COMMENTS

Liability for Data Scraping Prohibitions under the Refusal to Deal Doctrine: An Incremental Step toward More Robust Sherman Act Enforcement

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The digital economy has become increasingly consolidated in recent years as a handful of companies (namely Google, Facebook, Microsoft, and Amazon) have come to dominate every corner of the internet. Several of these companies have attained such size and influence that labelling them monopolists seems unavoidable. These companies have reinvigorated the debate regarding how antitrust law should treat monopolists. Many scholars, typically associated with the Chicago School of antitrust, believe that courts should hesitate before taking action against internet monopolists because judicial intervention may discourage investment in the digital economy without benefiting consumers. Critics of the Chicago School meanwhile argue that internet monopolists pose a unique threat to competition by virtue of their control of user-generated data.

This Comment argues that monopolists' ability to restrict data access poses a grave and novel threat to competition. Two recent cases, hiQ Labs, Inc v LinkedIn Corp *and* Authenticom, Inc v CDK Global LLC*, highlight the risk of dominant internet companies prohibiting public data scraping to quash competitors and cement their monopolies. This Comment argues that courts should apply the Sherman Act "refusal to deal" doctrine to proscribe public data scraping prohibitions under specific circumstances. Applying refusal to deal liability to scraping prohibitions would create a more dynamic and open digital economy. It would also be an incremental expansion of antitrust liability, which would not dissuade digital investment or otherwise cause massive economic disruption. Finding refusal to deal liability for data scraping prohibitions would therefore allow courts to employ their common law process and adapt the Sherman Act to meet new competitive challenges in the digital economy.*

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INTRODUCTION

Internet giants like Google, Facebook, Microsoft, and Amazon have attracted controversy for their growing influence on our social, political, and commercial activities. Some commentators worry that these companies' ability to gather data and control who accesses it threatens the competitive health of the digital economy.[1] This trend could harm consumers by stifling innovation in online products and by producing a digital economy with fewer choices and fewer competitors determined to win consumers' business. Some advocate for more robust antitrust enforcement to

[1] Internet companies have been scrutinized recently for leveraging their data to quash competitors. For example, leaked internal documents show that Facebook has selectively denied rivals access to its "trove of user data" whenever it felt they could pose a serious threat. See Olivia Solon and Cyrus Farivar, *Mark Zuckerberg Leveraged Facebook User Data to Fight Rivals and Help Friends, Leaked Documents Show* (NBC, Apr 18, 2019), archived at http://perma.cc/72Q5-GS52.

combat internet monopolists and argue that the antitrust laws should play a larger role in checking restrictions on data access that harm competition.[2]

Data access restrictions are particularly concerning because data is central to the digital economy.[3] Collecting data helps internet companies understand their customers in order to more efficiently market their products. It also allows them to perform analytics to improve their technology and yield economic insights.[4] Not surprisingly, companies go to great lengths to access data. They often purchase it from other internet companies or through brokers.[5] Alternatively, some firms have developed methods to gather public data—that is, data posted on the internet without password protection reserving it for specific users—on a massive scale.[6]

One such method is data (or web) scraping, which involves software applications, called "bots," that efficiently collect information from across the internet. By automating the web browsing process, scraping bots gather data in the same format as it appears on a user's computer screen.[7] Scraping bots serve an indispensable function for internet companies ranging from analytics

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2 See, for example, Daniel L. Rubinfeld and Michal S. Gal, *Access Barriers to Big Data*, 59 Ariz L Rev 339, 380–81 (2017); Maurice E. Stucke, *Should We Be Concerned about Data-opolies?*, 2 Georgetown L Tech Rev 275, 275–80, 283–85 (2018) (outlining potential harms associated with internet monopolists absent vigilant antitrust enforcement).

3 See Rubinfeld and Gal, 59 Ariz L Rev at 343 (cited in note 2). Some politicians have argued for radical antitrust remedies, like breaking up internet companies, to limit their ability to stifle competition. See Astead W. Herndon, *Elizabeth Warren Proposes Breaking Up Tech Giants Like Amazon and Facebook* (NY Times, Mar 8, 2019), archived at http://perma.cc/KZ8B-Q53Y.

4 See Tom Symons and Theo Bass, *Me, My Data and I: The Future of the Personal Data Economy* *34 (European Commission Decode Project, Sept 2017), archived at http://perma.cc/W6YR-ZEJZ (proposing that internet companies could use data-generated insights to provide services ranging from "shopping, banking, transport, work, health and social networking").

5 Brian Naylor, *Firms Are Buying, Sharing Your Online Info. What Can You Do about It?* (NPR, July 11, 2016), archived at http://perma.cc/BV4C-HWJ7.

6 See Adrian Agius, *Legal Perspectives on Scraping Data from the Modern Web* (Law in Society, Oct 23, 2017), archived at http://perma.cc/6J3H-B7C5; Aaron Rubin and Tiffany Hu, *How Website Operators Use CFAA to Combat Data-Scraping* (Law360, Aug 25, 2014), archived at http://perma.cc/6V98-7JUS.

7 See Jeffrey Kenneth Hirschey, Note, *Symbiotic Relationships: Pragmatic Acceptance of Data Scraping*, 29 Berkeley Tech L J 897, 897–98 (2014). Scrapers gather diverse data from across the internet and compile it in a structured and usable format. To that end, they typically write custom scripts for each website they scrape, or they employ premade scraping tools that are compatible with many different websites and forms of data. Hoda Raissi, *What is Web Scraping?* (insideBigData, Jan 26, 2019), archived at http://perma.cc/Z4DT-KA4C.

startups to the internet's most established firms. Search engines, such as Google and Bing, use web crawler bots to catalog public websites.[8] Analytics startups draw insights for industries, ranging from finance to retail, using public data gathered by bots.[9] Estimates show that bots account for nearly one quarter of all internet traffic, and they have contributed significantly to the web's development.[10]

But not all bots are benevolent—some bad actors scrape data for destructive purposes. For example, they scrape information from websites to create knockoff versions or gather users' contact information to pester them with unsolicited marketing campaigns.[11] Furthermore, internet users and website providers agree to specific terms and conditions regarding data privacy. Scrapers that gather users' personal information may use that data for purposes outside of those agreed-upon terms, so companies that fail to prevent scraping may lose their users' trust.[12]

Accordingly, companies operating public websites take defensive measures to control who can scrape data and what they may collect. Some public websites, for example, employ technical defenses such as click-through agreements,[13] IP address blockers,[14]

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[8] See *How Search Organizes Information* (Google), archived at http://perma.cc/CUX2-SQA6 (explaining how web crawlers rely on links on websites to discover publicly available webpages and render the content of the pages to create a Search index).

