



August 20, 2018

**Comments of News Corp  
to the Federal Trade Commission**

*Re: Hearings on Competition and Consumer Protection in the 21st Century*

**I. Introduction**

News Corp appreciates having the opportunity to submit these comments to the Commission in preparation for the upcoming Hearings on Competition and Consumer Protection in the 21st Century. There has never been a more vital time for the Commission to step back and take stock of what is happening in the tech industry. The world has changed remarkably since the Commission first held hearings on this topic in 1995 (the “Pitofsky Hearings”), both in terms of how the tech sector operates and in terms of our understanding of the industry. It is thus an opportune time for the Commission to reexamine whether it is on the right track for fulfilling its antitrust and consumer protection missions.

As a global diversified media and information services company—comprised of businesses that include, among others, news and information services, book publishing, and digital real estate services—News Corp has a strong interest in the protection and preservation of competition in an age of digital media. The rise of modern tech platforms has brought with it enormous benefits to consumers—including unprecedented access to news and information from a vast array of sources. Unfortunately, the same market dynamics that have allowed such benefits to flourish have also created opportunities for exploitation and abuse by monopoly firms. The separate comments submitted by News Corp subsidiaries Dow Jones & Company and Harper Collins Publishers, LLC address these issues in the context of their respective publishing sectors. In the balance of this submission, we focus on the news industry.

The news industry is far from the only industry that is under threat as a result of anticompetitive conduct in the new economy. It is, however, one of the most consequential. In other industries, abusive conduct by a platform might cause consumers to suffer from the loss or degradation of a useful or entertaining service. But in the case of news, consumers are losing access to critically important information.

The news media is responsible for connecting people to the most up-to-the-minute information about their world. We also give citizens a way to oversee the choices and actions of those in power, both in government and in the private sphere. This oversight plays a critical role in a functioning democracy. Without it, the people would be easily manipulated by those in positions of authority. The news media is thus worth protecting, not merely because it is an

industry that produces content consumers value, but because it is a vital component of our democratic system.<sup>1</sup>

The Commission has solicited public comment on 11 topics addressing technology and the modern economy, in advance of the Hearings. In this submission, we identify several specific questions which we urge the Commission to consider in the course of those Hearings. We believe that addressing these questions will help to illuminate critical issues going to the heart of the Commission's ability to fulfill its antitrust and consumer protection missions in the digital age. Specifically, we ask the Commission to consider:

- What different kinds of platforms are there, and what are the implications of those differences for antitrust enforcement and consumer protection?
- How can antitrust enforcers look beyond price and output to identify anticompetitive effects?
- How should antitrust enforcers address harm to innovation?
- What presumptions are appropriate when assessing platform markets?
- What is the role of data as a barrier to entry?
- What is the impact of data on competition?
- What is the importance of algorithm transparency on competition and consumer protection?

Below, we discuss each of these questions in more detail and explain why we believe they are worthy of consideration. As background, we also identify certain key developments in competition enforcement since the Pitofsky Hearings and highlight some limitations in the ability of conventional antitrust analysis to identify and address novel antitrust and consumer protection issues in the modern digital economy.

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<sup>1</sup> As Professor Robert Pitofsky argued, the antitrust laws have traditionally been understood by Congress and the courts to address political considerations emanating from concentration and monopoly power, not just economic considerations. Those political considerations include “the fear that excessive concentration of economic power will foster antidemocratic political pressures.” Robert Pitofsky, *The Political Content of Antitrust*, 127 U. PENN. L.R. 1051, 1075 (1979). The control of news distribution by a small clique of tech corporations poses just such a risk.

## II. Key Developments Involving Antitrust Enforcement and Tech Markets

Three of the most consequential developments involving the intersection of tech and antitrust that have occurred since the Pitofsky Hearings have been: (1) the DOJ's successful challenge of Microsoft for Sherman Act Section 2 violations; (2) a series of decisions by the FTC not to challenge acquisitions by Google of key online advertising technologies; and (3) the FTC's decision not to challenge Google's search manipulation practices. We discuss the significance of each briefly below.

**The Microsoft Case.** In 2001, the DOJ succeeded in pursuing claims against Microsoft based on alleged anticompetitive behavior relating to the design and distribution of its Windows operating system. The D.C. Circuit's decision set several positive precedents with respect to the enforcement of the antitrust laws in the context of high-tech industries. The most important of these may have been that when a monopolist targets nascent competitive threats, courts may infer an anticompetitive effect without the plaintiff having to prove that the nascent rival would have matured into a full-blown, effective competitor. Specifically, the court held: "To require that § 2 liability turn on a plaintiff's ability or inability to reconstruct the hypothetical marketplace absent a defendant's anticompetitive conduct would only encourage monopolists to take more and earlier anticompetitive action."<sup>2</sup> The ruling also set a precedent for holding a monopolist in one market liable for conduct that impacts an adjacent market in ways that ultimately reinforce the defendant's primary monopoly position in its home market.

The DOJ's case centered on the fact that Microsoft sought to preserve the barriers to entry that it enjoyed due to, among other things, network effects in the operating system market. Central to the case was the allegation that Microsoft had impermissibly maintained its monopoly power, including "[t]echnologically binding" the code of the Internet Explorer and Windows.<sup>3</sup> The court found these arrangements to insulate Microsoft's monopoly by sustaining the "applications barrier to entry" and suffocating nascent competitive threats in the form of disruptive middleware software. The court also held actionable Microsoft's exclusive dealing arrangements aimed at promoting its alternative to the cross-platform Java language, as well as certain other deceptive and coercive conduct.<sup>4</sup>

In short, the *Microsoft* case demonstrated that the tools of traditional antitrust enforcement and analysis are flexible enough to be adapted for tech markets in which competition (and its suppression) may not take immediately familiar forms. Subsequent to

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<sup>2</sup> *United States v. Microsoft Corp.*, 253 F.3d 34, 79 (D.C. Cir. 2001).

<sup>3</sup> *Id.* at 64.

<sup>4</sup> *Id.* at 77-78. The court found other related conduct not actionable, largely because plaintiffs had not rebutted Microsoft's justifications or shown an effect on competition. *Id.* at 84.

*Microsoft*, however, antitrust authorities have declined to bring enforcement actions in situations that presented similar threats to nascent competition.

**Ad Tech Acquisitions.** In 2007, Google announced its intent to acquire DoubleClick, the leading provider of advertising technology (“ad tech”) that intermediates the sale of advertising inventory by website publishers to online advertisers. Opponents of the deal raised several objections, including that it would eliminate both direct and potential competition between the companies and that Google would be able to leverage its leading position in third-party ad serving to its advantage in the ad intermediation market.<sup>5</sup> The Commission rejected these arguments, in part based on a belief that restrictions in DoubleClick’s contracts would prevent publishers’ competitively sensitive data from passing to Google.<sup>6</sup> The Commission also found that, even if Google had access to such data, Google would be unable to use it to undermine rivals.<sup>7</sup> Finally, the Commission pointed to entry by significant competitors—Microsoft, Yahoo!, and Time Warner.<sup>8</sup> On these bases, the Commission approved the deal.<sup>9</sup>

In hindsight, however, the market did not develop as the Commission expected it might. Today, Google can use data gathered through DoubleClick across its advertising services.<sup>10</sup> There have also been several allegations that Google is manipulating DoubleClick to favor its own ad intermediation services in ways that the Commission suggested would be impossible.<sup>11</sup> Many have also argued that Google’s data advantage has crystallized DoubleClick’s dominant position in the ad-serving and ad exchange markets.<sup>12</sup> And the rivals identified by the FTC in its

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<sup>5</sup> See U.S. Fed. Trade Comm’n, Statement of the Federal Trade Commission Concerning Google/DoubleClick 11 (Dec. 11, 2007), [https://www.ftc.gov/system/files/documents/public\\_statements/418081/071220googledc-commstmt.pdf](https://www.ftc.gov/system/files/documents/public_statements/418081/071220googledc-commstmt.pdf) [hereinafter FTC Google/DoubleClick Statement] (“We also carefully reviewed whether Google was likely to manipulate DoubleClick’s products to its advantage in the ad intermediation market and thereby diminish the competitiveness of other ad intermediation companies.”).

