaningfully different policies regarding where and how users may get digital subscriptions. Even once a user is locked in to the more restrictive iOS ecosystem, they may buy digital subscriptions through the convenient App Store, or by, somewhat less conveniently, going through the publisher's website or some other marketplace not housed in an iOS app. Users are only restricted from both having the most convenient option and not paying the fee that Apple is able to command. It seems likely that the App Store's seemingly draconian terms allow it to offer publishers and users features, an ease of use, and convenience that would not otherwise be possible. From this perspective, Apple's terms begin to look like the process of competition, rather than a sabotage of that process. Though network neutrality principles provide a method for identifying marketplace neutrality claims to scrutinize, online marketplaces are different enough from broadband providers that it would be unwise to transpose network neutrality principles onto online marketplaces.

²⁰² This is the case despite the lack of consensus that such a set-up would be harmful. Yoo, for example, argues that networks should be allowed to experiment with such options. *See supra* text accompanying notes 47-51. If network neutrality advocates are right that consumers want nothing less than the full Internet, then the market should punish such experiments, making a rule largely unnecessary.

²⁰³ Thomas W. Hazlett, *FCC Net Neutrality Rules and Efficiency*, FINANCIAL TIMES (Mar. 29, 2011), <http://mason.gmu.edu/~thazlett/opeds/FCCNetNeutralityRulesandEfficiency.pdf>.

²⁰⁴ Notably, the App Store's subscription service also blocks some actions that publishers might otherwise take. Publishers may not sell subscriptions through their own apps (though they may through their own websites) and, under the initial terms, they could not offer lower prices for digital subscriptions elsewhere, for example through the One Pass market. It is unclear how the FCC's neutrality principles would apply to these restrictions on publishers that provide content for the platform, if at all. Given immediate competition to the App Store's terms and the vigorous competition between mobile device operating systems, these terms are unlikely to harm consumers.

2. Antitrust Scrutiny of Online Markets' Discriminatory Terms

Online markets that restrict sellers' abilities to sell elsewhere or put other burdensome terms on marketplace participation are not the prototypical example of a tying arrangement. But they can still be usefully framed and analyzed under the quasi-per se rule. Normally, markets like iTunes compete for customers by offering convenience, low prices, or valuable services. The App Store clearly does offer some of these, but it also may gain customers through a tying arrangement in which it (along with its terms and fees) is the tied good. It might seem that the tying good is the apps and digital subscriptions that must be purchased through iTunes—but in fact the tying good is the iOS operating system and the devices on which it must operate. By selecting a mobile device that runs on iOS, the user accepts the tie with the iTunes App Store, and restrictions on the apps available for iOS. It is because this tying arrangement is in place that iPhone and iPad users who want to get a digital subscription are limited to the content providers that work within Apple's terms in order to be available on the platform. iTunes is the exclusive marketplace for the iOS, excluding competing marketplaces like the Amazon App Store that is offered on the Android OS. Framed in this way, the tying analysis proposed above is easily applied.

First, the two-product requirement likely is met. There are two products with demand to purchase each separately from the other. The tying goods, the iOS and the few devices on which it operates, compete in one market against Android, Blackberry, Microsoft and other Smartphone and mobile devices. Online marketplaces for digital subscriptions operate in another market, and they compete to sell digital subscriptions separate from competition between mobile operating systems and devices. Even under Apple's restrictive terms, within the iOS ecosystem the App Store competes with other places where consumers can purchase digital subscriptions. For example, users can buy digital subscriptions directly from publishers on their websites, from other marketplaces, like Amazon.com (though they may not do so through an iOS app), and, until Apple's recent policy change, from apps that operate on iOS. Outside of iOS, consumers purchase digital subscriptions through several online marketplaces that compete with the App Store to sell digital subscriptions, including the Android Market, Amazon's App Store, and the Kindle App (both for iOS and Android). Clearly, mobile operating systems and devices operate in a different competitive market than online Marketplaces that sell digital subscriptions.

In *Jefferson Parish*, the Court found that anesthesiological services that were tied to use of hospital surgical services were a separate product because consumers regularly sought to select surgical services separately from anesthesiological services—the fact that one hospital sought to offer the two together did not change the fact that generally there is demand to purchase them separately.²⁰⁵ A similar analysis applies in the iTunes context. There is demand to select digital marketplaces separately from operating systems—the fact that Apple sanctions only a single App Store for iOS does not change this more general market fact. Having determined that two products are indeed tied, a platform (iOS and iOS devices) to a specific application (the App Store), the subsequent steps determine whether the neutrality violations implicated by the tie warrant scrutiny.