[9] See Brief of Amici Curiae Electronic Frontier Foundation, DuckDuckGo, and Internet Archive in Support of Plaintiff-Appellee, *hiQ Labs, Inc v LinkedIn Corp*, No 17-16783, *21–22 (9th Cir filed Nov 27, 2017) (available on Westlaw at 2017 WL 5757674) (Electronic Frontier Foundation Brief) (noting that a wide variety of internet products, including search engines, news aggregators, public safety tools, and web archives, depend on scraping bots).

[10] See id at *5. Some sources estimate that bots account for as much as half of all web traffic. See, for example, Marissa Boulanger, Note, *Scraping the Bottom of the Barrel: Why It Is No Surprise That Data Scrapers Can Have Access to Public Profiles on LinkedIn*, 21 SMU Sci & Tech L Rev 77, 78 (2018).

[11] See Brief of Amicus Curiae Craigslist, Inc in Support of Defendant/Appellant LinkedIn Corp, *hiQ Labs, Inc v LinkedIn Corp*, No 17-16783, *1–2 (9th Cir filed Oct 10, 2017) (available on Westlaw at 2017 WL 4698991) (Craigslist Brief).

[12] See Hirschey, Note, 29 Berkeley Tech L J at 899 (cited in note 7) ("Scraping may collect personally identifying information ('PII') thought to be private and can have serious privacy implications.").

[13] See id at 910. A click-through agreement requires the user to click on an "acceptance icon," in order to consent to being bound by the website's terms of use. See Ian Rambarran and Robert Hunt, *Are Browse-Wrap Agreements All They Are Wrapped Up to Be?*, 9 Tulane J Tech & Intel Prop 173, 174 (2007).

[14] See Hirschey, Note, 29 Berkeley Tech L J at 909 (cited in note 7). See also, for example, *Facebook, Inc v Power Ventures, Inc*, 844 F Supp 2d 1025, 1031 (ND Cal 2012) (noting that Facebook employs IP address blocks to restrict access to its website).

and robot exclusion protocol[15] to discourage specific scrapers. Firms also use nontechnical measures such as website "terms and conditions" and "cease and desist" letters to dissuade certain scrapers from accessing their websites without permission.[16] Finally, companies try to sanction data scrapers for unauthorized computer entry under the Computer Fraud and Abuse Act[17] (CFAA).

While there are legitimate reasons to prohibit data scraping, firms may prevent their competitors from scraping to deny them access to information and hinder their ability to compete. If internet monopolists shut off data access to reduce competition, we may turn to the antitrust laws, and specifically the antimonopolization provisions of the Sherman Antitrust Act,[18] to protect the competitive health of the digital economy. Whether the Sherman Act proscribes data scraping prohibitions is an open question. Some argue that the Act's "refusal to deal" doctrine should prevent monopolists from using scraping prohibitions to deny their competitors access to public data.[19] Others argue that mandating access for data scrapers under the Sherman Act would force internet monopolists to accommodate their rivals, which would weaken, rather than promote, digital competition.[20]

This Comment analyzes whether it is legal under the Sherman Act for an internet monopolist to prohibit competitors from scraping public data from its website and concludes that the Sherman Act should be interpreted to forbid that behavior under specific circumstances. Part I discusses the Sherman Antitrust Act,

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15 Robot exclusion protocol, or robots.txt, is a "text file that . . . instruct[s] search engine bots . . . how to crawl and index website pages." Sergey Grybniak, *Best Practices for Setting Up Meta Robots Tags and Robots.txt* (Search Engine Journal, Mar 15, 2017), archived at http://perma.cc/7WGW-3ZM4.

16 See, for example, *Power Ventures*, 844 F Supp 2d at 1028, 1031 (noting Facebook's use of website terms and "cease and desist" letters to keep out unwanted users). See also *hiQ Labs, Inc v LinkedIn Corp*, 273 F Supp 3d 1099, 1104 (ND Cal 2017) (noting LinkedIn's use of "cease and desist" letters and terms of service to bar data scrapers).

17 Pub L No 99-474, 100 Stat 1213 (1986), codified as amended at 18 USC § 1030. The CFAA proscribes computer access "without authorization." 18 USC § 1030(a). Whether the statute bans only computer hacking or any unwanted visit to a company's website is hotly contested. See Andrew Sellars, *Twenty Years of Web Scraping and the Computer Fraud and Abuse Act*, 24 BU J Sci & Tech L 372, 397–408 (2018). Companies hosting copyrighted information on their websites can also pursue liability under 17 USC § 1201 for scrapers who gather data subject to exclusive intellectual property protections.

18 26 Stat 209 (1890), codified as amended at 15 USC §§ 1–7.

19 See Part III.A. See also, for example, Brief for Amicus Curiae Scraping Hub, Ltd in Support of Affirmance, *hiQ Labs, Inc v LinkedIn Corp*, No 17-16783, *20 (9th Cir filed Nov 27, 2017) (available on Westlaw at 2017 WL 5757675) (Scraping Hub Brief).