<sup>6</sup> *Id.* at 12 (“Restrictions in DoubleClick’s contracts with its customers, which those customers insisted on, protect that information from disclosure, and we understand that Google has committed to the sanctity of those contracts.”).

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> Note, however, that two commissioners opposed approving the deal. See, e.g., U.S. Fed. Trade Comm’n, Dissenting Statement of Commissioner Pamela Jones Harbour (Dec. 11, 2007).

<sup>10</sup> Julia Angwin, *Google Has Quietly Dropped Ban on Personally Identifiable Web Tracking*, PROPUBLICA (Oct. 21, 2016), <https://www.propublica.org/article/google-has-quietly-dropped-ban-on-personally-identifiable-web-tracking> (“for nearly a decade, Google did in fact keep DoubleClick’s massive database of web-browsing records separate by default from the names and other personally identifiable information.... But this summer, Google quietly erased that last privacy line in the sand”).

<sup>11</sup> Google/DoubleClick Statement at 12 (“If any manipulation were discovered, the impartiality of DoubleClick’s ad serving products would be compromised and it (and Google) would likely be punished in the marketplace.”).

<sup>12</sup> Mathew Ingram, *How Google and Facebook Have Taken Over the Digital Ad Industry*, Fortune (Jan. 4, 2017), <http://fortune.com/2017/01/04/google-facebook-ad-industry/> (“Data on users and their preferences and behavior

clearance decision—Microsoft, Yahoo!, and Time Warner—do not compete to any significant extent in ad tech.<sup>13</sup>

Google subsequently acquired other ad tech companies, including AdMob (the leading mobile ad network) and Invite Media (the leading demand-side platform) in 2010, and AdMeld (the world’s leading supply-side platform) in 2011. In each case, the Commission once again dismissed warnings from industry participants about anticompetitive effects that would result from the acquisition. For example, in approving the AdMob acquisition, the Commission rejected arguments that the deal would make Google a monopolist in mobile ad intermediation, arguing that “Apple quickly will become a strong mobile advertising network competitor.”<sup>14</sup> Apple, however, has since effectively exited the mobile ad intermediation business, and more than 83% of Android mobile apps now use AdMob to sell their advertising inventory.<sup>15</sup>

Google’s acquisitions have thus re-shaped the ad tech landscape, and have done so in ways that appear to be contrary to what the Commission expected or intended in approving the transactions.

**Google Search Investigation.** Between 2011 and 2012, the Commission investigated allegations that Google was manipulating its search results in order to favor links to its own vertically-integrated properties. The FTC staff also investigated at least three other categories of alleged misconduct, including allegations that Google “scraped” content from rivals for display on its own site, allegations that it eroded rivals’ access to its search advertising tools, and allegations that it reached exclusionary search syndication deals.<sup>16</sup>

The FTC ultimately decided not to sue Google for violation of the antitrust laws. Instead, the Commission accepted voluntary commitments from Google to stop certain scraping practices (which Google had already ceased). In 2015, however, it was revealed that the investigating

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is the Holy Grail for most advertisers, and the reality is that Google and Facebook have orders of magnitude more data than their nearest competitors”).

<sup>13</sup> See, e.g., Lara O’Reilly, *Data on users and their preferences and behavior is the Holy Grail for most advertisers, and the reality is that Google and Facebook have orders of magnitude more data than their nearest competitors*, BUSINESS INSIDER (June 30, 2015) <https://www.businessinsider.com/why-microsoft-is-exiting-the-display-advertising-business-2015-6>; Michelle Castillo, *Inside Yahoo’s troubled advertising business*, CNBC (Jan. 7, 2016), <https://www.businessinsider.com/why-microsoft-is-exiting-the-display-advertising-business-2015-6>.

<sup>14</sup> U.S. Fed. Trade Comm’n, Statement of the Commission Concerning Google/AdMob 1 (May 21, 2010), [https://www.ftc.gov/sites/default/files/documents/closing\\_letters/google-inc./admob-inc/100521google-admobstmt.pdf](https://www.ftc.gov/sites/default/files/documents/closing_letters/google-inc./admob-inc/100521google-admobstmt.pdf).

<sup>15</sup> Mobbo, *The State of Mobile Monetization – February 2017* (Feb. 2017), <https://mobbo.com/whitepaper-monetization/>.

<sup>16</sup> U.S. Fed. Trade Comm’n, Memorandum from the Staff regarding the investigation of Google Inc. 126 n.102 (Aug. 8, 2012) (available at *The FTC Report on Google Business Practices*, WALL ST. J., (Mar. 24, 2015), <http://graphics.wsj.com/google-ftc-report/>) [hereinafter FTC Staff Memo].

staff had found significant evidence of anticompetitive effects that enhanced Google’s monopoly power:

[E]vidence paints a complex portrait of a company working toward an overall goal of maintaining its market share by providing the best user experience, while simultaneously engaging in tactics that resulted in harm to many vertical competitors, and likely helped to entrench Google’s monopoly power over search and search advertising.<sup>17</sup>

Nevertheless, the Commission closed its investigation. Since that time, Google’s position in the search market has grown significantly. In 2012, the FTC staff concluded that Google controlled approximately 71% of the U.S. search market.<sup>18</sup> Today, Google controls 87% of the market.<sup>19</sup> Moreover, studies have been conducted since the Commission’s decision demonstrating that Google’s search practices—which Google claimed benefited the user experience—actually reduce social welfare by “leaving consumers with lower quality results and worse matches.”<sup>20</sup>

Since the FTC’s decision, other jurisdictions have been especially active in bringing enforcement actions directed toward Google’s search practices. For example, in just the past two years, the European Commission’s Directorate of Competition has leveled over €6.5 billion in fines against Google for antitrust violations relating to search manipulation and abuses involving its Android mobile operating system.<sup>21</sup>

We believe that the upcoming Hearings present a valuable opportunity for the Commission and the public to reflect on these and other milestones in the last two decades of antitrust enforcement, and to consider whether the Commission today has the appropriate set of tools at its disposal to detect anticompetitive conduct in high-tech markets and remedy its effects.

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<sup>17</sup> *Id.* at 86.

<sup>18</sup> *Id.* at 68.

<sup>19</sup> StatCounter, *Search Engine Market Share United States of America: Jan 2009 – June 2018* (last accessed July 10, 2018), <http://gs.statcounter.com/search-engine-market-share/all/united-states-of-america#monthly-200901-201806>.

<sup>20</sup> Michael Luca et al., *Is Google degrading search? Consumer Harm from Universal Search* 1 (2015), <https://www.law.berkeley.edu/wp-content/uploads/2015/04/Luca-Wu-Yelp-Is-Google-Degrading-Search-2015.pdf>.

