

Looking Ahead: The FTC’s Role in Information Technology Markets

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ABSTRACT

The Federal Trade Commission (“FTC”) has played, and should continue to play, a key role in preserving and promoting competition in information technology markets. In this Essay we review recent FTC decisions involving this sector in the context of the continuing efforts of antitrust academics and practitioners to develop doctrines for evaluating competition issues in such markets. We also discuss the doctrinal and jurisdictional issues raised by the Federal Communications Commission’s expanding role in such markets, including through its Open Internet proceedings.

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INTRODUCTION

Information technology (“IT”) markets raise difficult issues for competition policy. They are characterized by both supply- and demand-side economies of scale and scope, often exhibiting high levels of concentration, and experiencing rapid innovation and the potential for disruptive entry. Products tend to be highly differentiated—e.g., smartphones with different operating systems and features—leading to equilibrium prices above marginal costs. Strong complementarities—such as those between operating systems and microprocessors—place interoperability and interconnection issues at center stage. In many cases, prices and terms for complementary inputs are set through bilateral bargaining over actual or anticipated quasi-rents.

The Federal Trade Commission (“FTC”) has long played a leading role in the development of competition policy and jurisprudence in the IT sector.¹ In its role as an economy-wide watchdog over both competition and consumer-protection matters and its lengthy history of focusing its enforcement activities on practices that harm consumer welfare, the FTC is well positioned to play a key role in preserving and protecting competition in IT markets.² To do so effectively, however, it will need to overcome at least two challenges.

¹ For antitrust enforcement, the FTC shares jurisdiction with the Antitrust Division of the U.S. Department of Justice. For certain IT sectors, e.g., telecommunications, the usual practice is for merger reviews to be conducted by the DOJ rather than the FTC. See FTC & U.S. DEP’T OF JUSTICE, MEMORANDUM OF AGREEMENT BETWEEN THE FEDERAL TRADE COMMISSION AND THE ANTITRUST DIVISION OF THE UNITED STATES DEPARTMENT OF JUSTICE CONCERNING CLEARANCE PROCEDURES FOR INVESTIGATIONS 10–11 (2015).

² On FTC enforcement in antitrust and consumer protection, see generally J. Howard Beales III & Timothy J. Muris, *FTC Consumer Protection at 100: 1972 Redux or Protecting Markets to Protect Consumers?*, 83 GEO. WASH. L. REV. 2157 (2015); Daniel A. Crane, *Debunking Humphrey’s Executor*, 83 GEO. WASH. L. REV. 1835 (2015); Andrew I. Gavil, *The FTC’s Study and Advocacy Authority in Its Second Century: A Look Ahead*, 83 GEO. WASH. L. REV. 1902 (2015); Richard J. Gilbert & Hillary Greene, *Merging Innovation into Antitrust Agency Enforcement of the Clayton Act*, 83 GEO. WASH. L. REV. 1919 (2015); Woodrow Hartzog & Daniel J. Solove, *The Scope and Potential of FTC Data Protection*, 83 GEO. WASH. L. REV. 2230 (2015); David A. Hyman & William E. Kovacic, *Can’t Anyone Here Play This Game? Judging the FTC’s Critics*, 83 GEO. WASH. L. REV. 1948 (2015); Jeffrey S. Lubbers, *It’s Time to Remove the “Mossified” Procedures for FTC Rulemaking*, 83 GEO. WASH. L. REV. 1979 (2015); Maureen K. Ohlhausen, *Weigh the Label, Not the Tractor: What Goes on the Scale in an FTC Unfairness Cost-Benefit Analysis?*, 83 GEO. WASH. L. REV. 1999 (2015); Richard J. Pierce, Jr., *The Rocky Relationship Between the Federal Trade Commission and Administrative Law*, 83 GEO. WASH. L. REV. 2026 (2015); Edith Ramirez, *The FTC: A Framework for Promoting Competition and Protecting Consumers*, 83 GEO. WASH. L. REV. 2049 (2015); D. Daniel Sokol, *Analyzing Robinson-Patman*, 83 GEO. WASH. L. REV. 2064 (2015); David C. Vladeck, *Charting the Course: The Federal Trade Commission’s Second Hundred Years*, 83 GEO. WASH. L. REV. 2101 (2015); Joshua Wright & John Yun, *Stop Chug-a-lug-a-lugin 5 Miles an Hour on Your International Harvester*:

First, the FTC must continue making progress in the quest for a better understanding of the competitive dynamics of IT markets and for more effective means of distinguishing between conduct that is beneficial and conduct that is harmful to competition and consumers.

Second, the FTC must clearly define and establish its concurrent jurisdictional role in the Internet ecosystem, especially in the face of the more expansive stance adopted by the Federal Communications Commission (“FCC”).³ While IT markets, by virtue of their “dynamism,” should not get a “free pass” from antitrust enforcement, it is also not clear that that *ex ante* regulation is the optimal way to address all potential relationships and conduct. That being said, the focus here is on the more practical question of how these new developments are likely to affect FTC’s role in IT markets and how the agency can continue to play a constructive role in enforcing the competition laws.

The remainder of this Essay is organized as follows. Part I presents a brief summary of the three characteristics that distinguish IT markets from more traditional ones—*dynamism*, *modularity*, and *demand-side effects*—which is referred to as the “IT Trifecta.” Part II discusses several recent situations in which the FTC has wrestled with such issues in practice. Part III describes the FCC’s expansion, most notably its net neutrality rulemaking, beyond its traditional role as a regulator of telecommunications and media markets into the broader Internet ecosystem. This Part then discusses the potential implications of that expansion for competition policy in general and for the role of the FTC in particular. The Conclusion then presents a brief conclusion and recommendations.

I. COMPETITION ANALYSIS IN IT MARKETS: THE “IT TRIFECTA”

Effective antitrust enforcement depends upon the ability to identify market power and assess its effects on competition and consum-

How Modern Economics Brings the FTC’s Unfairness Analysis Up to Speed with Digital Platforms, 83 GEO. WASH. L. REV. 2130 (2015).

³ The FTC currently lacks jurisdiction over common carriers under Section 5 of the Federal Trade Commission Act, which impedes its ability to enforce antitrust laws against certain telecommunications carriers in their provision of certain services. Federal Trade Commission Act of 1914, 15 U.S.C. § 45 (2012). As seen in the recent *AT&T* case involving data throttling, discussed *infra* notes 118–20, AT&T has challenged the FTC’s jurisdiction over it on grounds that it is a common carrier. *FTC v. AT&T Mobility LLC*, 87 F. Supp. 3d 1087 (N.D. Cal. 2015) (holding the common carrier exemption does not apply to AT&T and denying AT&T’s motion to dismiss).

ers.⁴ It has long been understood that IT markets have characteristics that make the challenge of assessing market power and its effects more difficult and complex than in more traditional markets, including economies of scale and scope, rapid technological change, and heavy reliance on intellectual property. This Essay has described these characteristics in terms of three broad categories, *dynamism*, *modularity*, and *demand-side effects*, referred to as the “IT Trifecta.”⁵

Dynamism refers to what is often called “Schumpeterian” competition⁶ and implies that firms compete primarily by offering new and improved products rather than by finding ways to produce and sell existing products at lower prices.⁷ Such competition implies the existence of sunk costs (in research and development (“R&D”) or nonrecoverable investments in fixed assets). The resulting economies of scale tend to lead to high levels of concentration, and the product differentiation that results from successful innovation yields high margins with equilibrium prices above marginal costs that are easily mistaken for traditional monopoly power.⁸ But to conclude based on those factors that the firms involved have traditional monopoly power, in the sense of being able to exclude entrants or earn monopoly rents, would be erroneous.⁹

4 See *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2238 (2013) (Roberts, C.J., dissenting) (“The point of antitrust law is to encourage competitive markets to promote consumer welfare.”).

5 See Jeffrey A. Eisenach & Ilene Knable Gotts, *In Search of a Competition Doctrine for Information Technology Markets: Recent Antitrust Developments in the Online Sector*, in COMMUNICATIONS AND COMPETITION LAW: KEY ISSUES IN THE TELECOMS, MEDIA AND TECHNOLOGY SECTORS 69, 71–76 (Fabrizio Cugia di Sant’Orsola et al. eds., 2015). For a more extensive discussion of these phenomena and their implications for competition analysis, see generally JEFFREY A. EISENACH, AM. ENTER. INST., *BROADBAND COMPETITION IN THE INTERNET ECOSYSTEM* (2012). See also OZ SHY, *THE ECONOMICS OF NETWORK INDUSTRIES* (2001).