20 See, for example, Dennis W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal—Why* Aspen *and* Kodak *are Misguided*, 68 Antitrust L J 659, 671–76 (2001).

which proscribes monopolization, and analyzes competing theories (namely the Chicago School and its critics) regarding the proper scope of the Sherman Act in the digital economy. Part II describes the development of the Sherman Act refusal to deal doctrine, which imposes liability on monopolists, under limited circumstances, when they fail to accommodate smaller competitors. This doctrine could serve as a tool to combat internet monopolists' restrictions on public data access.[21] Furthermore, Part II discusses recent cases that suggest these restrictions may invite refusal to deal liability. Part III then argues that refusal to deal liability for anticompetitive data scraping prohibitions is necessary to prevent internet monopolists from stifling access to public information in order to solidify their dominant positions. In addition, the Part outlines factors that courts must consider when analyzing those prohibitions under the Sherman Act and proposes a standard for their adjudication. This Comment concludes by noting the importance of finding Sherman Act liability for anticompetitive scraping prohibitions for the competitive health of the digital economy.

I. THE SHERMAN ANTITRUST ACT

The Sherman Antitrust Act is the centerpiece of the American antitrust regime.[22] Its two operative provisions, Sections 1 and 2, prohibit unreasonable restraints of trade and monopolization, respectively.[23] The language of both provisions is sweeping and unspecific, such that the Act has been compared to the United States Constitution for its brevity and breadth.[24] Much like constitutional law, antitrust law is crafted through a common law process. Courts shape rules applying the Sherman Act's broad

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[21] See, for example, Autorité de la Concurrence and Bundeskartellamt, *Competition Law and Data* *17–18 (2016) (noting the slim possibility of refusal to deal liability in data access cases under European competition law); Zachary Abrahamson, *Essential Data*, 124 Yale L J 867, 872–75 (2014) (arguing monopolist's restrictions on data access could invite refusal to deal liability); Sean Howell, *Big Data and Monopolization* *18–22 (unpublished manuscript, Jan 28, 2019), archived at http://perma.cc/9U2T-HLUZ (discussing how digital platforms might risk liability for refusal to deal data in rare circumstances).

[22] See *The Antitrust Laws* (Federal Trade Commission), archived at http://perma.cc/S3ZD-RQ67.

[23] 15 USC §§ 1, 2.

[24] See Jay Dratler, *Licensing of Intellectual Property: A Brief Primer of Antitrust Law and Misuse Doctrine* § 5.02 at 5-5 (Law Journal Press 2019) ("[T]he United States Supreme Court has likened the Sherman Act to the Constitution of the United States in its generality.").

prohibitions through incremental trial and error.[25] This Part discusses Sherman Act jurisprudence. Part I.A outlines the fundamentals of Sherman Act § 2 law. Part I.B then analyzes how that law has developed and the schools of thought regarding the direction it should take in the digital economy.

A. Section 2 Prohibitions against Monopolization

Section 2 provides that "[e]very person who shall monopolize, or attempt to monopolize, or combine or conspire . . . to monopolize . . . shall be deemed guilty of a felony."[26] Taken at face value, its language could proscribe a firm's possession of monopoly power,[27] but courts have never found it to extend that far.[28] Furthermore, courts do not understand Section 2 to prohibit acquisition of monopoly power through superior business practices. The antitrust laws were intended to promote competition so that consumers could benefit from an economy that delivers low prices, robust supply, and innovative products.[29] It would be counterproductive to discourage firms from competing to acquire market share for fear of running afoul of the Sherman Act. Accordingly, the Supreme Court interprets monopolization to require both the possession of monopoly power in a given market and the "willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historical accident."[30] "Willful acquisition"

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25 "[T]he courts, and not the legislature, really make the law of antitrust. This fact reflects the common-law system of justice generally prevailing in the United States." Id. Antitrust enforcement agencies have also influenced antitrust law. See Department of Justice, *Competition and Monopoly: Single-Firm Conduct under Section 2 of the Sherman Act* *1–2 (Sept 2008), archived at http://perma.cc/YD26-V5EA.

26 15 USC § 2.

27 Monopoly power is typically defined as "the power to control prices or exclude competition." *United States v E.I. du Pont de Nemours & Co*, 351 US 377, 391 (1956). See also *Jefferson Parish Hospital District No 2 v Hyde*, 466 US 2, 13–14 (1984) (defining market power as the "special ability . . . to force a purchaser to do something that he would not do in a competitive market"). Concluding that a firm has monopoly power typically requires defining the relevant market for antitrust analysis. There is an expansive body of law not covered by this Comment regarding market definition, but broadly speaking, the relevant market for antitrust analysis is defined based on the "area of effective competition." *Brown Shoe Co v United States*, 370 US 294, 324 (1962).

28 See *United States v Aluminum Co of America*, 148 F2d 416, 430 (2d Cir 1945) (*Alcoa*) (explaining that size alone does not violate the Sherman Act because "[t]he successful competitor, having been urged to compete, must not be turned upon when he wins").

29 See *Pacific Bell Telephone Co v Linkline Communications, Inc*, 555 US 438, 451 (2009) (explaining that the antitrust laws are meant to promote aggressive competition in the market).

30 *United States v Grinnell Corp*, 384 US 563, 570–71 (1966).

requires gaining market dominance through exclusionary, anticompetitive conduct.[31]

However, the requirement that monopoly conduct be "exclusionary" helps little in determining what behavior violates Section 2. Aggressive competitive behavior that benefits consumers is often indistinguishable from exclusionary conduct that reduces long-run competition and consumer welfare.[32] Consider, for example, a monopolist's decision to undercut its competitors' prices. If the decision benefits consumers by lowering prices, it could be procompetitive. However, the decision could be predatory if it harms consumers by letting the monopolist drive out rivals with the intention of raising prices over time. Courts, relying on imperfect information, often struggle to determine which view is correct.[33]

Because of this uncertainty, courts risk committing false positive and false negative errors whenever they condemn conduct under Section 2. Wrongly proscribing behavior discourages businesses from competing, whereas failing to condemn exclusionary conduct allows monopolists to crush rivals before they can viably compete.[34] Furthermore, distinguishing exclusionary conduct from aggressive competition imposes significant decision costs on fact finders.[35]

Courts and scholars differ in their tolerance of decision and error costs when evaluating exclusionary conduct. They have developed several tests for identifying exclusionary practices. For example, they have (1) assessed the net effects of the conduct on competition (effects-balancing test), (2) conducted a weighted comparison of competitive effects and condemned conduct only when it is disproportionally anticompetitive (disproportionality

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31 Examples of exclusionary conduct include tying, exclusive dealing, and predatory pricing. See generally Mark S. Popofsky, *Defining Exclusionary Conduct: Section 2, the Rule of Reason, and the Unifying Principle Underlying Antitrust Rules*, 73 Antitrust L J 435 (2006).