<sup>21</sup> European Comm’n, *Press Release: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google’s search engine* (July 18, 2018), [http://europa.eu/rapid/press-release\\_IP-18-4581\\_en.htm](http://europa.eu/rapid/press-release_IP-18-4581_en.htm); European Comm’n, *Press Release: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service* (June 27, 2017), [http://europa.eu/rapid/press-release\\_IP-17-1784\\_en.htm](http://europa.eu/rapid/press-release_IP-17-1784_en.htm).

### **III. Understanding Differences between Platforms and the Implications for Antitrust Enforcement and Consumer Protection**

One specific topic that the Commission has identified for comment pertains to the identification and measurement of market power and entry barriers, and the evaluation of conduct that harms competition or consumers, in markets featuring “platform” businesses (Topic 3). It is now widely recognized that the rise of digital platforms can present special issues and challenges for antitrust and consumer protection enforcement.<sup>22</sup> Platforms, however, are not monolithic. They come in many different forms, which can create different competitive dynamics. As a result, there is no one-size-fits-all approach for analyzing the conduct of platforms from an antitrust or consumer protection perspective. And overly broad legal or economic presumptions about the procompetitive benefits, or anticompetitive harms, caused by platforms can lead to erroneous results. We therefore urge the Commission in its hearings to examine the different roles that platforms can play in our digital economy and to consider how those different roles may warrant different enforcement approaches.

“There is no consensus on exactly what constitutes a digital platform.”<sup>23</sup> Most definitions of platforms, however, focus on what is essentially a “matchmaking” function. For example: “A platform is a business based on enabling value-creating interactions between external producers and consumers. . . . The platform’s overarching purpose: to consummate matches among users and facilitate the exchange of goods, services, or social currency, thereby enabling value creation for all participants.”<sup>24</sup>

Platforms can include a wide range of different types of products that intermediate between groups of consumers and producers. Examples of platforms that fit broadly within the definitions given above may include “devices (e.g., phones and tablets), software (e.g., operating systems and browsers), and services (e.g., search engines, social networks, and e-commerce sites).”<sup>25</sup>

When platforms play a pure matchmaking function, they can provide extraordinary benefits for consumers and competition. At the most basic level, a matchmaking platform is

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<sup>22</sup> See generally, e.g., Howard A. Shelanski, *Information, Innovation, and Competition Policy for the Internet*, 161 U. PA. L.R. 1663 (2013); Susan Athey, et al., *The Impact of Aggregators on Internet News Consumption 3* (Working Paper, 2017), <https://pdfs.semanticscholar.org/27e4/6dfcfbce75660b39462cccff62328d0ede5.pdf>.

<sup>23</sup> Shelanski, *supra* note 21, at 1665.

<sup>24</sup> GEOFFREY G. PARKER, ET AL., PLATFORM REVOLUTION: HOW NETWORKED MARKETS ARE TRANSFORMING THE ECONOMY - AND HOW TO MAKE THEM WORK FOR YOU 5 (2016); see also Shelanski, *supra* note 22, at 1665 (“I will define digital platforms as products or services through which end users and a wide variety of complementary products, services, or information (‘applications’) can interact.”).

<sup>25</sup> Shelanski, *supra* note 22, at 1666.

“mainly about selling one group of customers, like restaurants with spare tables, access to another group of customers, like people who want to go out to eat.”<sup>26</sup>

Platforms playing a matchmaking function can enhance competition and benefit all participants on the platform. They can, for example, reduce transaction costs by making it easier for users to find relevant goods, services, or information, or for producers to find new customers.<sup>27</sup> Such platforms, moreover, can “serve as ‘enablers’ of innovation by providing common interfaces through which entrepreneurs can connect their complementary products to critical masses of consumers.”<sup>28</sup> Microsoft Windows, for example, has been described as a platform that “made it far easier for a new firm (like Netscape) to reach millions of customers with a single product, without having to write its own operating system or its own tools.”<sup>29</sup> Today, a mobile app developer can bring an innovative product to market “with just a few programmers. The developer may have to do some separate coding for Android, Apple, and Windows, but doesn’t have to write his [or her] own operating system or manufacture a physical phone. The platform, we might say, allows radically non-integrated firms to succeed.”<sup>30</sup>

At the same time, however, the structural features of platform markets (including, among other things, the presence of strong network effects) can increase or solidify barriers to entry and lead to more entrenched and durable market power. In addition, a dominant platform can act as a “bottleneck monopolist” and thereby restrict competition in a wide range of different markets: “While a typical monopolist controls access to its own products and services, a typical bottleneck monopolist both controls access to its own service and can affect access to some number of other products and services.”<sup>31</sup> These dynamics can offset or even overwhelm the welfare benefits typically associated with platforms. For example, while a platform fulfilling its traditional matchmaking function can serve as an “enabler” of innovation as described above, a monopolistic platform can acquire both the incentive and the ability to squelch innovation—especially “over-the-top” innovation that threatens to circumvent the bottleneck—to preserve its own monopoly position.

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<sup>26</sup> David Slocum, *5 Questions With David S. Evans and Richard Schmalensee On Matchmaking*, FORBES (May 25, 2016), <https://www.forbes.com/sites/berlinschoolofcreativeleadership/2016/05/25/5-questions-with-david-s-evans-and-richard-schmalensee-on-matchmaking/> (May 25, 2016).

<sup>27</sup> See, e.g., Athey, *supra* note 22, at 3 (observing that platform intermediaries can “make it easier for consumers to search and consumer products from small firms, increasing competition across publishers for consumer attention. We have seen similar effects in other technology-enabled intermediaries, such as eBay, Uber, AirBnB, and travel and price comparison sites, where the technology platform reduces search costs and enable smaller firms that may lack name recognition or reputation to be discovered by consumers.”).

<sup>28</sup> Shelanski, *supra* note 22, at 1666.

<sup>29</sup> Tim Wu, *Taking Innovation Seriously: Antitrust Enforcement If Innovation Mattered Most*, 78 ANTITRUST L.J. 313, 321 (2012).

<sup>30</sup> *Id.* at 321-22.

<sup>31</sup> Shelanski, *supra* note 22, at 1676.

The antitrust and consumer protection risks associated with monopolistic platforms increase significantly the farther platforms migrate away from a pure matchmaking function. For example, platforms that vertically integrate develop mixed motivations—or conflicts of interest—that affect the balance of benefits and harms. On the one hand, the vertically-integrated platform acting as matchmaker may have the incentive to facilitate connections and increase access to a wide range of products and services, resulting in benefits to competition and consumers. On the other hand, the same platform may have the incentive to leverage its role as intermediary to favor its own vertically-integrated products and services over those of its competitors, and competition and consumers may suffer as a result (especially in an environment where one or two platforms are dominant and act as bottlenecks). This incentive to favor a vertically-integrated product or service can become particularly acute where the platform’s opportunities for revenues and earnings are greater in the vertical market, and extracting those economic benefits does not risk undermining the platform’s dominance in its home market, which is commonly based in part on giving its consumer-facing product away for free or at a highly subsidized cost.