6 See JOSEPH A. SCHUMPETER, *CAPITALISM, SOCIALISM & DEMOCRACY* 31–32 (Taylor & Francis e-Library ed., 2003).

7 WILLIAM J. BAUMOL, *THE FREE-MARKET INNOVATION MACHINE: ANALYZING THE GROWTH MIRACLE OF CAPITALISM* 4 (2002) (“Innovation has replaced price as the name of the game in a number of important industries. The computer industry is only the most obvious example, whose new and improved models appear constantly, each manufacturer battling to stay ahead of its rivals.”); SCHUMPETER, *supra* note 6, at 31–32 (“[N]ew products and new methods compete with the old products and old methods not on equal terms but at a decisive advantage that may mean death to the latter”).

8 See, e.g., Ian Hay Davison, *Michael Porter on Competitive Strategy: Reflections and Round Table Discussion*, 6 EUR. MGMT. J. 1, 3 (1987).

9 See, e.g., FRANKLIN W. FISHER, *Diagnosing Monopoly*, in INDUSTRIAL ORGANIZATION, ECONOMICS AND THE LAW: COLLECTED PAPERS OF FRANKLIN M. FISHER 3, 7–8 (John Monz, ed., 1991); see also Kenneth G. Elzinga & David E. Mills, *The Lerner Index of Monopoly Power: Origins and Uses*, 101 AM. ECON. REV. 558, 561 (2011).

Modularity refers to the concept of complementarity in production or consumption, as, for example, between the thousands of patents embodied in a typical smartphone,¹⁰ or between the applications, communications capabilities, content, and devices that, when combined, allow consumers to access and use the Internet. Combinations of complementary goods such as these are typically referred to as “platforms,” and competition in IT markets can take place both within platforms (for platform leadership) and among them (as between Android and iOS for smartphone operating systems).¹¹

The third element of the IT Trifecta is demand-side effects, which include demand-side economies of scale (or “network effects”) and of scope (or “multi-sided markets,” which can be thought of as markets for the value created by bringing together different types of customers—e.g., television viewers and television advertisers). Markets with strong network effects have a tendency towards “tipping” and natural monopoly, but on the other hand the welfare effects of a single standard may offset any losses from lack of competition.¹² Multi-sided markets are unique in that a monopolist in such a market will engage in efficient (Ramsey-based) price discrimination, even if she sets the price levels above the competitive optimum.¹³ Moreover, there is both theoretical and empirical evidence that mergers in two-sided markets will have smaller effects on prices than will mergers in a single-sided market as a result of demand interactions between the two sides.¹⁴

The IT Trifecta raises a variety of challenges for antitrust enforcement. A partial list includes (1) the need to predict future events in rapidly changing dynamic markets,¹⁵ (2) the absence of a reliable rela-

¹⁰ See, e.g., RPX Corp., Registration Statement (Form S-1) (Sept. 2, 2011), <http://www.sec.gov/Archives/edgar/data/1509432/000119312511240287/ds1.htm>.

¹¹ See, e.g., Timothy F. Bresnahan, *New Modes of Competition: Implications for the Future Structure of the Computer Industry*, in COMPETITION, INNOVATION AND THE MICROSOFT MONOPOLY: ANTITRUST IN THE DIGITAL MARKETPLACE 155, 157–61 (Jeffrey A. Eisenach & Thomas M. Lenard eds., 1999).

¹² See Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects*, J. ECON. PERSPECTIVES, Spring 1994, at 93, 105–09. “Tipping” refers to the tendency for standards that attract more users at an early stage to ultimately achieve dominance. *Id.* at 106.

¹³ See, e.g., Julian Wright, *One-sided Logic in Two-sided Markets*, 3 REV. NETWORK ECON. 44, 48–49 (2004).

¹⁴ See generally, e.g., Lapo Filistrucchi, Tobias J. Klein, & Thomas O. Michielsen, *Assessing Unilateral Merger Effects in a Two-Sided Market: An Application to the Dutch Daily Newspaper Market*, 8 J. COMPETITION L. & ECON. 297 (2012). The effect occurs because a firm in a two-sided market must take into account the effect that raising prices on one side of the platform will exert on the demand for the platform by consumers on the other side. *Id.* at 302.

¹⁵ See Herbert Hovenkamp, *Antitrust and the Movement of Technology*, 19 GEO. MASON

tionship between either market concentration¹⁶ or profit margins and monopoly power,¹⁷ and (3) the difficulties of balancing incentives to innovate, on the one hand, against the desire to facilitate entry and promote static competition, on the other.¹⁸ As discussed in the next Part, the FTC has contributed to a better understanding of these challenges, not because it has gotten every case exactly right, but perhaps rather because of the virtues of “learning by doing” that follow naturally from an enforcement-oriented approach to competition policy.

II. FROM THEORY TO PRACTICE: RECENT FTC ENFORCEMENT ACTIONS INVOLVING IT (AND RELATED) MARKETS

Indeed, the challenges to traditional antitrust doctrine described above arise frequently as competition authorities struggle to assess the competitive effects of conduct and proposed transactions throughout the IT sector. In this Part, several recent cases are discussed, highlighting the issues the FTC faces in identifying market power and devising remedies in rapidly changing markets.

A. Transactions Involving Content Providers

Acquisitions involving firms that compete in providing data or content to others often have the potential to increase the rate of inno-

L. REV. 1119, 1120–21 (2012) (“[I]nnovation often produces very sudden and quite unpredictable results. It can completely kill an industry in a few years, as electronic calculators did to slide rules in the 1960s. In the process, it can bring an entirely new industry into existence in an equally short time.”). See generally Ilene Knable Gotts & Richard T. Rapp, *Antitrust Treatment of Mergers Involving Future Goods*, ANTITRUST, Fall 2004, at 178.

¹⁶ *In re Fidelity Nat'l Fin., Inc.*, File No. 131-0159, at 2 (F.T.C. Dec. 23, 2013) (dissenting statement of Comm'r Joshua D. Wright), <https://www.ftc.gov/system/files/documents/cases/140305fidelitywrightstatement.pdf>; AM. BAR ASS'N SECTION OF ANTITRUST LAW, MARKET POWER HANDBOOK: COMPETITION LAW AND ECONOMIC FOUNDATIONS iv, 1 (2d ed. 2012); Ilene Knable Gotts, *Market Definitions in the Merger Context: Hard Work Pays Off in the Long Run*, in ANNUAL PROCEEDINGS OF THE FORDHAM COMPETITION LAW INSTITUTE: INTERNATIONAL ANTITRUST LAW & POLICY 161, 166 (Barry E. Hawk ed., 2013).

¹⁷ See Elzinga & Mills, *supra* note 9, at 560–61; AM. BAR ASS'N SECTION OF ANTITRUST LAW, *supra* note 16, at 1.

¹⁸ See, e.g., *Novell, Inc. v. Microsoft Corp.*, 731 F.3d 1064, 1073 (10th Cir. 2013) (“If the law were to make a habit of forcing monopolists to help competitors by keeping prices high, sharing their property, or declining to expand their own operations, courts would paradoxically risk encouraging collusion between rivals and dampened price competition—themselves paradigmatic antitrust wrongs, injuries to consumers and the competitive process alike. Forcing firms to help one another would also risk reducing the incentive both sides have to innovate, invest, and expand—again results inconsistent with the goals of antitrust. The monopolist might be deterred from investing, innovating, or expanding (or even entering a market in the first place) with the knowledge anything it creates it could be forced to share; the smaller company might be deterred, too, knowing it could just demand the right to piggyback on its larger rival.”).

vation, enhance modularity, and provide demand-side scale and scope efficiencies. Such procompetitive effects can reduce costs, particularly in nascent sectors. These developments, however, can also increase entry barriers or eliminate competition if they provide the firm with the ability and incentive to foreclose or restrict access or otherwise raise rivals' costs. The FTC has often responded to such situations by imposing licensing or open-access requirements on the buyer to create a "level playing field" for competitors. Unlike *ex ante* regulations, however, such requirements are virtually always limited to specific circumstances and parties and are of limited (e.g., five to ten years) duration.

Some recent such proposed mergers have involved firms with databases. In these cases, the FTC typically required that a third party be granted the rights to one of the databases to compete with the combined firm. For example, in CoreLogic, Inc.'s acquisition of DataQuick Information Systems, Inc.,¹⁹ the FTC alleged that CoreLogic and DataQuick were two of three providers of national accessor and recorder bulk data and that their combination would have risked both coordinated (with the remaining competitor) and unilateral effects to the extent that the merger would have eliminated competition between the merging firms.²⁰

In support of the transaction, the CoreLogic likely argued that combining the firms would lower the costs of maintaining the databases and broaden the user set. But, as often is the case when scale economies are presented and there are few, if any, other competitors, the FTC referenced the high cost of obtaining the necessary data (especially historical information) in finding that entry was unlikely.²¹

To foster effective competition, the FTC required CoreLogic to license to Renwood RealtyTrac ("RealtyTrac") historical data *and* future developed data for up to seven years and to grant RealtyTrac access to several ancillary data sets that DataQuick provides to its customers.²² The consent order also required CoreLogic to provide RealtyTrac with technical support for eighteen months and access to information regarding customers and data management and to allow certain DataQuick customers to terminate their contracts early and

¹⁹ Press Release, Fed. Trade Comm'n, *FTC Puts Conditions on CoreLogic, Inc.'s Proposed Acquisition of DataQuick Information Systems* (Mar. 24, 2014) [hereinafter CoreLogic Press Release], <http://www.ftc.gov/news-events/press-releases/2014/03/ftc-puts-conditions-corelogic-incs-proposed-acquisition-dataquick>.