32 See Frank H. Easterbrook, *On Identifying Exclusionary Conduct*, 61 Notre Dame L Rev 972, 972 (1986) ("Courts should condemn [exclusionary conduct] under the antitrust laws. There is only one problem. Competitive and exclusionary conduct look alike.").

33 See *Alcoa*, 148 F2d at 431 (determining that preemptively investing in new opportunities was a form of exclusionary conduct, although it could easily be characterized as aggressive competition).

34 See Thomas C. Arthur, *The Costly Quest for Perfect Competition:* Kodak *and Nonstructural Market Power*, 69 NYU L Rev 1, 61–68 (1994) (discussing the significant costs of false positives, false negatives, and adjudication in the antitrust context).

35 Easterbrook, 61 Notre Dame L Rev at 977 (cited in note 32) ("[T]he legal system must minimize the *sum* of error and process costs.") (emphasis in original).

test), (3) determined whether the conduct involved a "profit sacrifice" (profit sacrifice test), (4) assessed whether the conduct excluded equally efficient rivals (equally efficient competitor test), (5) questioned whether conduct makes no sense based on economic principles (no economic sense test), and (6) proscribed obviously anticompetitive practices as per se illegal.[36] These standards vary in their administrability and the extent to which they encourage antitrust intervention.

B. The Chicago School and Its Critics

For several decades, the Chicago School of antitrust has influenced how antitrust law is interpreted and enforced, particularly with respect to defining exclusionary conduct.[37] The Chicago School emerged as a reaction to the interventionist antitrust regime of the 1960s and 1970s, under which enforcement actions against monopolies were launched on purportedly tenuous economic grounds.[38] The Chicago approach, which remains the dominant view, is skeptical of vigorous antitrust enforcement and aims to protect the competitive process rather than individual competitors. It elevates maximizing consumer welfare as the ultimate goal of the antitrust laws and is predicated on neoclassical economics, which espouses faith in market efficiency and skepticism toward government interference in the economy.[39]

Proponents of the Chicago School advocate for restraint in Section 2 enforcement on the grounds that courts lack the institutional capacity to act as central planners and reliably distinguish exclusionary conduct from aggressive competition.[40] They claim markets provide a more robust check on monopolists' abuse of

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[36] See *Competition and Monopoly* at *viii–x (cited in note 25).

[37] See George L. Priest, *Bork's Strategy and the Influence of the Chicago School on Modern Antitrust Law*, 57 J L & Econ 1, 1–2 (2014).

[38] See id at 4.

[39] See Robert H. Bork, *The Antitrust Paradox: A Policy at War with Itself* 69–71 (Basic Books 1978). Some scholars counter that the Sherman Act was intended to address harms from market concentration apart from economic inefficiency, such as unfair wealth transfers from consumers to big business or corporations' political influence. See Robert H. Lande, *Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, 50 Hastings L J 871, 888 (1999).

[40] See Joshua D. Wright, *Overshot the Mark? A Simple Explanation of the Chicago School's Influence on Antitrust*, 5 Competition Pol Intl 1, 11 (2009) (noting the Chicago School's emphasis on minimizing judicial error). See also Frank H. Easterbrook, *The Chicago School and Exclusionary Conduct*, 31 Harv J L & Pub Pol 439, 442 (2008) ("Anyone who thinks that judges would be good at detecting the few situations in which cooperation would do more good than harm has not studied the history of antitrust.").

dominance than courts because, if monopolists charge supracompetitive prices or fail to innovate, they will be swept away by new entrants through the process of "creative destruction."[41] We can, therefore, expect monopolists to generally avoid exclusionary conduct out of self-interest.[42] Accordingly, in the Chicago view, courts should take action under Section 2 only when monopolists exhibit obviously predatory behavior.[43]

The Chicago School approach has received increased criticism in recent years.[44] Opponents claim that fear of false positives has given cover to monopolists' predatory behavior and has contributed to an increasingly consolidated economy.[45] They argue that Chicago School adherents place too much confidence in economic orthodoxy and the neoclassical assumptions underpinning their approach, which are out of touch in the digital economy.[46] As examples, they point to internet behemoths, such as Google, Facebook, Amazon, and LinkedIn. These businesses operate multi-sided platforms, which link groups of consumers and sell different products to each group. Facebook, for example, provides advertising to companies and social networking to internet users.[47] These platforms benefit from direct and indirect network effects, meaning demand for their services is influenced by the number of users they serve.[48] For example, the more professionals that create LinkedIn profiles, the more attractive the platform is

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41 Easterbrook, 31 Harv J L & Pub Pol at 440 (cited in note 40). See also generally Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (Harper 1942).

42 See Easterbrook, 31 Harv J L & Pub Pol at 440–41 (cited in note 40).

43 For example, Robert Bork, one of the Chicago School's "elder statesmen," considered exclusion through predatory pricing implausible but was more receptive to theories of nonprice predation. Bork thought that a monopolist may raise its rivals' costs, for instance, by imposing exclusive dealing arrangements on its customers, thereby denying competitors sufficient volume to pose a threat. See Kenneth G. Elzinga and David E. Mills, *Antitrust Predation and* The Antitrust Paradox, 57 J L & Econ 181, 195–96 (2014).

44 See, for example, *The University of Chicago Worries about a Lack of Competition* (The Economist, Apr 12, 2017), archived at http://perma.cc/NUX7-HSXC.

45 See *How Regulators Can Prevent Excessive Concentration Online* (The Economist, June 28, 2018), archived at http://perma.cc/H7BS-QCNB.