These kinds of conflicts of interest have given rise to numerous complaints against large-scale platforms in recent years—including, for example, the complaints at issue in the Commission’s 2012 investigation of Google’s search practices. There, it was alleged that “[w]hile Google embarked on a multi-year strategy of developing and showcasing its own vertical properties, Google simultaneously adopted a strategy of demoting, or refusing to display, links to certain vertical websites in highly commercial categories.”<sup>32</sup> Several major competitors to Google’s vertical properties complained “that Google’s practice of preferencing its own vertical results over the complainants’ websites on Google’s search page has negatively impacted the complainants’ ability to compete for users and advertisers.”<sup>33</sup> Setting aside the merits of these particular complaints, they are illustrative of the issues of platforms that simultaneously act as matchmakers and also compete with vertical businesses that, because of the platform’s dominance, depend on the platform’s matchmaking function. As discussed further below, in Part IV, such issues may warrant a re-thinking of certain presumptions baked into traditional antitrust analysis—such as the presumption that vertical integration produces procompetitive efficiencies—when evaluating certain types of platform businesses.

Similar kinds of concerns present themselves when platforms act as “news aggregators”—another role that strays from the pure matchmaking function. As discussed further in the separate comment submitted by Dow Jones, a News Corp subsidiary, news aggregators do not produce their own journalistic content, but collect and curate content produced by others—often presenting it in ways that compete for user attention with the original sources of the content (*i.e.*, news publishers) themselves. “[N]ews aggregators act in dual roles:

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<sup>32</sup> FTC Staff Memo, *supra* note 16, at 28.

<sup>33</sup> *Id.* at 6.

their front pages look very similar to news outlets who produce original content, and thus may be a substitute for them; yet they also aggregate a wide range of sources, and may be an effective mechanism for search and discovery, which places it in the role of an upstream complement to the outlets who produce the news.”<sup>34</sup> Thus, while such aggregators may play some matchmaking role, they also simultaneously function as “attention merchants”—meaning that they seek user attention (and data) for the purpose of selling it to advertisers.<sup>35</sup> In this regard, the aggregator has an incentive to steer users to its own front page and away from that of the original publisher, which is seeking the same user attention to sell to the same advertisers.

And, because the aggregator does not produce its own content, its means of attracting user attention may take the form of what commentators have termed “forced free riding”—*i.e.*, “scraping” content or otherwise “appropriat[ing] innovation by other firms that depend on the platform for access to consumers.”<sup>36</sup> Such conduct by dominant aggregators can cause substantial harm to welfare “because the process of appropriating the developments of downstream rivals disincentivizes future downstream innovation.”<sup>37</sup> The negative welfare effects of decreased innovation are especially acute in news, given its vital role in preserving democracy, and may well outweigh any welfare benefits that flow from the platform’s matchmaking function.<sup>38</sup> As Professor Susan Athey notes, “[t]he magnitudes of these two effects, as well as the answer to more detailed questions about how aggregators affect different types of outlets and readership of different types of news, determine whether aggregators increase or decrease the returns to investment in news reporting.”<sup>39</sup>

The discussion above touches on just a few of the ways in which the different roles played by different types of platforms may affect competition and consumers. As the Commission deliberates on how to identify and evaluate market power, entry barriers, and anticompetitive conduct in “platform” businesses, we encourage it to consider how differences in the way those businesses are structured may determine the appropriate framework for evaluation. For example, in *Ohio v. American Express Co.*, the Supreme Court concluded that “transaction platforms” constituted a “special type” of multi-sided platform, which warranted a unique

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<sup>34</sup> Athey et al., *supra* note 22, at 2.

<sup>35</sup> Tim Wu, *The Attention Merchants: How Our Time and Attention Are Gathered and Sold* (2017).

<sup>36</sup> Shelanski, *supra* note 22, at 1699.

<sup>37</sup> *Id.*

<sup>38</sup> Indeed, from an antitrust perspective, it is likely inappropriate to treat news aggregators as a two-sided market at all, given the extent to which their business is driven primarily by advertisements. For example, in *Amex*, the Court reasoned that “it is not always necessary to consider both sides of a two-sided platform” because a market “should be treated as one sided when the impacts of indirect network effects and relative pricing in that market are minor.” *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2286 (2018). “[I]n the newspaper-advertisement market, the indirect networks effects operate in only one direction; newspaper readers are largely indifferent to the amount of advertising that a newspaper contains.” *Id.*

<sup>39</sup> Athey et al., *supra* note 22, at 2.

approach to product market definition.<sup>40</sup> By the same token, the same approach may not be warranted for other types of platforms, specifically firms that are not real-time transaction platforms à la American Express.<sup>41</sup> The principle that “[l]egal presumptions that rest on formalistic distinctions rather than actual market realities are generally disfavored in antitrust law,”<sup>42</sup> applies with particular force in this context.

We look forward to addressing these issues in more detail with the Commission and other participants in the course of the upcoming hearings.

#### **IV. Looking Beyond Price and Output to Measure Anticompetitive Effects**

In proposing the question of whether antitrust enforcers should look beyond price and output to identify anticompetitive effects, we encourage the Commission to examine whether, to what extent, and in what specific ways anticompetitive harm can and should be measured by reference to factors other than traditional price- and output-oriented analysis.

It is generally recognized that anticompetitive effects (necessary to support an antitrust cause of action) include, but are not limited to, “reduced output, increased prices, or decreased quality in the relevant market.”<sup>43</sup> In practice, however, regulators and courts have tended to place far more focus on price increases and output restrictions than degradations in quality or other forms of harm.<sup>44</sup> To some degree, this focus is understandable. Econometrics has played an increasingly important role in antitrust jurisprudence and enforcement over the last few decades, and price and output effects lend themselves more readily to quantification and econometric analysis.<sup>45</sup> But focusing too narrowly on price and output effects can be a manifestation of the “streetlight effect,” the observational bias that causes people to search for

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<sup>40</sup> *Amex*, 138 S. Ct. at 2277.

<sup>41</sup> *Oversight of the Fed. Trade Comm’n before the H. Comm. On Energy and Commerce Subcomm. On Digital Commerce and Consumer Protection*, 115th Cong. 2 (2018) (witness testimony of Joseph Simons, Chairman of the U.S. Fed. Trade Comm’n), <https://docs.house.gov/meetings/IF/IF17/20180718/108560/HHRG-115-IF17-Transcript-20180718.pdf> (“I think the Am Ex case is extremely narrow. I think, really, the basic crux of it is limited to situations where there’s a multi-sided platform that effectively involves a transaction where the platform is providing a service to both sides at the same time in the same way.”).

<sup>42</sup> 138 S. Ct. at 2285 (quoting *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 466-67 (1992)).

<sup>43</sup> *Id.* at 2284.

<sup>44</sup> See Shelanski, *supra* note 22, at 1670 (“Nonprice considerations are not absent from conventional antitrust analysis . . . . But such non price concerns have generally remained secondary to modern antitrust law’s primary emphasis on price effects and static efficiency.”).

<sup>45</sup> See Rebecca Haw Allensworth, *Law and the Art of Modeling: Are Models Facts?*, 103 GEO. L.J. 825, 835 (2015) (“Virtually every antitrust case involves a data-driven model used to estimate price effects of anticompetitive conduct.”).

something where it is easiest to look.<sup>46</sup> As a result, regulators may overlook or underweight very significant welfare harms that are more difficult to measure.

In a platform tech economy, the traditional price and output-centric paradigm for evaluating competitive harm may be especially limiting. Modern tech platforms often involve businesses where consumers (*i.e.*, end users) do not pay directly for the platforms' services. As a result, instead of competing on price, platforms compete in terms of innovation and/or the quality of the user experience they can deliver.<sup>47</sup> On the flip side, when competition in a platform market dries up, harm is much more likely to take the form of quality degradations (or reduced innovation<sup>48</sup>) and harm to the competitive process on other sides of the platform rather than price increases or output restrictions. Thus, "the usual price-oriented antitrust analysis may be irrelevant in markets where consumers pay nothing for the services they use and in which firms compete more through technological advancements than through lower prices."<sup>49</sup>

Quality degradations are often difficult to measure, but they may nevertheless significantly harm consumers and other participants on the platform. In the context of dominant tech platforms, such degradations can take several forms, affecting both the quality of the platform itself and the quality of the content or services delivered by third parties through the platform.