²⁰ *Id.*

²¹ Complaint at 3, *In re* CoreLogic, Inc., Docket No. C-4458 (F.T.C. May 20, 2014).

²² Decision and Order at 5–6, *In re* CoreLogic, Inc., No. C-4458 (F.T.C. May 20, 2014).

switch to RealtyTrac without penalty.²³ The FTC deemed RealtyTrac an acceptable divestiture buyer because it operated an online marketplace of foreclosure real property listings and provided national foreclosure data services to some subset of real estate consumers, investors, and professionals; with this license, it would be expanding into the new line of business.²⁴

The FTC similarly conditioned its approval of CoStar's acquisition of LoopNet on the sale of LoopNet's ownership interest in Xceligent to DMG Information, Inc. The FTC's complaint and consent order analysis alleged that the acquisition would reduce competition in the markets for listing databases and information services and that CoStar and LoopNet were the only two providers of those services with nationwide coverage.²⁵ The complaint also alleges unilateral effects based on the particularly close competition between Xceligent and CoStar and on LoopNet's ownership stake in Xceligent.²⁶ The proposed consent decree "impose[d] certain conduct requirements to assure the continued viability of Xceligent as a competitor to the merged firm and to reduce barriers to competitive entry and expansion. These additional provisions will facilitate Xceligent's geographic expansion and prevent foreclosure of [the parties'] established customer base."²⁷ Among other requirements, CoStar and LoopNet must continue to offer their customers core products on a stand-alone basis for three years.²⁸ In addition, the parties may not limit use of the REApplications product, a software tool for managing market research, in connection with customers' purchase, lease, or license of commercial real estate database services from competitors.²⁹ The FTC, on similar grounds, required Fidelity National Financial, Inc. ("Fidelity") to sell a copy of Lender Processing Services, Inc.'s ("LPS") title plants (databases used to determine title status of real

²³ *Id.* at 5–8.

²⁴ See CoreLogic Press Release, *supra* note 19.

²⁵ Complaint at 3–4, *In re CoStar Group, Inc.*, Docket No. C-1110172 (F.T.C. Apr. 26, 2012), <https://www.ftc.gov/sites/default/files/documents/cases/2012/04/120426costarcmt.pdf>; Analysis of Agreement Containing Consent Order to Aid Public Comment at 2–3, *In re CoStar Group, Inc.*, File No. 111-0172 (F.T.C. Apr. 26, 2012) [hereinafter Analysis of Agreement], <https://www.ftc.gov/sites/default/files/documents/cases/2012/04/120426costaranal.pdf>.

²⁶ Complaint, *supra* note 25, at 4.

²⁷ Analysis of Agreement, *supra* note 25, at 1.

²⁸ *Id.* at 4–5. The "anti-bundling" provisions are aimed to protect Xceligent for a limited period while it expands the breadth and geographic scope of its services.

²⁹ *Id.* at 5.

property) in six Oregon counties before consenting to Fidelity's plan to acquire LPS.³⁰

The same issues were considered in the recently reviewed merger between Zillow, Inc. ("Zillow") and Trulia, Inc. ("Trulia"). In February 2015, the Commission decided unanimously to close its six-month investigation of Zillow's proposed acquisition of Trulia.³¹ Commissioners Ohlhausen, Wright, and McSweeney issued a statement providing the reason for the decision.³² According to that statement, "Zillow and Trulia operated the first and largest consumer-facing web portals for home buying that sell advertising space to real estate agents seeking to attract customers buying and selling homes."³³ Although staff uncovered documents tending to show that the two firms competed intensely with one another for consumer traffic and real estate agent advertising sales, there was also evidence that real estate agents use numerous other methods to attract customers. Moreover, there was insufficient evidence to conclude that real estate agents would face higher prices for advertising after the merger or that the combined firm would have reduced incentives to innovate.³⁴ Apparently, real estate portals constitute only a small portion of real estate agents' total advertising spending and there was no evidence that such portals offered a higher return on investment than did other forms of advertising.³⁵ In addition, FTC Staff was unable to develop evidence that demonstrated that a significant portion of either company's customers would switch to the other company if there were a price increase.³⁶ Data also did not show a relationship between Zillow's advertising

³⁰ Press Release, Fed. Trade Comm'n, *FTC Puts Conditions on Fidelity National Financial's Acquisition of Lender Processing Services* (Dec. 24, 2013), <https://www.ftc.gov/news-events/press-releases/2013/12/ftc-puts-conditions-fidelity-national-financials-acquisition>. This matter is also noteworthy because it prompted Commissioner Wright's dissent, where he challenged the presumption that a decrease in the number of competitors from four to three, or even three to two, will necessarily harm competition even in highly concentrated markets where entry is unlikely. Dissenting Statement of Comm'r Wright at 2–3, *In re Fidelity Nat'l Fin., Inc.*, FTC File No. 131-0159 (F.T.C. Dec. 23, 2013), https://www.ftc.gov/system/files/documents/cases/140305_fidelitywrightstatement.pdf.

³¹ See Tim Logan, *FTC OKs Zillow-Trulia Merger, Creating Real Estate Behemoth*, L.A. TIMES (Feb. 13, 2015, 4:39 PM), <http://www.latimes.com/business/realestate/la-fi-ftc-zillow-trulia-merger-20150213-story.html>.

³² Statement of Comm'r Ohlhausen, Comm'r Wright, and Comm'r McSweeney Concerning Zillow, Inc./Trulia, Inc., FTC File No. 141-0214 (F.T.C. Feb. 19, 2015), <https://www.ftc.gov/public-statements/2015/02/statement-commissioner-ohlhausen-commissioner-wright-commissioner-mcsweeney>.

³³ *Id.* at 1.

³⁴ See *id.*

³⁵ See *id.*

³⁶ See *id.* at 1–2.

pricing and Trulia's presence in any given geographic market.³⁷ Finally, the FTC concluded that Zillow would "still face significant competition for consumer traffic from the remaining portals like Realtor.com, online brokerage services such as Redfin, and other consumer-facing online real estate products."³⁸

B. Transactions Involving Hardware, Platforms, or Networks

As with combinations involving content providers, mergers of firms providing components (e.g., hardware),³⁹ platforms, or networks in the IT industry can generate efficiency benefits associated with scale and scope. At the same time, such proposed mergers can raise concerns that the combination will change incentives to deal with rivals or foreclosure concerns. The FTC's inquiry often seeks to determine whether the combination will create or enhance entry barriers by becoming a bottleneck for rivals attempting to gain access to the resources necessary to compete.⁴⁰ Such transactions often involve nascent or quickly evolving marketplaces, making it difficult to assess accurately the ability of third parties to develop competing products or platforms. Nonetheless, as discussed in this Section, the FTC has imposed conduct remedies to ensure that these potential antitrust harms do not occur.

The unpredictability of developments that can change the competitive landscape virtually overnight in nascent markets was exemplified by Apple's entry into the relevant market during the FTC's

³⁷ *Id.* at 2.

³⁸ *Id.*

³⁹ Although the Tokyo Electron, Ltd.—Applied Materials, Inc. (ultimately abandoned) transaction was reviewed by the U.S. Department of Justice Antitrust Division rather than the FTC, it provides an example of a deal between hardware producers (in this case, producers of equipment used to make semiconductors) that raised antitrust concerns. See Press Release, U.S. Dep't of Justice, *Applied Materials and Tokyo Electron Ltd. Abandon Merger Plans After Justice Department Rejected Their Proposed Remedy* (Apr. 27, 2015) [hereinafter *Applied Materials–Tokyo Electron Press Release*], <http://www.justice.gov/opa/pr/applied-materials-inc-and-tokyo-electron-ltd-abandon-merger-plans-after-justice-department>. In 2012, the FTC moved to block a proposed combination of IDT and PLX, two manufacturers of PCIe switches, on the basis that the parties combined would have a near-monopoly (85%) share of the market and were each other's closest and most direct competitors. The parties abandoned the deal. Press Release, Fed. Trade Comm'n, *FTC Issues Complaint Seeking to Block Integrated Device Technology, Inc.'s Proposed \$330 Million Acquisition of PLX Technology, Inc.* (Dec. 18, 2012) [hereinafter *PLX Press Release*], <https://www.ftc.gov/news-events/press-releases/2012/12/ftc-issues-complaint-seeking-block-integrated-device-technology>; see also Scott Stuart, *IDT, PLX Abandon \$330M Merger in Face of Antitrust Challenge*, *DEAL PIPELINE* (Dec. 20, 2012, 1:05 PM), <http://www.thedeal.com/content/regulatory/idt-plx-abandon-330m-merger-in-face-of-antitrust-challenge.php>.