²⁰⁵ *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 22-24 (1984).

The second prong of the test looks at whether the platform owner has market power in the platform market—does Apple have market power in the operating system or mobile device market? The answer appears to be no. Though Apple and its iOS does occupy a large portion of the market for mobile operating systems, it does not have such a dominant position or unique product that it can impose onerous terms without losing part of that market share.²⁰⁶ Any decrease in usefulness in the operating system caused by requiring users to purchase some products through iTunes is a potential decrease in the number of users who decide on iOS rather than Android, BlackBerry, or Microsoft’s mobile OS. There is evidence for this fact in the context in which Apple’s subscription service was released. The next day Google announced a similar competing service that had more favorable terms in place of some of the onerous ones imposed by Apple. If either Google or Apple had the economic power to impose onerous terms without losing customers, we would not see this competition on marketplace terms. Nor does iOS occupy a sufficient portion of the market to suggest such power. Android devices outsell iPhones.²⁰⁷ In this case, it appears that competitive harm is unlikely and the quasi-per se rule provides no justification for further scrutiny.²⁰⁸

VI. RECOMMENDATIONS AND CONCLUSION

Scrutiny of non-neutral behavior by Internet platforms appears to be inevitable. The FTC has launched or threatened to launch investigations into a number of Internet platforms, and commentators have called repeatedly for scrutiny of search neutrality, API neutrality, and online marketplace neutrality violations. This attack on the business practices of firms that give content and structure to the Internet lacks a coherent framework for separating harmful violations of neutrality principles from business arrangements that are forms of competition. Section V demonstrates that application of either of the likely methods for scrutiny of Internet platforms, a network neutrality or antitrust framework, will result in penalization of the process of competition on the Internet, without identifying neutrality violations that are likely to harm to competition or innovation on the Internet. Instead of either of these shortsighted methods, policymakers, and the FTC in particular, should shift their focus from neutrality concerns to the prevention of identifiable economic harms that may be the result of non-neutral platform behavior. The concept of neutrality may still be a valuable flag, suggesting that it is necessary to look for harmful business practices, but a violation of neutrality principles alone does not demonstrate a

²⁰⁶ This is the basic requirement of economic power established by tying cases. *See supra* text accompanying notes 82-85; *cf.* Jarosch, *supra* note 80.

²⁰⁷ Kevin C. Tofel, *Android Sales Overtake iPhone in the U.S.*, GIGAOM (Aug. 2, 2010, 7:56 AM), <http://gigaom.com/2010/08/02/android-sales-overtake-iphone-in-the-u-s/>.

²⁰⁸ Having found that neither the two-product nor the market-power requirements are met, it is unnecessary to consider whether competitors could be forced out of the tied market or barriers to entry meaningfully raised—without market power it is not possible that they could be. *See Jefferson Parish*, 466 U.S. at 37, (O’Connor, J., concurring) (“Absent [market] power tying cannot conceivably have any adverse impact in the tied-product market, and can be only procompetitive in the tying-product market.”). In fact, a major market actor without market power that decides to impose onerous terms like those imposed by Apple’s subscription service is likely to create opportunities for new entry by breeding discontent among iOS users, and lowering their thresholds for switching to another platform.

competitive problem. Part V demonstrates this fact by examining three platforms that face neutrality-based challenges. Yet none of these three can be adequately scrutinized by either neutrality or antitrust frameworks.

In evaluating neutrality concerns as applied to Internet platforms, it is important not to lose sight of the unique characteristics of Internet platforms that make simple application of existing rules inadequate. Internet platforms in general tend to share several qualities, and it is these qualities that prove problematic for application of the quasi-per se rule and neutrality principles. These qualities are covered in detail in Part V.a, but to recap, Internet platforms are different from either the goods that generally are included in tying arrangements or the Internet access points to which network neutrality principles are applied. For Internet platforms, use of one platform generally does not preclude use of another. Even when only one platform can be used at a time, switching costs tend to be low. Further, non-neutral behavior, especially discrimination between potential platform applications may be necessary to an Internet platform's business model.

In looking for economic harms related to violations of neutrality principles, policymakers should specifically look for evidence of foreclosure and exclusion. Foreclosure, when a firm is forced out of a market, and exclusion when barriers to entry raise the costs of entering a market, are the specific types of competitive harm that violations of neutrality principles may cause in some situations. These were found to be potential, but not actual harms for each of the platforms examined above.