The paradigmatic example of a tech monopolist degrading the quality of its own platform is when it favors its own vertical offerings to the detriment or exclusion of downstream competitors. As discussed above, a vertically-integrated platform, meaning a company that both owns a platform and competes on one or more sides of the platform, may have incentives to abuse its matchmaking role to give an unfair advantage to its own vertical lines of business. This type of bias (which we also discuss more specifically below, in Part IX, in the context of algorithm transparency) can reduce the quality of the platform itself. Consumers expect matchmaking platforms to reduce transaction costs by connecting them to the most relevant products. When those platforms favor their own competing products, however, the platform becomes less reliable and it becomes harder for users to find what they want and need.<sup>50</sup> If the

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<sup>46</sup> David H. Freedman, *Why Scientific Studies Are So Often Wrong: The Streetlight Effect*, DISCOVER (Dec. 10, 2010), <http://discovermagazine.com/2010/jul-aug/29-why-scientific-studies-often-wrong-streetlight-effect>.

<sup>47</sup> See Susan Athey, *Information, Privacy, and the Internet: An Economic Perspective* 7 (2014), <https://www.cpb.nl/sites/default/files/CPB-Lecture-2014-Information-Privacy-and-the-Internet-an-economic-perspective.pdf> ("Technology platforms, as complex entities, often have a wider array of strategic choices" than to increase quality or lower prices).

<sup>48</sup> We discuss harm to innovation more specifically below, in Part V.

<sup>49</sup> Shelanski, *supra* note 22, at 1667.

<sup>50</sup> Michael Luca, Tim Wu, and the Yelp Data Science Team explained how platforms manipulating their products can result in consumer harm:

There are, to be more precise, several species of harm caused. First, some consumers may simply not find what they are looking for in the time they have,

platform is dominant, however, and sufficient barriers to entry exist, it may be willing to risk degrading its platform if the economic benefits accruing to the vertical product are sufficient to outweigh this risk, particularly where the platform perceives the need to favor its own vertical to be only transitory—*i.e.*, only needed for a limited time to give its vertical service traction with consumers.

Tech platforms can also degrade quality on one side of the platform in a way that harms consumers on the other side. For example, the major platforms often push the mantra that “information wants to be free,” and then force the free-to-consumers paradigm on publishers. The push not to charge consumers monetarily for content, however, primarily serves to advance the platforms’ own self-interests by making it easier for them to intermedialize the relationships between users and publishers. At the same time, it undermines publishers’ ability to generate new and innovative content. High-quality news publishers, in particular, are built on the notion that investing in a superior product yields benefits for all parties. But when publishers cannot effectively monetize their content, they cannot make the necessary investments to continue producing high-quality content. Without investment, journalists will be laid off, offices will be closed, and longer-term investigations will be cut.<sup>51</sup> The platforms and the publishers are thus locked in an existential (for publishers) battle over whether consumers will pay for news content—which would make them more likely to navigate directly to publishers’ sites and apps—or whether content will be made available for free, and intermediated by the platforms. The stakes are amplified by the fact that the platforms also control the only alternative form of monetization, advertising. Given the disparate power between the two sides, the likeliest outcome will be the reinforcement of the platforms’ dominance and the further degradation of publishers’ ability to generate quality journalism.

There is an open question as to how antitrust enforcers should measure the degradation in quality of online content (or services) as a result of stifled competition and, if necessary, balance

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and will give up, yielding some number of unconsummated transactions. Second, some consumers will be, in fact, determined enough to eventually find their desired target, but simply suffer greater search costs in the process. A third kind of harm arises when a buyer ends up patronizing a business or other service provider who would not have been their first choice, but for the degrading of the search. Consider, for example, a consumer who is misdirected and ends up at a bad restaurant; or the parents who are looking for a top-notch pediatrician, but because of search degradation, patronize a subpar practitioner. The harm caused by such misdirection when it occurs, will vary, but is undeniable in the aggregate. The point is simply that a degraded search engine will invariably, as compared to its alternative, yield some consumer harm from misdirection.

Michael Luca et al., *supra* note 20, at 25-26.

<sup>51</sup> Elizabeth Grieco, *Newsroom employment dropped nearly a quarter in less than 10 years, with greatest decline at newspapers*, PEW RESEARCH CTR. (July 30, 2018), <http://www.pewresearch.org/fact-tank/2018/07/30/newsroom-employment-dropped-nearly-a-quarter-in-less-than-10-years-with-greatest-decline-at-newspapers/> (“From 2008 to 2017, newsroom employment in the U.S. dropped by 23%.”).

such degradation in quality against an (arguable) increase in quantity. The Commission should use the Hearings as an opportunity to examine whether a new paradigm for measuring harm to welfare is warranted. This includes consideration of whether the identification and measurement of welfare effects in the context of antitrust enforcement should remain primarily or exclusively the province of economics analysis (and experts), or whether other quantitative or qualitative metrics like original content, sociological and public health findings, and subjective assessment by market experts could be instructive, at least in certain contexts. The Hearings also provide an opportunity to explore whether a new Bureau of Technology (as Chairman Simons has described it) could play a role in the assessment and evaluation of non-price-related anticompetitive effects. Such a department would be especially valuable in helping the Commission to identify threats from nascent competitors and to assess and balance benefits against anticompetitive harms in highly complex and sophisticated tech markets.

At the very least, we would encourage the Commission not to ignore quality degradations or subordinate them to price and output effects to such a degree as to render them meaningless in the context of antitrust enforcement in the digital economy. The quality of content and services that consumers obtain through tech platforms has a significant impact on their lives. Any difficulty of measuring that impact does not justify discounting it to zero. A market that is producing high volumes of low-quality product, even if consumers are being charged a low (or no) price, cannot be deemed a healthy, functioning market.

## **V. How Antitrust Enforcement Should Address Harm to Innovation**

Like reductions in quality, the stifling of innovation by firms with monopoly power has been recognized as a potential form of anticompetitive harm, but is rarely acted upon in the absence of measurable price or output effects. As discussed above in Part IV, a narrow focus on price and output may risk failure to detect and act upon anticompetitive harms in markets where competition occurs primarily on other dimensions, such as quality and innovation.<sup>52</sup> We encourage the Commission to examine specifically whether a more coherent and rigorous approach to measuring and acting on harm to innovation and threats to nascent competition would be sensible and, as importantly, whether it would be practical and justiciable.

The difficulty of relying on harm to innovation as the basis for establishing anticompetitive harm to support a monopolization case is two-fold: (1) the harm is necessarily prospective and uncertain, and (2) the harm is less easily quantifiable than price or output effects. But despite these difficulties, the Commission should not ignore harms to innovation because in many cases those harms are both real and severe. The importance of preserving innovation in

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<sup>52</sup> See Shelanski, *supra* note 22, at 1667 (discussing “the mismatch between the conventional, price-oriented antitrust framework and the more innovation-based competition that characterizes markets for digital goods and services”).

platform tech markets is particularly acute because, as Professor Howard Shelanski notes, “[i]f there is any single force that best characterizes digital platform markets, it is probably the intensive and continuous investment in research and development to improve existing products and develop new platforms and applications.”<sup>53</sup> In this context, “R&D is the central input of production, not merely an episodic activity that affects the production process.”<sup>54</sup> Conduct that suppresses innovation therefore distorts the key competitive feature of such markets.