⁴⁰ See, e.g., PLX Press Release, *supra* note 39.

review of the Google–AdMob transaction.⁴¹ AdMob had been one of the first mobile advertising networks to focus on the iPhone when the Apple App Store opened in June 2009.⁴² At the time that Google announced its proposed acquisition of AdMob, Google had a beta advertising network for mobile applications that also operated on some iPhone apps. The parties argued that the transaction would (1) accelerate innovation across platforms, (2) build capabilities and tools, and (3) allow the use of Google’s sales team, infrastructure, and relationships to increase the effectiveness of display advertising.⁴³ In other words, to use our paradigm, the transaction would foster dynamism, modularity, and demand-side benefits.

In May 2012, the FTC closed its investigation of the acquisition.⁴⁴ The FTC’s decision not to challenge the transaction “was a difficult one because the parties currently are the two leading mobile advertising networks . . . [and] each of the merging parties viewed the other as its primary competitor.”⁴⁵ The FTC ultimately decided not to challenge the transaction because while the proposed merger was under FTC review, Apple announced that it was entering into a new mobile advertising platform called “iAd”.⁴⁶ The FTC concluded that Apple had both the ability and the incentive to ensure that advertising networks would not raise prices or reduce the percentage of advertising revenue that they share with application developers.⁴⁷ The Commission made clear, however, that it “must subject mergers in nascent markets to the same level of antitrust scrutiny as mergers in other

41 See Press Release, Fed. Trade Comm’n, *FTC Closes Its Investigation of Google AdMob Deal* (May 21, 2010) [hereinafter AdMob Press Release], <https://www.ftc.gov/news-events/press-releases/2010/05/ftc-closes-its-investigation-google-admob-deal>.

42 See Susan Wojcicki, *We’ve Officially Acquired AdMob!*, GOOGLE OFFICIAL BLOG (May 27, 2010), <http://googleblog.blogspot.com/2010/05/weve-officially-acquired-admob.html>.

43 See *id.*

44 AdMob Press Release, *supra* note 41.

45 Statement of the Fed. Trade Comm’n Concerning Google/AdMob at 1, *In re Google, Inc./AdMob, Inc.*, FTC File No. 101-0031 (F.T.C. May 21, 2010), https://www.ftc.gov/sites/default/files/documents/closing_letters/google-inc./admob-inc/100521google-admobstmt.pdf.

46 AdMob Press Release, *supra* note 44.

47 See *id.* Perhaps ironically, in April 2014, Apple faced accusations of denying access to its iAd service to an online radio competitor, Bloom.fm, for anticompetitive purposes. See Stuart Dredge, *Apple Bans Music App Bloom.fm from Running Ads on Its iAd Network*, THE GUARDIAN (Apr. 11, 2014, 6:38 AM), <http://www.theguardian.com/technology/2014/apr/11/apple-bloom-fm-music-app-iads>. Shortly afterwards, Bloom.fm announced it was shutting down. See Stuart Dredge, *Streaming Music Startup Bloom.fm Shuts Down After Investor Pulls Out*, THE GUARDIAN (May 1, 2014, 4:56 AM), <http://www.theguardian.com/technology/2014/may/01/bloom-fm-streaming-music-shuts-down>.

markets”⁴⁸ even when, to some extent, every competitor is a recent entrant and entry barriers are unclear.

C. *Transactions Involving Potential Competition and Future Markets*

In the proposed merger between Nielsen Holdings N.V. (“Nielsen”) and Arbitron, Inc. (“Arbitron”) the FTC focused on protecting a *future* market for audience measurement services.⁴⁹ The transaction parties—Nielsen and Arbitron—were the leading media ratings businesses.⁵⁰ Historically, Nielsen and Arbitron did not overlap, with Nielsen providing ratings for television and Arbitron for radio.⁵¹ Both companies, however, were developing syndicated cross-platform audience-measurement services that would be agnostic as to medium.⁵² The FTC feared that the elimination of future competition between Nielsen and Arbitron would “cause advertisers, ad agencies, and programmers to pay more for such national cross-platform audience measurement services.”⁵³

FTC Chairwoman Edith Ramirez and Commissioner Julie Brill voted to condition the transaction’s approval on Nielsen’s obligation to (1) continue its cross-platform project with ESPN Inc. and Comscore Inc. and (2) license Arbitron’s portable “people meter” and related data, as well as software and technology being used in the ESPN project, to an FTC-approved third party for up to eight years.⁵⁴ Commissioner Wright dissented from the decision on the basis that such intervention was premised on “a novel theory—that is, that the merger will substantially lessen competition in a market that does not

⁴⁸ See Statement of the Fed. Trade Comm’n Concerning Google/AdMob, *supra* note 45, at 1. The FTC’s treatment of the AdMob transaction presents an interesting comparison with the Department of Justice Antitrust Division’s successful challenge of Bazaarvoice, Inc.’s July 2012 proposed acquisition of PowerReviews, Inc. See *United States v. Bazaarvoice, Inc.*, No. 13-cv-00133-WHO, 2014 WL 203966, at *2 (N.D. Cal. Jan. 8, 2014). In *Bazaarvoice* the merging parties were the two primary firms in their advertising-related markets and claimed the merger would generate efficiencies and speed innovation. *Id.* at *1, *18. For further discussion, see Eisenach & Gotts, *supra* note 5, at 84–86.

⁴⁹ Press Release, Fed. Trade Comm’n, *FTC Puts Conditions on Nielsen’s Proposed \$1.26 Billion Acquisition of Arbitron* (Sept. 20, 2013), <http://www.ftc.gov/opa/2013/09/nielsen.shtm>.

⁵⁰ See *id.*

⁵¹ See *id.*

⁵² See *id.*

⁵³ *Id.*

⁵⁴ See Decision and Order at 5–7, *In re Nielsen Holdings N.V.*, Docket No. C-4439 (F.T.C. Feb. 24, 2014), <https://www.ftc.gov/system/files/documents/cases/140228nielsenholdingsdo.pdf>; Statement of the Fed. Trade Comm’n, *In re Nielsen Holdings N.V.*, File No. 131-0058 (F.T.C. Sept. 20, 2013), <http://www.ftc.gov/os/caselist/1310058/130920nielsenarbitroncommstmt.pdf>.

today exist.”⁵⁵ Commissioner Wright advocated for a higher standard of evidence regarding likely competitive effects in a matter involving future markets.⁵⁶

D. Policing Conduct in IT Markets

The FTC also polices conduct under the panoply of antitrust laws. Although this Essay primarily focuses on competition issues, the Commission’s enforcement of its consumer-protection authority often has competitive implications.⁵⁷ In addition, the FTC’s Section 5 authority extends to privacy and security concerns.⁵⁸ In this Section we

⁵⁵ See Dissenting Statement of Comm’r Joshua D. Wright at 1, *In re Nielsen Holdings N.V.*, FTC File No. 131-0058 (F.T.C. Sept. 20, 2013), <https://www.ftc.gov/system/files/documents/cases/140228nielsenholdingwrightstatement.pdf>.

⁵⁶ *Id.* at 2–3 & n.3. The DOJ’s concerns in the *Applied Materials–Tokyo Electron* transaction reportedly included the ultimate impact of the deal on innovation in future generations of semiconductor equipment. See Brent Kendall & Don Clark, *Applied Materials, Tokyo Electron Cancel Merger Plan*, WALL ST. J. (Apr. 27, 2015 5:58 PM), <http://www.wsj.com/articles/applied-materials-tokyo-electron-scrap-merger-plan-1430117758>.

⁵⁷ The FTC’s consumer-protection enforcement in IT markets is by no means new. See, e.g., Press Release, Fed. Trade Comm’n, *America OnLine, CompuServe and Prodigy Settle FTC Charges Over “Free” Trial Offers, Billing Practices* (May 1, 1997), <https://www.ftc.gov/news-events/press-releases/1997/05/america-online-compuserve-and-prodigy-settle-ftc-charges-over> (settling allegations that “free trial offers resulted in unexpected charges for many consumers” (internal quotation marks omitted)); Press Release, Fed. Trade Comm’n, *Law Enforcers Target “Top 10” Online Scams* (Oct. 31, 2000), <https://www.ftc.gov/news-events/press-releases/2000/10/law-enforcers-target-top-10-online-scams>.