46 See Lina M. Khan, *Amazon's Antitrust Paradox*, 126 Yale L J 710, 790 (2017) (outlining various ways the neoclassical school overlooks novel forms of anticompetitive conduct in online markets). See also Nathan Newman, *Search, Antitrust, and the Economics of the Control of User Data*, 31 Yale J Reg 401, 402–04 (2014); Spencer Weber Waller, *The Language of Law and the Language of Business*, 52 Case W Res L Rev 283, 304–10 (2001) (cataloguing critiques of the Chicago School's approach).

47 Lapo Filistrucchi, et al, *Market Definition in Two-Sided Markets: Theory and Practice*, 10 J Competition L & Econ 293, 296–97 (2014).

48 David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, 20 Yale J Reg 325, 331–34 (2003).

to other professionals who might consider joining LinkedIn (direct network effect). Additionally, the more professionals that join LinkedIn, the more attractive the platform is to employers considering advertising on it (indirect network effect). These network effects help internet platforms attain market power and resist competitive threats because they dramatically increase the benefits of size and create a virtuous cycle that rewards first movers.[49]

Relatedly, critics of the Chicago School argue that a conservative antitrust regime equating consumer harm with high prices is ill-suited to a data-driven economy, in which many of the world's most powerful companies offer products for free.[50] They believe the Chicago School's fixation with price as the metric of consumer harm ignores that monopolists offering free products can still harm consumers by displacing more creative or proconsumer rivals.[51] Toothless antitrust enforcement, for example, may allow internet monopolists to underinvest in innovation and abuse their customers' data privacy in a manner that new entrants in a competitive market would not. This seems plausible given incumbent tech firms' poor track record on privacy in recent years. Indeed, tech giants committed several high-profile privacy blunders in 2018 alone, ranging from Facebook's Cambridge Analytica data breach to Google and Facebook's secret purchases of users' financial data.[52]

Furthermore, critics note that viably competing in the digital economy increasingly requires data access.[53] Dominant internet platforms stay ahead of the competition by developing superior algorithms, and they rely on access to data to train and improve

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[49] See, for example, Maurice E. Stucke and Allen P. Grunes, *Debunking the Myths over Big Data and Antitrust*, 2 CPI Antitrust Chron 1, 6 ("[N]etwork effects, at times, enable big firms to become bigger until they dominate the industry."); Newman, 31 Yale J Reg at 403 (cited in note 46) ("[N]etwork effects grant competitive advantages that undercut simple analyses of 'equilibrium' prices."). See also Khan, 126 Yale L J at 772 (cited in note 46) (noting that first-mover advantages and network effects create considerable entry barriers in platform industries).

[50] See, for example, Stucke, 2 Georgetown L Tech Rev at 281 (cited in note 2) ("The presumption is that 'lower prices improve consumer welfare (all else being equal).' Since data-opolies are not raising prices above competitive levels (or reducing output below competitive levels), some may question if they even possess monopoly power.") (citation omitted).

[51] See, for example, id at 279–80.

[52] See Bennett Cyphers, Gennie Gebhart, and Adam Schwartz, *Data Privacy Scandals and Public Policy Picking Up Speed: 2018 in Review* (Electronic Frontier Foundation, Dec 31, 2018), archived at http://perma.cc/426H-EGV2.

[53] See Abrahamson, 124 Yale L J at 870–72 (cited in note 21) (arguing that, in some contexts, data is an essential input to viable competition).

those algorithms.[54] Consequently, multisided platforms can leverage their size and information-gathering capabilities (enabled by network effects) to control data stocks and flows. By denying rivals access to data, they can quash competitive products and cement their dominance.[55] Critics, therefore, conclude that current Section 2 enforcement fails to check digital monopolists.

Proponents of the Chicago School counter that internet monopolists and their control of data do not mandate a new antitrust regime. They claim that data access cannot pose a significant barrier to entry because data is replicable, nonrivalrous, and exceedingly abundant, and its value is not innate but dependent on the algorithms that analyze it.[56] Furthermore, they find it unlikely that internet platforms harm consumers when they offer products for free and are skeptical of alleged entry barriers from restrictive data access policies when users can abandon monopolists just by typing in a competitor's web address.[57] They believe Sherman Act intervention under these circumstances is likely to discourage

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[54] See Symons and Bass, *Me, My Data and I* at *25 (cited in note 4) ("Access to personal data is important because it is the primary feedback loop through which companies can generate and test new innovations and service improvements. Crucially, monopolisation of data matters because the more data a firm has on performance, the more it can improve performance."). See also Frank Pasquale, *Paradoxes of Digital Antitrust: Why the FTC Failed to Explain Its Inaction on Search Bias* *7 (Harv J L & Tech Occasional Paper Series, July 2013), archived at http://perma.cc/AU3S-53H9 (arguing that access to data has been integral to Google's development of superior search algorithms).

[55] See Rubinfeld and Gal, 59 Ariz L Rev at 349–68 (cited in note 2) (arguing there are legal, technological, and practical barriers to entry that monopolists can use to deny competitors access to data and stifle competition). See also Symons and Bass, *Me, My Data and I* at *24 (cited in note 4) ("The control of data by companies . . . contributes to market dynamics which mean those companies can become unassailable monoliths.").

[56] See, for example, D. Daniel Sokol and Roisin Comerford, *Antitrust and Regulating Big Data*, 23 Geo Mason L Rev 1129, 1137 (2016) ("Data is non-exclusive and nonrivalrous. No one firm can, or does, control all of the world's data."); id at 1139 ("Data does not typically provide value on a standalone basis."). See also Joe Kennedy, *The Myth of Data Monopoly: Why Antitrust Concerns about Data Are Overblown* (Information Technology & Innovation Foundation, Mar 2017), archived at http://perma.cc/643Q-ABY8.