Stifling of innovation by monopolists has been recognized as a potential form of anticompetitive harm in the language of judicial opinions and agency enforcement policy. As the Commission itself recognized (and alleged) in its 2009 enforcement action against Intel Corporation: “The loss of price and innovation competition in the relevant markets will continue to have an adverse effect on competition and hence consumers. Absent [a] remedy . . . , Intel will continue to maintain or even enhance its market power, consumers will have fewer choices, prices will be higher than they would be in competitive markets, and quality and innovation will be diminished.”<sup>55</sup>

As noted above, in Part III, dominant tech platforms can function as “bottleneck” monopolists that have the ability and the incentive to undermine innovation in their own platform markets as well as in adjacent markets that rely on the platform. Harms to innovation in the platform’s own market are easily understood as instances of exclusionary conduct. Harms to innovation in adjacent markets, on the other hand, may be better understood as akin to monopsony abuses. By forcing participants on their platforms (such as news publishers) to earn less revenue through practices such as forced free riding, platform monopolists undermine those participants’ ability to invest in innovation. In effect, the platform can act as an innovation bottleneck, which can deter the development of new and innovative products and services on the edges of the platform.<sup>56</sup>

Despite the acute potential for harm, instances in which stifling of innovation has been treated as an actionable basis for an antitrust claim are relatively rare. As a result, analytical tools and doctrines for determining when such harms should be actionable are currently underdeveloped. There are compelling reasons, however, for the Commission to use the Hearings as an opportunity to advance the development of a doctrinal framework for evaluating harm to innovation.

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<sup>53</sup> Shelanski, *supra* note 22, at 1684.

<sup>54</sup> *Id.* at 1685.

<sup>55</sup> Complaint at 5, Intel Corp., FTC Docket No. 9341, 2010 WL 4542454 (Nov. 2, 2010), <http://www.ftc.gov/os/adjpro/d9341/091216intelcmpt.pdf>.

<sup>56</sup> See Shelanski, *supra* note 22, at 1676 (“monopolist both controls access to its own service and can affect access to some number of other products and services. . . . [As such,] it affects the decisions of a much broader universe of users”).

First, a common thread in the competitive dynamics of the platform tech economy is that competition with a monopolist will most often come in the form of disruption (*i.e.*, “competition for the field”). As the D.C. Circuit observed in *Microsoft*, “it would be inimical to the purpose of the Sherman Act to allow monopolists free reign to squash nascent, albeit unproven, competitors at will—particularly in industries marked by rapid technological advance and frequent paradigm shifts.”<sup>57</sup> Antitrust enforcers should recognize that the greatest competitive threats to tech monopolists may not come in the form of rivals competing with the monopolist at its own game. Rather, the greatest threats are likely to come from upstart competitors in adjacent markets changing the way the game is played or eroding barriers to entry and disruption that insulate and perpetuate dominant firms’ monopoly power in their native markets. As a result, regulators should thus be on the lookout for efforts by monopolists to squash such threats in their incipency.<sup>58</sup>

Second, as discussed above, in a platform tech economy, anticompetitive harm may not manifest itself immediately in the form of price or output effects. Put another way, it may be less instructive in a platform tech economy to look at quantifiable indicators of anticompetitive harm in the relevant market, because that is not necessarily the basis on which firms compete, or where new entry will be foreclosed.<sup>59</sup> And in a nascent market, there is no benchmark against which to measure below-market output or above-market price. What is left is to examine the consumer choice or new tech that has been foreclosed or stunted.

The *Microsoft* decision provides a useful starting point for addressing these issues in the context of a Sherman Act Section 2 claim. As discussed above in Part II, the D.C. Circuit found that Microsoft had engaged in a variety of different forms of conduct all aimed at eliminating new technologies that posed emerging threats to Microsoft’s operating system monopoly. Microsoft’s conduct was ultimately found to be anticompetitive because it reinforced the inherent barriers to entry posed by network effects in the operating system market. Microsoft objected that the DOJ was unable to prove that the nascent competitors would have eventually displaced Microsoft—rather, all that the Department could prove was that they were “potential substitutes.”<sup>60</sup> But the court rejected this argument, concluding that “[t]o require that § 2 liability turn on a plaintiff’s ability or inability to reconstruct the hypothetical marketplace absent a defendant’s anticompetitive conduct would only encourage monopolists to take more and earlier

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<sup>57</sup> *Microsoft*, 253 F.3d at 79.

<sup>58</sup> See Shelanski, *supra* note 22, at 1693 (“A natural implication of the Schumpeterian argument is that a firm with market power would, if acting in its own economic interests, have an incentive to interfere with the cycle of ‘creative destruction’ by impeding rivals’ ability to develop new products or services that threaten its dominance. . . . Enforcement that focuses on how a dominant firm’s conduct might exclude or deter innovation is, therefore, consistent with a Schumpeterian view of competition.”).

<sup>59</sup> See Athey, *supra* note 47, at 7 (“Technology platforms, as complex entities, often have a wider array of strategic choices” than to increase quality or lower prices).

<sup>60</sup> *Microsoft*, 253 F.3d at 79.

anticompetitive action.”<sup>61</sup> The court decided that it would instead “infer causation when exclusionary conduct is aimed at producers of nascent competitive technologies.”<sup>62</sup>

Building on this foundation, we urge the Commission to consider in the Hearings how harm to innovation may be assessed when examining competitive restraints imposed by tech platforms—even when such harm may be difficult to quantify using conventional metrics such as price and output. In particular, it may be fruitful for the Commission to consider how harm to innovation can and should be balanced against any arguable pro-consumer interests presented to justify such constraints, and where the burden of proving harm to innovation (or its absence) should lie when evaluating the conduct of a platform monopolist. Among other things, the Commission may want to consider whether a special application of the “less restrictive alternative” test should apply with respect to conduct that threatens harm to innovation by nascent competitors. Indeed, the Supreme Court recently endorsed the less restrictive alternative test in its *American Express* decision.<sup>63</sup> This type of analysis was noticeably absent from the Commission’s previous cases involving dominant platforms.<sup>64</sup>

## **VI. The Role of Presumptions in Assessing Platform Markets**

As noted above in Part III, antitrust law generally disfavors “legal presumptions that rest on formalistic distinctions rather than actual market realities.”<sup>65</sup> Nonetheless, traditional antitrust analysis does incorporate a number of formal or informal presumptions regarding the economic effects of certain kinds of conduct and market structures. We encourage the Commission to examine whether, when, and to what extent such presumptions should be abandoned or reversed in evaluating possible anticompetitive conduct in platform markets. A principal reason that certain presumptions may warrant close scrutiny is that many tech platforms, in particular vertically-integrated ones, are characterized by conflicts of interest. As examples, we discuss legacy presumptions in favor of vertical integration and presumptions against causation where nascent competition is foreclosed.

First, we encourage the FTC to examine whether the general presumption in favor of vertical integration needs to be abandoned—or flipped—in platform tech markets, because of the inherent risk that the platform will use its dominance to preference an inferior product. When a

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<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> *See Amex*, 138 S. Ct. at 2284 (describing the three-step framework that applies in rule of reason cases, whereby if the defendant can show a procompetitive rationale (step 2), “then the burden shifts back to the plaintiff to demonstrate that the procompetitive efficiencies could be reasonably achieved through less anticompetitive means” (step 3)).