⁵⁸ See, e.g., Press Release, Fed. Trade Comm’n, *Facebook Settles FTC Charges That It Deceived Consumers By Failing To Keep Privacy Promises* (Nov. 29, 2011), <https://www.ftc.gov/news-events/press-releases/2011/11/facebook-settles-ftc-charges-it-deceived-consumers-failing-keep> (stating that the Commission issued a settlement order that requires Facebook to implement a comprehensive privacy program and obtain consent to share information); Press Release, Fed. Trade Comm’n, *FTC Charges Deceptive Privacy Practices in Google’s Rollout of Its Buzz Social Network* (Mar. 30, 2011), <https://www.ftc.gov/news-events/press-releases/2011/03/ftc-charges-deceptive-privacy-practices-googles-rollout-its-buzz> (noting that the Commission issued a settlement order requiring implementation of a comprehensive privacy policy); Press Release, Fed. Trade Comm’n, *HTC America Settles FTC Charges It Failed to Secure Millions of Mobile Devices Shipped to Consumers* (Feb. 22, 2013), <https://www.ftc.gov/news-events/press-releases/2013/02/htc-america-settles-ftc-charges-it-failed-secure-millions-mobile> (explaining that a Commission consent order required HTC to develop and release software patches to fix security flaws); Press Release, Fed. Trade Comm’n, *Path Social Networking App Settles FTC Charges it Deceived Consumers and Improperly Collected Personal Information from Users’ Mobile Address Books* (Feb. 1, 2013), <https://www.ftc.gov/news-events/press-releases/2013/02/path-social-networking-app-settles-ftc-charges-it-deceived> (noting that the Commission issued a consent order requiring corrective measures to address deceptive marketing and improper collection of children’s personal information and imposing an \$800,000 fine); Press Release, Fed. Trade Comm’n, *Snapchat Settles FTC Charges That Promises of Disappearing Messages Were False* (May 8, 2014), <https://www.ftc.gov/news-events/press-releases/2014/05/snapchat-settles-ftc-charges-promises-disappearing-messages-were> (explaining that the Commission’s settlement or-

briefly review two recent IT sector cases, the first involving alleged anticompetitive conduct by Google and the second involving a consumer-protection complaint against AT&T.⁵⁹

The Google matter involved a series of allegations that the company was using unfair acts and practices to maintain and expand its market power in both the mobile wireless and search engine arenas. In the mobile wireless space, the FTC accused Google of failing to abide by its obligations to engage in fair and reasonable licensing ("FRAND" obligations) of patents acquired in conjunction with its 2012 acquisition of Motorola Mobility.⁶⁰ The more controversial issues, however, involved the market for search engines, in which the FTC alleged that Google used a variety of unfair tactics, including "biasing" its search results in favor of its own content over the content of actual or potential competitors.⁶¹ Complainants in the matter included such Google rivals as Microsoft, TripAdvisor, Kayak, Hotwire, Expedia, Oracle, and Nokia, which (operating through the FairSearch coalition⁶²) argued in favor of a principle of "search neutrality"?i.e., an affirmative obligation on a dominant search provider not to discriminate in favor of its own content when presenting its search results.⁶³

der in this case prohibited further deceptive claims regarding disappearing messages and required remedial security and privacy measures).

⁵⁹ The Commission engages in a wide-ranging set of consumer-protection activities involving the IT sector, notably in the areas of consumer credit, data security, and privacy. It also holds workshops and issues reports. In November 2013, it held a workshop on the "Internet of Things" and issued a report shortly thereafter summarizing the workshop and FTC Staff recommendations. FED. TRADE COMM'N, INTERNET OF THINGS: PRIVACY AND SECURITY IN A CONNECTED WORLD (2015), <https://www.ftc.gov/system/files/documents/reports/federal-trade-commission-staff-report-november-2013-workshop-entitled-internet-things-privacy/150127iotrpt.pdf>.

⁶⁰ Complaint at 1, *In re* Motorola Mobility LLC, Docket No. C-4410 (F.T.C. July 23, 2013), <https://www.ftc.gov/sites/default/files/documents/cases/2013/07/130724googlemotorolacmpt.pdf>. On October 29, 2014, Google announced that it had completed the sale of Motorola Mobility to Lenovo. See Roger Cheng, *It's Official: Motorola Mobility Now Belongs to Lenovo*, CNET (Oct. 30, 2014, 4:25 AM), <http://www.cnet.com/news/lenovo-closes-acquisition-of-motorola-mobility-from-google/>.

⁶¹ Press Release, Fed. Trade Comm'n, *Google Agrees to Change Its Business Practices to Resolve FTC Competition Concerns In the Markets for Devices Like Smart Phones, Games and Tablets, and in Online Search* (Jan. 3, 2013), <https://www.ftc.gov/news-events/press-releases/2013/01/google-agrees-change-its-business-practices-resolve-ftc>.

⁶² FairSearch "is a group of businesses and organizations united to promote economic growth, innovation and choice across the Internet ecosystem by fostering and defending competition in online and mobile search." See *About*, FAIRSEARCH, <http://www.fairsearch.org/about/> (last visited Oct. 26, 2015).

⁶³ For useful reviews of the Google investigation, see, e.g., Robert H. Bork & J. Gregory Sidak, *What Does the Chicago School Teach About Internet Search and the Antitrust Treatment of*

The Commission ultimately concluded that Google had violated certain of its FRAND obligations, and Google entered into a consent agreement in which it agreed for a period of ten years to license certain patents under specified terms.⁶⁴ However, on the more consequential issues of search neutrality, the Commission in January 2015 closed what it described as a “wide-ranging” investigation, concluding:

[T]he evidence presented at this time does not support the allegation that Google’s display of its own vertical content at or near the top of its search results page was a product design change undertaken without a legitimate business justification. Rather, we conclude that Google’s display of its own content could plausibly be viewed as an improvement in the overall quality of Google’s search product.⁶⁵

In its closing statement, the Commission explained its concern that attacking conduct that was not “demonstrably anticompetitive” and for which there were “plausible procompetitive justifications” would “risk[] harming consumers.”⁶⁶ Thus, in a matter involving many of the complexities and analytical difficulties associated with IT markets, the Commission was able to conclude, on the basis of extensive, fact-specific analysis, that there was insufficient evidence to create a presumption of harm to competition and consumers.⁶⁷

A still more recent example of the FTC’s engagement in IT markets is its October 2014 complaint against AT&T Mobility for conduct that it alleged is both unfair and deceptive under Section 5 of the FTC Act.⁶⁸ According to the Commission’s complaint, AT&T began offer-

Google?, 8 J. COMP. L. & ECON. 663 (2012); Daniel A. Crane, *After Search Neutrality: Drawing a Line Between Promotion and Demotion*, 9 I/S J.L. & POL’Y FOR INFO. SOC’Y 397 (2014); Geoffrey A. Manne & Joshua D. Wright, *If Search Neutrality is the Answer, What’s the Question?*, 2012 COLUM. BUS. L. REV. 151.

⁶⁴ See Decision and Order at 7–8, *In re Motorola Mobility LLC*, No. C-4410 (F.T.C. July 23, 2013), <http://www.ftc.gov/sites/default/files/documents/cases/2013/07/130724googlemotorolado.pdf>.

⁶⁵ Statement of the Fed. Trade Comm’n Regarding Google’s Search Practices at 3, *In re Google Inc.*, FTC File No. 111-0163 (F.T.C. Jan. 3, 2013), http://www.ftc.gov/sites/default/files/documents/public_statements/statement-commission-regarding-googles-search-practices/130103brillgooglesearchstmt.pdf.

⁶⁶ *Id.*

⁶⁷ *Id.* at 3–4.