Search neutrality is an important principle, not because search engines should not discriminate between potential search results. To the contrary, they must do so. This discrimination is the basis on which they compete. Violations of search neutrality become a problem when search engines discriminate between potential search results in ways that make it difficult to enter the searched markets, or force some firms out of the searched markets in ways that make these markets overall less competitive. This exclusion and foreclosure is, of course, only possible if the discriminatory search engine has market power. Even discrimination may not cause the searched market to be less competitive, and evidence of such an effect should be required before penalizing a search engine.

Similarly, for API and online-marketplace neutrality, the harm does not stem from the discrimination itself, which may be a pro-competitive method of competition between platforms, but from discrimination which makes a second market less competitive due to exclusion or foreclosure. For API neutrality, this could happen if one platform, a social media site, for example, was both dominant, and a necessary access point to succeed in a second market, for example, a video game market. For online markets like iTunes and Google's One Pass, the marketplaces have not been shown to have the power to require terms that would exclude competitors from the digital content markets. For the most part, this is because iTunes is a convenient way for publishers to pay to get access to customers on iOS devices, but not a necessary one for a publisher to compete in the digital publishing market.

This focus on exclusion and foreclosure may sound overly broad. Luckily, this analysis need not be wide open, and may be structured by our understanding of platform behavior. Justice O'Connor laid the groundwork for this analysis in her attempt to reform tying doctrine. The ultimate harms that non-neutral platform behavior may cause are exclusion and foreclosure, but courts and policymakers may take threshold questions from the quasi-per se rule, and apply them with an eye towards ultimate economic harms, as Justice O'Connor proposes.

Scrutiny of platform behavior that is discriminatory towards platform applications or users is only warranted when 1) the platform and the applications or products making use of the platform occupy separate markets with separate consumer demands;²⁰⁹ 2) the platform has economic power; and 3) the platform exclusivity or non-neutrality is likely either to force existing competitors of the applications market out of the market, or raise the barriers to entering applications markets generally.²¹⁰ As in Justice O'Connor's gloss on the quasi-per se rule, these anticompetitive effects must then be balanced against any pro-competitive effects that the arrangement may have.

For each of the Internet platforms considered above, this framework produces more reasonable results, allowing pro-competitive business arrangements to be separated from those that may harm competition in Internet markets. It becomes clear that discrimination between search results is a form of competition that is only problematic if a search engine can make search results less useful and more profitable without losing users. Similarly, restricting API is only a problem if a platform with market power can make an entire secondary, tied market less competitive. In today's world of vigorous competition between websites and Internet services, this is unlikely. And for online marketplaces, limiting access to the market platform can only harm consumers if the market itself is so powerful that no successful application can go without it and must abide by whatever terms it imposes. Additionally, the marketplace must be able to survive the absence of applications that are forced both off the platform and out of the market by onerous terms.

This Article has examined three Internet platforms that have faced claims that they must be in some way more neutral. It has demonstrated that neither of the likely ways in which agencies and courts might scrutinize this discriminatory behavior are adequate to distinguish between competitive behavior between market participants and anticompetitive arrangements that harm online markets. Finally, it has proposed a method of analysis in which neutrality-based claims should be examined for the presence of two markets in which the platform has market power in one market and uses that power to either exclude or foreclose platform applications from a second market. This Article has applied this method of analysis to three Internet platforms, but there are many others that either are now, or could in the future face claims that they violate some neutrality principle. For example, e-book publishers, sellers, and devices all have the potential to behave in discriminatory ways towards each other. The manner in which search engines interact with social media sites could also be the subject of neutrality scrutiny. Recently, Facebook has made data from its social network available to power the results of a single search engine, Bing, but has refused to grant the same access to Google or other search competitors.²¹¹ This Article proposes a method that is sufficiently general to be applied to such neutrality claims, as well as others that have not yet occurred.

²⁰⁹ Here I adopt the Court's standard, rather than Justice O'Connor's stricter standard that would make application to Internet platforms difficult, if not impossible.

²¹⁰ Such entry barriers must extend beyond the closed platform, and must raise barriers to entering an applications market or markets that cut across platforms.

²¹¹ See David Balto, *Google's Integration of Social Content in Search is a Good Development for Consumers*, ANTITRUST CONNECT (Jan. 12, 2012),

<http://antitrustconnect.com/2012/01/12/googles-integration-of-social-content-in-search-is-a-good-development-for-consumers/>.