<sup>64</sup> FTC Google/DoubleClick Statement, *supra* note 5; FTC Staff Memo, *supra* note 16.

<sup>65</sup> *Eastman Kodak*. 504 U.S. at 466-67.

platform also operates in a competing vertical, it can have a conflicted motivation to facilitate connections organically *and* to favor its own vertical, as discussed above.<sup>66</sup> Such favoritism can manifest itself directly, as when a platform favors its own vertical product, often in a manner designed to make users believe they are getting objective matchmaking based on the “best” product or search result.<sup>67</sup> A platform can also indirectly advantage itself by configuring its platform in a way that benefits its business model in the relevant vertical.

It is generally presumed in antitrust law that vertical integration by a monopolist carries with it a presumption of efficiency and, thus, benefit to consumers.<sup>68</sup> This presumption arguably reflects traditional roles in a consumer supply chain, where a breakdown at any level could impact the value created along the whole chain. But in the platform economy, “different types of users – some of them producers, some of them consumers, and some of them people who may play both roles at various times – connect and conduct interactions with one another using the resources provided by the platform.”<sup>69</sup> Often, vertical expansion by a tech platform involves becoming a late-joining competitor with an opportunity to steer traffic to its own vertical, despite a lack of any real innovation or quality advantage. As a result, the assumptions about cost efficiencies and consumer benefits that underlie the traditional presumption may have no application. In such situation, the Commission should consider whether the traditional presumption should be abandoned, or whether it should be reversed so as to require upfront a compelling showing of consumer benefit to justify the vertical integration.

Second, we encourage the Commission to examine the role of presumptions in the analysis of causation where harm to nascent markets or competitors is alleged. In winner-take-all (or winner take most) markets, courts and commentators have recognized that just because a but-for world may not be susceptible to proof, a monopolist should not necessarily be absolved of anticompetitive conduct. As the court in *Microsoft* recognized (and as discussed in more detail in Section I above), conduct that is aimed at nascent competition justifies an inference of anticompetitive effects.<sup>70</sup>

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<sup>66</sup> See Shelanski, *supra* note 22, at 1677 (citation omitted) (“a firm’s incentive to discriminate against unaffiliated providers of complementary products are complex – especially when that firm’s business model hinges largely on selling advertising to those complementary producers.”).

<sup>67</sup> See, e.g., FTC Staff Memo, *supra* note 16, at 28 (“While Google embarked on a multi-year strategy of developing and showcasing its own vertical properties, Google simultaneously adopted a strategy of demoting, or refusing to display, links to certain vertical websites in highly commercial categories.”).

<sup>68</sup> See, e.g., *Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 54-57 (1977); 11 Phillip E. Areeda, et al., *Antitrust Law* ¶ 1803, at 104 (3d ed. 2011) (synergies resulting from vertical integration are “presumptively procompetitive”).

<sup>69</sup> Parker, *supra* note 24, at 6.

<sup>70</sup> *Microsoft*, 253 F.3d at 79.

Finally, we encourage the Commission to examine whether platform monopolists should be put to a higher standard to justify presumptively anticompetitive conduct. As discussed, platform tech markets generally are characterized by network effects that can result in natural monopolies and a “winner take all” framework for competition. This dynamic can create significant procompetitive benefits for consumers. However, as the Supreme Court’s recent decision in *Amex* recognized, there is a need to consider whether “procompetitive efficiencies could be reasonably achieved through less anticompetitive means.”<sup>71</sup> That need may be particularly acute in markets where there is a risk of nascent competitive technologies being eliminated in their infancy. Thus, the Commission should consider the role of the “less restrictive alternative” test in the context of evaluating anticompetitive conduct by platform monopolists—including when and how the burden of proving a less restrictive alternative attaches.

## **VII. The Role of Data as a Barrier to Entry**

Although the business models of major tech platforms may vary, they are connected by common thread in that user data plays a key role in their ability to monetize their services. Such platforms usually collect consumer data through their user-facing services. They then sell that data to advertisers, either directly or, more commonly, by incorporating it into advertising technologies the advertisers use to target ads to specific audiences. At the same time, they use the data to improve the quality of their platforms. For example, Google uses consumer data to generate more relevant search results, Facebook uses it to customize its news feed, and Amazon uses it generate product recommendations.

Data gathering can thus have consumer benefits by giving companies alternative ways to monetize and fund online services and increasing the quality of platforms. But in certain circumstances, a platform’s data advantages can create an insurmountable entry barrier that locks in its monopoly position. For example, Maurice Stucke and Allen Grunes have explained how a platform that exceeds its rivals in terms of the scale and scope of data it collects can benefit from data-specific network effects: “[T]he more people who actively or passively contribute data, the more the company can improve the quality of its product, the more attractive the product is to other users, the more the company has to further improve its product, which becomes more attractive to prospective users.”<sup>72</sup>

These data-driven network effects are not necessarily bad for consumers, but as Stucke and Grunes point out, they can raise competition issues. For example, data-driven network

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<sup>71</sup> *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2284 (2018) (finding no anticompetitive effect and thus no violation under the rule of reason, not reaching question of less restrictive means).

<sup>72</sup> MAURICE E. STUCKE & ALLEN P. GRUNES, *BIG DATA AND COMPETITION POLICY* 170 (2016).

effects can amplify the stakes of gaining and losing users.<sup>73</sup> This means that a company that can reduce its rivals' access to users, even temporarily, may be able to develop a durable monopoly position. This can increase incentives for anticompetitive behavior by platforms trying to ensure that the market “tips” in their favor.<sup>74</sup> It also means that a leading competitor's market power may be greater than other factors suggest.

As the Commission considers the role of data in creating entry barriers in platform markets, it should recognize that not all data is created equal. Again, Grunes and Stucke explain that data is commonly characterized by four “V”s: “the *volume* of data; the *velocity* at which data is collected, used, and disseminated; the *variety* of information aggregated; and finally the *value* of data.”<sup>75</sup> Antitrust enforcers should thus not assume that two companies are competing on equal footing just because they both have access to “data” generally. Data must be of a similar kind, quality, and quantity to give rivals a real chance to compete.

The Commission should also recognize that certain types of data are “rivalrous” goods, meaning that when a data point is collected by one entity, the same data point cannot be collected by any other entity.<sup>76</sup> For example, a search engine user's search query and subsequent clicks would be rivalrous data. If the user performs a search on Google, then there is no way for Bing, DuckDuckGo, or any other search engine to collect the same data about that user. The implication is that, in some situations, data collection can be zero-sum—the more one company gathers, the less there is available for others. In such situations, “a platform's acquisition of customer information may have an exclusionary effect on competition.”<sup>77</sup>

With these considerations in mind, we suggest that the Commission explore ways data is used in online advertising markets, how it is packaged and sold to advertisers, and how the advertising ecosystem might be structured to funnel data to the most dominant firms. We also suggest that the Commission examine ways in which platform monopolies might create data advantages that are not justified by competition on the merits, either through data-driven acquisitions, free-riding on the data generated by others (such as participants on their platforms), illegally co-mingling data, or interfering with others' ability to acquire similar data. Finally, we encourage the Commission to consider ways in which data-related remedies might be used to reestablish competition and erode entry barriers in markets affected by anticompetitive conduct.

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<sup>73</sup> *Id.* at 201.

<sup>74</sup> *Id.* at 204.

<sup>75</sup> *Id.* at 16.

<sup>76</sup> See Shelanski, *supra* note 22, at 1687.