[57] See, for example, Robert H. Bork and J. Gregory Sidak, *What Does the Chicago School Teach about Internet Search and the Antitrust Treatment of Google?*, 8 J Competition L & Econ 663, 665 (2012) ("Search engines epitomize dynamic competition—the virtuous cycle in which innovation drives competition, which further drives consumer-welfare-enhancing innovation."). See also id at 671 ("Because the use of a search engine is free, users can easily switch from one engine to another if they are dissatisfied with the results provided."). The belief that entry barriers would not significantly encumber internet competition because users can seamlessly navigate among rival websites is best encapsulated by the expression "competition is one click away." David Wismer, *Google's Larry Page: "Competition is One Click Away" (and Other Quotes of the Week)* (Forbes, Oct 14, 2012), archived at http://perma.cc/2RW7-TX7U.

monopolies from competing without alleviating consumer harms.[58]

Lastly, the Chicago School's proponents and critics disagree about whether current Sherman Act doctrines are sufficient to combat threats to competition in the digital economy. Critics argue for adopting new doctrines or expanding existing ones while the Chicago School's proponents have faith in current Sherman Act enforcement tools to address new antitrust concerns.[59] Those who advocate for more robust antitrust enforcement often point to the refusal to deal doctrine, under which monopolists are compelled to accommodate their rivals, as a means to check restrictions on data access that impede competition.[60] By contrast, Chicago School adherents particularly disfavor that doctrine, as they believe mandating data sharing on refusal to deal grounds would temper internet monopolists' incentives to compete and stifle competition in the digital economy.[61]

In sum, the Chicago School's faith in the free market as a check against monopolists and its preference for restraint in antitrust enforcement have shaped modern antitrust law. Those principles are now under attack by critics who believe that dominant technology companies pose a unique threat to competition. Critics argue that incumbent digital platforms benefit from network effects, first-mover advantages, and command over stores of data that make entry of new competitors unlikely. They advocate for more expansive antitrust liability to combat digital monopolists, and this Comment contends that these critics have the better side of the argument. Indeed, this Comment argues that refusal to deal liability, which is disfavored by Chicago School adherents, provides a solution. Part II analyzes refusal to deal liability and its recent applications in the digital context. Part III

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58 See Geoffrey A. Manne and Joshua D. Wright, *Innovation and the Limits of Antitrust*, 6 J Competition L & Econ 153, 164–68 (2010) (arguing that antitrust intervention can be particularly ill-advised in innovative economic sectors due to the high risk of error).

59 See Richard A. Posner, *Antitrust in the New Economy*, 68 Antitrust L J 925, 925 (2001) ("[T]here is indeed a problem with the application of antitrust law to the new economy, but [ ] it is not a doctrinal problem; antitrust doctrine is supple enough, and its commitment to economic rationality strong enough, to take in stride the competitive issues presented by the new economy.").

60 See Abrahamson, 124 Yale L J at 870–72 (cited in note 21).

61 See Bork and Sidak, 8 J Competition L & Econ at 683 (cited in note 57) (arguing that the essential facilities doctrine would be inappropriate for regulating internet giants like Google).

argues that this form of liability offers an incremental step toward remedying the competitive threat posed by data access restrictions.

II. REFUSAL TO DEAL LIABILITY UNDER SECTION 2 AND ITS DATA SCRAPING IMPLICATIONS

Sherman Act liability for a monopolist's refusal to deal with its direct competitors is a controversial doctrine that has been cited as a possible tool to combat exclusionary restrictions on data access.[62] Generally, monopolists incur liability under Section 2 when their behavior affects the integrity of the market.[63] Monopolists' unilateral decisions typically do not run afoul of the Sherman Act because companies are generally free to choose how and with whom they do business.[64] However, courts have found unilateral conduct exclusionary under certain circumstances; a monopolist refusing to deal with competitors in a manner that harms competition is one example.[65]

Liability for refusal to deal attracts controversy because the antitrust laws are designed to promote competition, rather than cooperation, and compelling a monopolist to engage with competitors offends the principle of firm independence.[66] Antitrust law, consequently, does not recognize any general obligation to deal with competitors. Most antitrust experts agree that even monopolists typically have no duty to accommodate rivals, and their

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62 For opposing perspectives on the continuing vitality of the refusal to deal doctrine, compare Easterbrook, 31 Harv J L & Pub Pol at 441–42 (cited in note 40) (arguing that the refusal to deal doctrine was the "last gasp" of the economically unsound, pre–Chicago School of antitrust), with Abrahamson, 124 Yale L J at 870–71 (cited in note 21) (arguing that refusal to deal liability should be appropriate for data access under certain circumstances).

63 For example, monopolists incur liability for illegally tying product sales or prohibiting their customers from dealing with rivals. See *Novell, Inc v Microsoft Corp*, 731 F3d 1064, 1072 (10th Cir 2013).

64 Id ("By contrast, and 'as a general rule . . . purely unilateral conduct' does not run afoul of section 2—'businesses are free to choose' whether or not to do business with others and free to assign what prices they hope to secure for their own products.").

65 See *Aspen Skiing Co v Aspen Highlands Skiing Corp*, 472 US 585, 601 (1985) ("The absence of an unqualified duty to cooperate does not mean that every time a firm declines to participate in a particular cooperative venture, that decision may not . . . give rise to liability in certain circumstances.").

66 See Carlton, 68 Antitrust L J at 659 (cited in note 20) ("[T]he antitrust laws are premised on the simple notion that rivalry among firms benefits consumers, yet a doctrine of a duty to deal clearly limits that rivalry.").

choice to deny competitors their business should not be condemned lightly.[67]

However, experts disagree about when refusals to deal are exclusionary. Some even argue that the risk of false positives and administrative difficulties innate to refusal to deal liability outweigh any procompetitive benefits, such that the doctrine should be retired. Others counter that dogmatic commitment to the principle of firm independence gives cover to monopolists that suppress competition by stonewalling competitors.[68] Supreme Court precedent has limited refusal to deal liability to rare circumstances, but there is some indication that courts may employ the doctrine when monopolists bar access to data, for example, through scraping prohibitions. Part II.A discusses the development of the refusal to deal doctrine. Part II.B analyzes recent cases that suggest refusal to deal liability may obtain when digital monopolists prevent rivals from scraping public data.