⁶⁸ Complaint for Permanent Injunction and Other Equitable Relief, *FTC v. AT&T Mobility LLC*, No. 3:14-cv-04783-EMC (N.D. Cal. Oct. 28, 2014) [hereinafter *AT&T Complaint*], <https://www.ftc.gov/system/files/documents/cases/141028attcmpt.pdf>. On January 28, 2015, the FTC settled an enforcement action based on similar facts with TracFone, in which TracFone agreed to pay \$40 million in consumer redress. Press Release, Fed. Trade Comm’n, *Prepaid Mobile Provider TracFone to Pay \$40 Million to Settle FTC Charges It Deceived Consumers*

ing consumers “unlimited” data plans in 2007 and stopped offering the plans to new customers in 2010, though existing customers’ unlimited plans were “grandfathered.”⁶⁹ Then, the complaint alleges, AT&T began in 2011 to engage in “data throttling,” meaning that it reduced the speed of mobile connections for customers who exceeded monthly data limits.⁷⁰

Leaving aside the merits of the case, we believe it is worth noting the substantive standards that attach to the Commission’s unfairness and deception authorities. Specifically, an unfairness charge is premised by statute on the Commission’s conclusion that the practice at issue “has caused or is likely to cause substantial injury to consumers that is not outweighed by countervailing benefits to consumers or competition and is not reasonably avoidable by consumers themselves,”⁷¹ while a finding of deception requires that the offending conduct be “significant and material”⁷² and that “consumers have suffered and will continue to suffer substantial injury as a result of [the conduct].”⁷³

As the above cases demonstrate, the FTC is actively engaged in enforcing traditional antitrust (and consumer-protection) principles in the IT sector. Such enforcement remains challenging, as the ability to distinguish between harmful activities and beneficial ones remains imperfect. Still, the Commission has, in our judgment, generally sought to strike a reasonable balance between Type I and Type II error.⁷⁴ One can dispute the outcomes in individual cases, or bemoan the tendency of particular chairmen or majorities to “lean” one way or another, but as the Google search-neutrality case suggests, in the end the agency has focused on finding a balance between innovation and competition, on the one hand, and intervention, on the other. And, importantly, the Commission has generally made its decisions on its perceptions of the merits, even when powerful interests have been at play.

About “Unlimited” Data Plans (Jan. 28, 2015), <https://www.ftc.gov/news-events/press-releases/2015/01/prepaid-mobile-provider-tracfone-pay-40-million-settle-ftc>.

⁶⁹ AT&T Complaint, *supra* note 68, at 3.

⁷⁰ *Id.* at 4.

⁷¹ *Id.* at 12.

⁷² *See id.* at 13.

⁷³ *Id.*

⁷⁴ Type I error refers to instances where enforcement authorities fail to identify harmful behavior, while Type II error refers to instances in which beneficial or benign behavior is misidentified as harmful.

III. IMPLICATIONS FOR THE FTC OF THE FCC'S EXPANDING ROLE IN IT MARKETS

The FCC approaches the IT sector from a different perspective than does the FTC. As a public utility regulator, its legacy is one of ex ante price regulation. As a sector-specific regulator, it is charged by statute with advancing policy objectives that exceed the bounds of competition policy, including increasing investment in the industries it oversees, promoting diversity in broadcast media, and promoting (including through the Universal Service Fund) consumer adoption of communications technologies.⁷⁵ As the agency charged with overseeing allocation of the broadcast spectrum, it awards licenses worth tens of millions, and sometimes billions of dollars.⁷⁶ The FCC's overall statutory mission is to further "the public interest."⁷⁷

Traditionally, the FCC has limited the exercise of its authority to the specific industries it is charged with overseeing, each of which has been thought to possess unique characteristics (e.g., natural monopoly for telephony, various content issues for broadcasting) that justify such special attention.⁷⁸ With the rise of the Internet, the convergence of the computing, communications, and media sectors has blurred the boundaries of the FCC's jurisdiction.

The first Section below briefly reviews the history of the FCC's efforts to grapple with the jurisdictional implications of convergence. The second Section discusses the jurisdictional ramifications of its May 2015 Open Internet Order.

A. *Convergence and the Boundaries of the FCC's Authority*

For most of its history, the FCC has limited the exercise of its authority to the reasonably well-defined boundaries of the specific industries it oversees?principally wireline telecommunications (Title II

⁷⁵ See 47 U.S.C. §§ 151, 154, 254 (2012).

⁷⁶ See, e.g., R. H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1, 1, 36 (1959); Jeffrey A. Eisenach, Navigant Economics, *The Equities and Economics of Property Interests in TV Spectrum Licenses* 9–13 (Jan. 2014), http://www.nab.org/documents/newsRoom/pdfs/011614_Navigant_spectrum_study.pdf.

⁷⁷ See, e.g., ABA SECTION OF ANTITRUST LAW, *TELECOM ANTITRUST HANDBOOK* 81–84 (2d ed. 2013).

⁷⁸ For a critical view of the FCC's expansion, see Gus Hurwitz, *With "Net Neutrality," FCC Moves Beyond Its Legal Authority*, REAL CLEAR MKTS., Feb. 25, 2015, http://www.realclearmarkets.com/articles/2015/02/25/with_net_neutrality_fcc_moves_beyond_its_legal_authority_101547.html ("20 years of [FCC] policy . . . has consistently taken a hands-off approach to the Internet—a principle embraced by every Congress and Presidential administration since the 1996 Telecommunications Act. Until now, the FCC had faithfully followed the direction of these elected leaders.").

of the Communications Act),⁷⁹ wireless communications and broadcasting (Title III),⁸⁰ and cable communications (Title VI).⁸¹ Beginning in the 1960s, the convergence of computing and communications began raising questions about how far into the computing industry the FCC's authority does, or should, extend. The agency has addressed these issues in scores of proceedings and contexts involving everything from universal service to set-top boxes,⁸² but most notably in the so-called *Computer Inquiries: Computer I*,⁸³ *Computer II*,⁸⁴ and *Computer III*.⁸⁵

Initiated at a time when the Commission was still regulating interstate telephone services as a public utility under Title II of the Communications Act, the *Computer Inquiries* set out to distinguish between communications services, which would be subject to public utility-style regulation, and data-processing services, which would not.⁸⁶ In *Computer I*, the Commission addressed two primary regulatory issues, namely (1) whether data-processing services should be subject to regulation under Title II of the Communications Act and

⁷⁹ Communications Act of 1934, Pub. L. No. 73-416, 48 Stat. 1064, 1070.

⁸⁰ *Id.* at 1081.

⁸¹ *Id.* at 1101; see, e.g., PATRICIA MOLONEY FIGLIOLA, CONG. RESEARCH SERV., RL32589, THE FEDERAL COMMUNICATIONS COMMISSION: CURRENT STRUCTURE AND ITS ROLE IN THE CHANGING TELECOMMUNICATIONS LANDSCAPE i, 1–2 (2015); KATHLEEN ANN RUANE, CONG. RESEARCH SERV., R40234, NET NEUTRALITY: THE FCC'S AUTHORITY TO REGULATE BROADBAND INTERNET TRAFFIC MANAGEMENT i, 1–4 (2014).

⁸² See generally Jason Oxman, *The FCC and the Unregulation of the Internet* (Fed. Commc'ns Comm'n, Office of Plans & Policy, Working Paper No. 31, July 1999), https://transition.fcc.gov/Bureaus/OPP/working_papers/oppwp31.pdf.

⁸³ *In re Regulatory & Policy Problems Presented by the Interdependence of Computer & Commc'ns Servs. & Facilities (Computer I final)*, 28 F.C.C. 2d 267 (1971) (final decision), *aff'd in part sub nom.* GTE Serv. Corp. v. FCC, 474 F.2d 724 (2d Cir. 1973); *In re Regulatory & Policy Problems Presented by the Interdependence of Computer & Commc'ns Servs. & Facilities (Computer I tentative)*, 28 F.C.C. 2d 291, 291 (1970) (tentative decision).

⁸⁴ *In re Amendment of Section 64.702 of the Comm'n's Rules & Regulations (Second Computer Inquiry) (Computer II)*, 77 F.C.C. 2d 384, 384–86 (1980) (final decision).

⁸⁵ *In re Amendment of Sections 64.702 of the Comm'n's Rules & Regulations (Third Computer Inquiry)*; and *Policy & Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Thereof*; *Commc'ns Protocols under Section 64.702 of the Comm'n's Rules & Regulations (Computer III)*, 104 F.C.C. 2d 958 (1986).

⁸⁶ For a useful overview of the Computer Inquiries, see generally Robert Cannon, *Where Internet Service Providers and Telephone Companies Compete: A Guide to the Computer Inquiries, Enhanced Service Providers and Information Service Providers*, 9 COMM'LAW CONSPECTUS 49 (2001). See also JONATHAN E. NUECHTERLEIN & PHILIP M. WEISER, DIGITAL CROSSROADS: TELECOMMUNICATIONS LAW AND POLICY IN THE INTERNET AGE 188–92 (2d ed., 2013). In general, public utility regulation involves regulation of prices and service offerings along with prohibitions on competitive entry. See, e.g., DENNIS W. CARLTON & JEFFREY M. PERLOFF, MODERN INDUSTRIAL ORGANIZATION 688 (4th ed., 2005).