<sup>77</sup> *Id.*

## VIII. The Impact of Data on Competition

For a platform tech company, data is a commodity to be monetized. Even when their products or services are made available to end users for no direct monetary cost, tech platforms are not charities. The end user pays, in effect, with her personal data. This dynamic raises important questions about the nature of competition to acquire and maintain user data, as well as consumer protection issues and privacy concerns.

One issue that can arise in the context of data gathering by platforms is that a monopolist may not have the proper incentives to afford users the degree of privacy protection or other welfare benefits that a competitive market would provide. “In conventional antitrust terms, anticompetitive conduct can enable a platform to extract more information from customers without offering the level of quality a consumer could barter for in a more competitive market.”<sup>78</sup> For example, a data-gathering monopolist may be able to accumulate more data about an individual—including personally identifiable information—than customers would normally consent to in a competitive environment. Users who do not wish to share their data with a monopolistic tech platform may have no choice other than to forego the market altogether.

Exacerbating this problem is the fact that most consumers are, at present, unable to understand the value of the data they are giving away online. Unlike traditional price effects, which consumers can (at least in many cases) understand and respond to rationally, data effects remain murky to consumers, who are ill equipped to protect themselves against market actors who may take their data without providing sufficient consideration. Again, this may be due to the absence of effective competition. Users who have no alternatives to giving up their data may be unable to fully appreciate how much they would value having more privacy, for example, if it were available. As a result, there are significant distortions of consumer welfare that can result from a data-centric platform revenue model.

Large-scale data collection may also create security risks. For example, while harm from leakage of any single data point about an individual (*e.g.*, name, age, social security number) might be mitigated, the leakage of a comprehensive profile that aggregates and interconnects many of those data points could be catastrophic. The creation of such profiles might thus be considered another form of harm.

We thus encourage the Commission to use the Hearings as an opportunity to examine data aggregation as a potential harm, both from an antitrust and a consumer protection perspective.

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<sup>78</sup> Shelanski, *supra* note 22, at 1691.

## **IX. The Impact of Algorithm Transparency on Welfare**

When platforms are accused of manipulation or bias, their most common response is that they rely on objective, neutral algorithms.<sup>79</sup> The problem is that no one—not the victims of the alleged manipulation or bias, not regulators, not the public, not even advertisers who purchase the products generated by the algorithms—has any insight into how those algorithms work.<sup>80</sup> The algorithms are “black boxes,” and many platforms expect the public simply to accept the output. This situation is rife for abuse.

In the absence of meaningful oversight, dominant tech platforms may have strong incentives to insert several types of harmful biases into the algorithms they use to operate their businesses. To undermine competition, for example, they can demote or exclude rivals and nascent competitive threats. To encourage dependence and return, they can discriminate against pay-walled content and promote content that is less engaging and more likely to result in a click back to the platform, or they can present content in ways calculated to encourage addiction to the platform. The platforms may even have commercial incentives to promote false or incendiary content, or to engage in “redlining” (*i.e.*, denying service to or otherwise discriminating against certain groups of consumers on the basis of impermissible factors such as race).

Algorithmic abuse can be an especially pernicious form of misconduct because it is virtually undetectable. Competitors or users may suspect that a platform’s algorithms are biased, but it is often impractical to find concrete evidence without having access to the underlying algorithms themselves. This lack of detectability sets algorithmic abuses apart from other forms of abusive conduct by monopolies, such as exclusionary tying or exclusive dealing arrangements, which are more easily exposed. We therefore encourage the Commission to consider whether the unusually covert nature of algorithmic abuses may thus justify a different investigatory or evidentiary framework—specifically one based on a principle of algorithm transparency.

Algorithm transparency is the idea that regulators and courts should have some way of evaluating whether a platform’s algorithms are biased in a way that harms competition and/or

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<sup>79</sup> See, e.g., *The Power of Google: Serving Consumers or Threatening Competition before Comm. on the Judiciary Subcomm. on Antitrust, Competition Policy and Consumer Rights*, 112th Cong. 10-11 (2011):

Senator Mike Lee: “I’m asking whether your own secondary services, services that Google itself offers, are they subject to the same test, to the same standard as all other results of an organic algorithmic search?”

Eric Schmidt: “I believe so. As I understand your question, I believe the answer is yes. I’m not aware of any unnecessary or strange boosts or biases.”

<sup>80</sup> See, e.g., U.K. House of Lords, *ALGORITHMS IN DECISION-MAKING* 27-28 (2018), <https://publications.parliament.uk/pa/cm201719/cmselect/cmsctech/351/351.pdf> (“Rebecca MacKinnon from think-tank New America has warned that ‘algorithms driven by machine learning quickly become opaque even to their creators, who no longer understand the logic being followed.’ . . . Professor Louise Amoore of Durham University wondered whether full transparency was possible ‘even to those who have designed and written [the algorithms].’”).

consumers, including through deception. The concept cannot require regulators to monitor platforms’ algorithms by continuously “looking under the hood,” which would be burdensome both for resource-constrained regulators and for platforms trying to protect their trade secrets. Rather, an effective algorithm transparency regime might consist of shifting the burden of proof in narrow, clearly defined situations.

For example, when a platform has market power—such that it is unconstrained by user preferences—and complainants or plaintiffs show that the output of its algorithms disproportionately demotes competitors or promotes harmful content, then regulators and courts may be justified in concluding that a *prima facie* case exists for believing that the platform’s algorithms produces those effects. The burden could then shift to the platform to prove that its algorithms are neutral or that they serve some beneficial consumer interest that cannot be achieved through less discriminatory means. If this showing were made, the factfinder could then consider all the evidence to determine whether the procompetitive justifications outweigh the anticompetitive effects.

A burden-shifting algorithm transparency regime makes sense for several reasons. First, it is more likely to result in correct outcomes because, where a *prima facie* case is found to exist, it places the burden of proof on the platforms, which have access to vastly more information than either regulators or users about how their algorithms function. Second, from a normative standpoint, it is desirable to hold platforms responsible for the consequences of algorithms that they themselves have designed—tech companies should not be able to release an algorithm into the world and then plead innocence as to its effects. Finally, the burden-shifting framework would benefit consumers by rooting out forms of algorithmic abuse that would otherwise go undetected.

A change in law may not be necessary for the FTC to promote an algorithm transparency regime such as the one outlined above. The Commission could advocate for a burden-shifting paradigm as a new evidentiary framework to help courts answer the difficult question of whether a platform’s algorithms are biased. Courts have adopted these kinds of frameworks before in cases where direct evidence of discriminatory intent is unavailable. For example, in Title VII cases, when a plaintiff can establish a *prima facie* case, a rebuttable presumption of discrimination arises, and the burden shifts to the defendant to rebut that presumption by showing nondiscriminatory reasons for its conduct.<sup>81</sup> The parallels to potential algorithmic abuse cases are strong. In both types of cases, the key issue is whether the challenged decision—a hiring decision or the output of an algorithm—is the result of impermissible bias. This burden-shifting approach is justified due to the difficulty or impossibility of proving such bias extrinsically.

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<sup>81</sup> See *McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 802 (1973).

The adoption of an algorithm transparency regime might also be an appropriate subject for consideration by Congress. To that end, we encourage the Commission to consider exploring different transparency regimes and their likely effects on competition and consumer protection. The Commission could then be in a position to educate Congress on the advisability of any such legislation.

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We appreciate the opportunity to share this public comment, and we look forward to discussing these issues further in the context of the Hearings.