A. Section 2 Liability for Refusal to Deal

Courts have imposed refusal to deal liability under two theories. First, they have applied the intent to monopolize test, in which they ask whether the defendant intended to create or maintain a monopoly by refusing to engage with its competitor. Second, some lower courts have allowed refusal to deal liability under the "essential facilities" doctrine, through which a monopolist is liable for denying access to a resource that is essential to downstream competition.[69] The Supreme Court has never endorsed the essential facilities doctrine. Consequently, the seminal cases for refusal to deal precedent apply the intent test.

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[67] The Antitrust Modernization Commission concluded that refusal to deal liability should be deployed only rarely because it could reduce firms' incentives to compete. Antitrust Modernization Commission, *Report and Recommendations* *101 (Apr 2007), archived at http://perma.cc/4HZG-UDHA.

[68] For a discussion regarding the spectrum of views on refusal to deal liability, see *Competition and Monopoly* at *125 (cited in note 25). See also Testimony of Carl Shapiro, *Exclusionary Conduct* (Antitrust Modernization Commission, Sept 29, 2005), archived at http://perma.cc/5X7E-Q4RC.

[69] 2 *Antitrust Laws and Trade Regulation* § 25.04 (LexisNexis 2d ed 2019).

1. Early Supreme Court refusal to deal precedent.

In 1973, the Supreme Court in *Otter Tail Power Co v United States*[70] first acknowledged Sherman Act liability for a monopolist's refusal to deal in a manner harmful to competition. The defendant, Otter Tail, had a monopoly in the electric power market in parts of Minnesota, North Dakota, and South Dakota.[71] Some towns in the area sought to supplant Otter Tail with competing power companies. Otter Tail declined to sell power to those towns and refused them access to its power lines to receive electricity from rival proprietors. The Supreme Court found that Otter Tail had used strategic dominance to "foreclose potential entrants" in violation of Section 2.[72]

After *Otter Tail*, the Supreme Court decided two cases that made refusal to deal liability a viable tool for Section 2 enforcement. *Aspen Skiing Co v Aspen Highlands Skiing Corp*[73] represents the high point of the Court's refusal to deal jurisprudence.[74] In *Aspen Skiing*, the plaintiff, who owned one of four ski resorts in the Aspen area, sued the defendant, who owned the remaining three resorts, for alleged monopolization under Section 2. For several years, the plaintiff and defendant jointly offered tickets allowing skiers to access any of the four resorts. One year, the defendant refused to sell tickets in conjunction with the plaintiff, even refusing to sell to the plaintiff at retail prices.[75] The Supreme Court concluded that while there is no general duty for monopolists to cooperate with rivals, that freedom is not unlimited.[76] The Court held the monopolist had not only refused to do business with its competitor but had terminated a long-standing practice that satisfied consumer demand. Ending the cooperative venture harmed consumers and precluded the plaintiff from viably competing. The evidence suggested that, by refusing to sell the plaintiff tickets, the defendant intended to maintain a monopoly.[77] Because the defendant offered no valid business reason for its

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70 410 US 366 (1973).

71 Id at 368.

72 Id at 377, 382.

73 472 US 585 (1985).

74 "Refusal to deal doctrine's high water mark came in *Aspen*." *Novell*, 731 F3d at 1074.

75 *Aspen Skiing*, 472 US at 587–96.

76 Id at 601.

77 Id at 605–11.

decision, the Court condemned the refusal to deal as exclusionary under Section 2.[78]

In *Eastman Kodak Co v Image Technical Services*,[79] the Court again recognized liability for a monopolist's refusal to deal. In that case, Kodak refused to sell replacement parts to a competitor offering repair services for Kodak products, allegedly to exclude that company from the repairs market.[80] The Court followed *Aspen Skiing* in holding Kodak would be liable under Section 2 if its refusal had exclusionary effects that could not be explained by valid business justifications.[81]

2. *Trinko* constrains the refusal to deal doctrine.

The Court subsequently limited the refusal to deal doctrine in *Verizon Communications, Inc v Law Offices of Curtis V. Trinko, LLP*.[82] In that case, Verizon was unsuccessfully sued for providing telecommunication services to clients of its competitors on a discriminatory basis.[83] The *Trinko* opinion is notable for its Chicago School overtones, particularly its suggestion that forcing monopolists to share resources through refusal to deal liability could harm consumer welfare by chilling competition.[84] The opinion also suggests that antitrust intervention in the market has the tendency to cause more harm than good.[85] Channeling the Chicago view, the *Trinko* Court described *Aspen Skiing* as "at or near the outer boundary of § 2 liability" and reaffirmed that there is no general duty to deal with competitors.[86] Before imposing refusal to deal liability, the *Trinko* Court wanted some indication that the monopolist had foregone short-term profits to reduce long-run competition.[87]

Several concerns motivated the *Trinko* Court's decision to limit the refusal to deal doctrine. First, Verizon had not engaged in a voluntary "course of dealing" with its rival because it would

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78 Id at 608–11.

79 504 US 451 (1992).

80 Id at 464–65.

81 Id at 483.

82 540 US 398 (2004).

83 Id at 402–06.

84 Id at 414.

85 See Easterbrook, 31 Harv J L & Pub Pol at 446 (cited in note 40) (citing the *Trinko* decision as evidence of the Chicago School's influence on Section 2 jurisprudence).

86 *Trinko*, 540 US at 409.

87 Id at 409–10.

not have dealt with the plaintiff, absent a statutory obligation.[88] The Court made clear that a voluntary relationship was fundamental to liability under *Aspen Skiing*. Second, the Court worried that far-reaching refusal to deal liability would turn courts into central planners, requiring them to set prices, quantities, and terms of service.[89] The Court preferred that anticompetitive harms be "irremediable by antitrust law when compulsory access requires the court to assume the day-to-day controls characteristic of a regulatory agency."[90] Third, the Court doubted the benefits of enforced sharing, especially because compelling monopolists to deal with rivals could engender collusion, which the Court considered the "supreme evil of antitrust."[91] Fourth, the Court worried that enforced sharing could disincentivize investment, harming consumers in the long run because imposing an obligation to deal could reduce the allure of monopoly profits and dissuade innovation.[92] Fifth, the Court questioned the incremental value of antitrust enforcement when a regulatory regime already exists to prevent anticompetitive harms (in this case, there was already a statutory framework that required Verizon to offer access to telecommunication services).[93] Lastly, the Court preferred to set clear antitrust rules that help companies accord their behavior with the law, which is difficult to do in highly fact-dependent refusal to deal cases.[94]

The Supreme Court reaffirmed *Trinko*'s principles in *Pacific Bell Telephone Co v Linkline Communications, Inc*[95] by holding that internet service providers had no duty to deal with competitors and could not be compelled to provide service on their competitors' preferred terms.[96] The Court emphasized the *Trinko* principles of providing clear antitrust rules and keeping courts out of the business of supervising commercial relationships.[97]

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88 Id at 409.