(2) whether common carriers should be allowed to engage in data processing.⁸⁷ On the first question, the Commission determined that “data processing services should not be regulated, even though transmission over common carrier communications facilities was involved in order to link user terminals to central computers.”⁸⁸ Thus, “where message-switching is offered as an incidental feature of an integrated service offering that is primarily data processing, there would be total regulatory forbearance with respect to the entire service.”⁸⁹

On the question of entry by communications companies (e.g., AT&T) into data processing, the Commission was “concerned with the possibility that common carriers might favor their own data processing activities through cross-subsidization, improper pricing of common carrier services, and related anti-competitive practices which could result in burdening or impairing the carrier’s provision of its other regulated services,” and thus allowed such entry only under a policy of “maximum separation whereby a communications common carrier had to furnish data processing services through a separate corporate entity.”⁹⁰

In *Computer II* and *Computer III*, the Commission moved to clarify the distinction between regulated and unregulated services and to gradually relax the conditions under which regulated companies could enter the market for data processing services. In *Computer II*, the Commission defined two classes of service: (1) “basic services,” defined as providing a “pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information,”⁹¹ and (2) “enhanced services,” defined as “services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber’s transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information.”⁹² Common carriers were permitted to offer enhanced services, but only under structurally separated subsidiaries.⁹³

⁸⁷ *Computer I tentative*, 28 F.C.C. 2d at 295.

⁸⁸ *Computer II*, 77 F.C.C. 2d at 390.

⁸⁹ *Id.*

⁹⁰ *Id.* at 391.

⁹¹ *Id.* at 420.

⁹² *Id.* at 498; see also 47 C.F.R. § 64.702(a) (2015).

⁹³ *Computer III* retained the distinction between basic and enhanced services but gave

Congress embraced the basic versus enhanced dichotomy in the Telecommunications Act of 1996, which replaced the words “basic” and “enhanced” with “telecommunications” and “information,” respectively, but did not change the substance of the distinction.⁹⁴

The *Computer Inquiries* set the stage for two decades of essentially deregulatory policy vis-à-vis the Internet.⁹⁵ In subsequent decisions—which are not covered in detail here—the Commission determined that broadband communications services offered over cable, fiber, DSL, wireless, and other types of infrastructures were appropriately classified as information services, not telecommunications services, and thus exempt from common carrier regulation.⁹⁶

B. Net Neutrality and the FCC's Role in the “Internet Ecosystem”

On February 26, 2015, the FCC adopted an Order establishing “net neutrality” regulations (“2015 Order”).⁹⁷ The new rules prohibit Internet service providers (“ISPs”) from blocking or throttling Internet traffic and from engaging in “paid prioritization” (i.e., accepting compensation to manage their networks in a way that benefits particular content, applications, services, or devices).⁹⁸ In addition to these “bright-line” rules, the Commission also put in place a “catch-all” standard banning ISPs from “unreasonably” interfering with or disadvantaging either an end user’s ability to reach lawful Internet content or an edge provider’s ability to make such content available to consumers.⁹⁹ The Commission based its new rules on two primary sources of authority: Section 706 of the Communications Act, which

common carriers the option of nonstructural (accounting) separation rather than structural separation. See *Computer III*, 104 F.C.C. 2d 958, 999 (1986).

⁹⁴ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56; see NUECHTERLEIN & WEISER, *supra* note 86, at 190 (“The 1996 Act codifies the distinction between basic and enhanced services with different but essentially synonymous terms. . . . For all relevant purposes, the term *telecommunications* means a basic service; *telecommunications service* means a basic service offered at common carriage; and *information service* means an enhanced service.”(footnote omitted)).

⁹⁵ See NUECHTERLEIN & WEISER, *supra* note 86 (“The origins of the government’s deregulatory approach to information services go back to the *Computer Inquiries*.”); see also Hurwitz, *supra* note 78.

⁹⁶ For a discussion of and references to the relevant proceedings, see *In re Preserving the Open Internet*, Notice of Proposed Rulemaking ¶ 26, GN Docket No. 09-191, (F.C.C. Oct. 22, 2009), https://apps.fcc.gov/edocs_public/attachmatch/FCC-09-93A1.pdf.

⁹⁷ See *In re Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, GN Docket No. 14-28 (Mar. 12, 2015) [hereinafter 2015 Order], https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-24A1.pdf.

⁹⁸ *Id.* ¶¶ 14–18.

⁹⁹ *Id.* ¶¶ 20–22.

(as discussed below) has been interpreted to provide the Commission with broad authority to take steps to encourage broadband deployment,¹⁰⁰ and Title II of the Communications Act, which applies to common carriers. The Commission has declared broadband Internet access to be a telecommunications service subject to Title II regulation.¹⁰¹

As a preliminary matter, it is worth noting that although the D.C. Circuit refused to suspend the 2015 Order on June 11, 2015—thus paving the way for the rules' implementation—the lawsuit challenging the rules remains pending.¹⁰² The court granted the request of the Appellants and FCC to “fast track” the case to obtain a final ruling as soon as possible.¹⁰³ Nevertheless, this process may take two or more years to resolve.¹⁰⁴ Also worth noting is that members of Congress, including Representatives Greg Walden and Fred Upton and Senator John Thune, have indicated plans to introduce legislation that would overturn the FCC's rules while putting in place new statutory authority for the Commission to enforce rules designed to accomplish the main regulatory objectives associated with net neutrality.¹⁰⁵ Thus, it is not clear that the 2015 Order brings closure to the decade-old net neutrality saga.

In any case, this Essay's purpose is not to present a full discussion of the merits of the new rules, but rather to assess their likely implications for the FTC's role vis-à-vis information technology markets absent legislative changes. In that context, this Essay offers three observations. First, the FCC's vision of the appropriate bounds of its oversight of the IT sector has expanded significantly from the days of the *Computer Inquiries* and now extends to the broader “Internet ecosystem,” i.e., to the markets for Internet applications, content, and

¹⁰⁰ *Id.* ¶¶ 275–82.

¹⁰¹ *Id.* ¶¶ 283–84. The Commission also chose to forbear to enforce many of the provisions of Title II. *See id.* ¶¶ 434–542.

¹⁰² Order at 1, *U.S. Telecom Ass'n v. FCC*, No. 15-1063 (D.C. Cir. June 11, 2015), https://apps.fcc.gov/edocs_public/attachmatch/DOC-333881A1.pdf.

¹⁰³ *Id.* at 2.

¹⁰⁴ *See* Thomas Gryta, *Net Neutrality Rules to Go Into Effect as Appeals Court Denies Stay*, WALL ST. J. (June 11, 2015, 5:11 PM), <http://www.wsj.com/articles/new-net-neutrality-rules-to-go-into-effect-as-appeals-court-denies-stay-1434056590>. The FCC's previous net neutrality order, issued in May 2010, was overturned by the D.C. Circuit in December 2014. *See Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014).

¹⁰⁵ *See, e.g., Protecting the Internet and Consumers Through Congressional Action: Hearing Before the H. Subcomm. on Commc'ns & Tech. of the H. Comm. on Energy and Commerce*, 114th Cong. Preliminary Transcript 1–14 (2015), <http://energycommerce.house.gov/hearing/protecting-the-internet-and-consumers-through-congressional-action>.

devices. Second, the prophylactic, ex ante approach to regulatory intervention favored by the FCC has the potential to obviate traditional competition enforcement by the FTC, not only as a legal matter, but also on practical grounds. Third, the potential limiting effects on the FTC's jurisdiction go beyond antitrust and may impact its consumer-protection mission as well.

The breadth of the FCC's net neutrality agenda has from the beginning extended beyond communication services to the broader markets that comprise the Internet ecosystem. Indeed, the FCC's 2005 *Internet Policy Statement*—in which the Commission first embraced concepts of net neutrality—declared that “consumers are entitled to competition among network providers, application and service providers, and content providers” and suggested it was the Commission's duty to “foster creation, adoption and use of Internet broadband content, applications, services and attachments.”¹⁰⁶

The intellectual foundation for this interpretation arises in part from the concept of “virtuous cycles”—the idea that the innovation that characterizes Internet markets flows from synergies among its various components. As the Commission explained in its 2014 Notice of Proposed Rulemaking, its regulatory objective is to prevent conduct that could “slow or even break the virtuous circle—chilling entry and innovation by edge providers, impeding competition in many sectors, dampening consumer demand, and deterring broadband deployment—in ways that may be irreversible or very costly to undo.”¹⁰⁷ The same expansive approach has characterized the Commission's most recent reports on competition in the market for mobile wireless services, which take an “expanded” view of the “mobile wireless ecosystem.”¹⁰⁸

The FCC's 2010 Open Internet Order embraced this view of the need for net neutrality regulation and on that basis imposed an open-access mandate on ISPs, prohibiting them from refusing interconnection with edge providers (“blocking”) or charging them for delivering traffic (“discriminating”).¹⁰⁹ In its January 2014 decision¹¹⁰ overturn-

¹⁰⁶ *In re* Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, 20 F.C.C.R. 14,986, 14,988 (2005) [hereinafter *Internet Policy Statement*].

¹⁰⁷ Protecting and Promoting the Open Internet, 79 Fed. Reg. 37,448, 37,451 (July 1, 2014) [hereinafter 2014 NPRM]; see also 2015 Order, *supra* note 97, ¶¶ 20, 81–83.

¹⁰⁸ See *In re* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993: Seventeenth Report at 5, WT Docket No. 13-135 (Dec. 18, 2014) (stating that the FCC's analysis is “founded upon an expanded view of the mobile wireless services marketplace and an examination of competition across the entire mobile wireless ecosystem”).

¹⁰⁹ *In re* Preserving the Open Internet, 25 F.C.C.R. 17,905, 17,906 (2010).

ing the 2010 Order (on the grounds that the Commission had relied improperly on its “ancillary” authority under Title I of the Communications Act), the United States Court of Appeals for the District of Columbia Circuit embraced the Commission’s underlying “virtuous cycle” rationale, concluding the Commission’s emphasis on a “connection between edge-provider innovation and infrastructure development is uncontroversial.”¹¹¹

Further, the court advanced an alternative basis for net neutrality regulation, Section 706 of the Telecommunications Act, which empowers the Commission, upon a finding that broadband deployment is not proceeding at a “reasonable and timely” pace, to take actions to “promote competition in the local telecommunications market” or “remove barriers to infrastructure investment.”¹¹² Specifically, the majority opinion found:

[The Commission’s Section 706] authority to promulgate regulations that promote broadband deployment encompasses the power to regulate broadband providers’ economic relationships with edge providers if, in fact, the nature of those relationships influences the rate and extent to which broadband providers develop and expand their services for end users.¹¹³

What remains unclear is precisely how far this authority extends. In his dissent, Judge Silberman argued the court’s interpretation gives the FCC “carte blanche to issue any regulation that the Commission might believe to be in the public interest” and declared the effect was to create “a new statute granting the FCC virtually unlimited power to regulate the Internet.”¹¹⁴

Further, as noted above, the 2015 Order also invokes the Commission’s Title II authority to apply common carriage regulation to telecommunications services. The *Order* includes language limiting the reach of the Open Internet rules to retail offerings of broadband ISPs,¹¹⁵ but at the same time invokes key provisions of its Title II authority that may empower it to mediate disputes between ISPs, on the one hand, and edge providers, on the other hand, on a case-by-case basis—potentially effectively bringing edge providers under the Com-

¹¹⁰ See *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014).

¹¹¹ *Id.* at 644.

¹¹² *Id.* at 635.

¹¹³ *Id.* at 643 (citations omitted).

¹¹⁴ *Id.* at 662 (Silberman, J., concurring in part and dissenting in part).

¹¹⁵ 2015 Order, *supra* note 97, ¶¶ 186–224.

mission's purview as a de facto matter.¹¹⁶ Thus, in a practical sense, it seems difficult to predict how far into the Internet ecosystem the new rules will ultimately reach.

Our second observation regarding the impact of the FCC's growing role in IT markets is that it could limit the potential scope of competition enforcement by the FTC. Simply put, to the extent ex ante regulation by the FCC simply extinguishes broad categories of potentially anticompetitive conduct, it would seem that there is little remaining residual enforcement role for the FTC's case-by-case approach.

Our third observation relates to the effects of net neutrality on the FTC's broader activities in the IT sector. By declaring broadband to be a Title II service, the 2015 Order implicates the "common carrier exemption," which exempts such companies from the FTC Act.¹¹⁷ Thus, the 2015 Order would arguably preclude future FTC involvement in cases like the AT&T throttling matter discussed above.¹¹⁸ Although the exemption does not apply to other (non-common-carrier) services, even if offered by common carriers,¹¹⁹ or to the FTC's authority under statutes other than the FTC Act, at a minimum the synergies associated with combining antitrust and consumer-protection enforcement in a single agency could be lost to the extent that the FTC is precluded from pursuing consumer-protection actions against broadband providers.¹²⁰

¹¹⁶ *Id.* ¶¶ 193, 202–06.

¹¹⁷ See 15 U.S.C. § 45(a)(2) (2012) (exempting "common carriers subject to the Acts to regulate commerce" from FTC actions to prevent unfair methods of competition); 15 U.S.C. § 44 (defining the "Acts to regulate commerce" as "subtitle IV of title 49 [regulating interstate transportation] and the Communications Act of 1934" and all amendments thereto).

¹¹⁸ See *supra* notes 68–70 and accompanying text. Former FTC Chairman William Kovacic testified before Congress on behalf of the Commission in 2008 in favor of repealing the common carrier exemption. See *Federal Trade Commission Reauthorization Hearing Before the S. Comm. on Commerce, Sci., and Transp.*, 110th Cong. 19 (2008) (prepared statement of William Kovacic, Chairman, Fed. Trade Comm'n). In March 2015, the U.S. District Court for the Northern District of California denied an AT&T Mobility motion to dismiss the FTC's throttling suit, noting that the 2015 Order applied only prospectively and thus did not prevent the FTC from challenging AT&T's prior conduct. See *FTC v. AT&T Mobility LLC*, 87 F. Supp. 3d 1087 (N.D. Cal. 2015).

¹¹⁹ See *FTC v. Verity Int'l, Ltd.*, 443 F.3d 48, 59–60 & n.4 (2d Cir. 2006).

¹²⁰ Subsequently, the FCC levied a \$100 million fine against AT&T Mobility for essentially the same conduct that prompted the FTC's action. See Press Release, Fed. Comm'n's Comm'n, *FCC Plans to Fine AT&T \$100 Million for Misleading Consumers About Unlimited Data Plans, Violating Transparency Obligations* (June 17, 2015), <https://www.fcc.gov/document/att-mobility-faces-100m-fine-misleading-consumers>. However, the FTC's consumer-protection authority is distinct from and in at least some respects superior to the FCC's. For example, the FTC's authority includes the ability to order consumer redress as opposed to simply levying fines that go

In her recent writings, FTC Commissioner Maureen Ohlhausen has referred to the principle of regulatory humility.¹²¹ Commissioner Ohlhausen and the Commission have maintained this approach in IT markets for many years. In its 2007 report on broadband connectivity and competition policy—written by a task force led by Ohlhausen, who was then Director of the Commission’s Office of Policy Planning—the Commission urged “proceeding with caution”:

The FTC’s Internet Access Task Force has conducted a broad examination of the technical, legal, and economic issues underpinning the debate surrounding broadband connectivity competition policy. . . . We have provided an explanation of the conduct that the antitrust and consumer protection laws already proscribe and a framework for analyzing which conduct may foster or impede competition in particular circumstances. In evaluating whether new prescriptions are necessary, we advise proceeding with caution before enacting broad, ex ante restrictions in an unsettled, dynamic environment. . . .

Industry-wide regulatory schemes?particularly those imposing general, one-size-fits-all restraints on business conduct?may well have adverse effects on consumer welfare, despite the good intentions of their proponents. Even if regulation does not have adverse effects on consumer welfare in the short term, it may nonetheless be welfare-reducing in the long term, particularly in terms of product and service innovation. Further, such regulatory schemes inevitably will have unintended consequences, some of which may not be known until far into the future. Once a regulatory regime is in place, moreover, it may be difficult or impossible to undo its effects.¹²²

By and large, the FTC—at least in recent years—has abided by these principles of regulatory humility, weighing the benefits of its actions against the costs, acknowledging the potential that regulatory overreach will violate a public policy version of the Hippocratic Oath, “first, do no harm.” While the net effects of the FCC’s new rules may be difficult to predict, it is reasonable to be concerned that they will

to the U.S. Treasury. *See Wrecking the Internet to Save It? The FCC’s Net Neutrality Rule Hearing Before the H. Comm. on the Judiciary*, 114th Cong. 37–38 (2015) (prepared statement of Joshua D. Wright, Comm’r, Fed. Trade Comm’n).

¹²¹ See, e.g., Maureen K. Ohlhausen, *The Procrustean Problem with Prescriptive Regulation*, 23 COMM’LAW CONSP’CTUS 1, 3 (2014).

¹²² FED. TRADE COMM’N, BROADBAND CONNECTIVITY COMPETITION POLICY 9, 11 (2007).

diminish the FTC's ability to protect competition and consumers in IT markets.

CONCLUSION

The FTC has long embraced a consumer welfare-focused approach to competition policy, supported by empirical research, conducted through case-by-case enforcement, and moderated by the courts. As academics and practitioners alike work to devise reliable doctrines for balancing the benefits of intervention in information technology markets against the costs, the FTC has sought to find a middle ground and has succeeded more often than not. For those who accept the principles of modern competition doctrine, the FCC's expanded role in IT markets and the potential for the FCC's rules to limit the FTC's efforts are cause for serious concern. Congress or the courts should rectify this potential (and, we believe, unintended) outcome, permitting the FTC and FCC to work together to strike the appropriate balance between regulation and enforcement as IT markets evolve over time.