89 Id at 408.

90 *Trinko*, 540 US at 415 (alternation omitted), citing Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 Antitrust L J 841, 853 (1990).

91 *Trinko*, 540 US at 408.

92 Id at 407–08.

93 Id at 412.

94 See *Competition and Monopoly* at *17–18 (cited in note 25).

95 555 US 438 (2009).

96 Id at 449–50.

97 Id at 452.

3. Post-*Trinko* applications of the intent to monopolize test.

After *Trinko*, lower courts have generally taken the Supreme Court's lead and limited the scope of refusal to deal liability. For example, in *Novell, Inc v Microsoft Corp*,[98] the Tenth Circuit denied Section 2 liability when Microsoft declined to license its software to rivals.[99] Following *Trinko*, the court imposed onerous evidentiary requirements to find refusal to deal liability. First, the monopolist and the competitor must have a preexisting and profitable course of dealing. This lessens the risk that courts will encourage collusion by compelling competitors to interact and reduces the administrative strain of courts setting commercial terms out of whole cloth.[100] Second, the circumstances must suggest the monopolist is willing to forsake short-term profits to achieve anticompetitive ends. This requires not only evidence of lost profits but also of the monopolist's anticompetitive intentions and lack of valid business justification. The court acknowledged that this standard is exacting and possibly underinclusive but argued that it is better to err on the side of firm independence because there is proven value in allowing firms to compete.[101]

Similarly, in *MetroNet Services Corp v Qwest Corp*,[102] the Ninth Circuit denied refusal to deal liability for a telecommunications carrier that changed its pricing structure to limit arbitrage.[103] The court emphasized the *Trinko* Court's concern that false positives would chill competition.[104] The court further noted that a regulatory regime existed to deter and remedy anticompetitive harms caused by telecommunications companies and that any "additional benefit to competition provided by antitrust enforcement will tend to be small" under those circumstances.[105]

The Ninth Circuit also held in *Aerotec International, Inc v Honeywell International, Inc*[106] that the defendant, who manufactured aircraft components, did not attempt to monopolize the

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98 731 F3d 1064 (10th Cir 2013).

99 Id at 1080–81.

100 Id at 1074–75.

101 Id at 1075–77.

102 383 F3d 1124 (9th Cir 2004).

103 MetroNet's challenged conduct prevented its customers from buying telecommunication services at wholesale rates and reselling them for a profit. Id at 1126–27.

104 Id at 1136.

105 Id at 1134–35, citing *Trinko*, 540 US at 412.

106 836 F3d 1171 (9th Cir 2016).

aircraft repair services market by refusing to deal with its competitors.[107] The court reiterated the logic of the *Trinko* decision (and channeled Chicago School principles) by finding that enforced sharing could reduce investment incentives, liability for refusal to deal would turn courts into central planners, and enforced sharing would invite collusion.[108] The court confirmed its standard from *MetroNet* by holding that refusal to deal liability should exist when the "only conceivable" rationale for the refusal is sacrificing short-term benefits to obtain long-run profits from exclusion.[109]

4. Essential facilities doctrine.

In addition to the intent test, some courts have analyzed refusal to deal liability under the essential facilities doctrine. Unlike the intent test, the essential facilities doctrine imposes liability based on the nature of the denied resource, rather than on the monopolist's exclusionary motives in the particular case. While the Supreme Court has never defined nor adopted the doctrine, the Seventh Circuit in *MCI Communications Corp v AT&T Co*[110] articulated the elements of an essential facilities claim. For liability under the essential facilities doctrine, the plaintiff must show "(1) control of the essential facility by a monopolist; (2) a competitor's inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility."[111] The court in *MCI* worried that a monopolist in possession of an essential facility could create a bottleneck. In deciding whether to impose liability, the court asked whether denying use of the facility would impede or destroy competition in downstream markets.[112] Although the doctrine generally applies to physical infrastructure, some courts have applied it to intellectual property or even digital assets.[113]

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107 Id at 1175–77.

108 Id at 1183.

109 Id at 1184.

110 708 F2d 1081 (7th Cir 1983).

111 Id at 1132–33.

112 Id.

113 See, for example, *Corsearch, Inc v Thomson & Thomson*, 792 F Supp 305, 332–33 (SDNY 1992) (finding that a trademark database was not an essential facility because competitors could replicate it at substantial, but not prohibitive, cost); *Intergraph Corp v Intel Corp*, 195 F3d 1346, 1358 (Fed Cir 1999) (finding that the plaintiff's dependence on the defendant's superior product did not turn the defendant's product into an essential

The Supreme Court has not expressly disavowed the essential facilities doctrine but, by consistently relegating discussion of it to dicta (and casting aspersions on its propriety), the Court has sown doubt regarding its validity.[114] Furthermore, some criticize the doctrine because it provides defendants with insufficient opportunity to explain their allegedly anticompetitive behavior through valid business justifications.[115] The doctrine is also criticized for failing to provide guidance regarding what constitutes a facility and when denying access risks liability.[116] Additionally, defining a resource as essential effectively classifies the defendant as a utility or common carrier, which likely strikes courts as an extreme measure with uncertain consequences.[117]

To summarize, the Supreme Court has steadily limited the scope of refusal to deal liability in recent decades. The *Trinko* decision narrowly cabined the doctrine, such that liability under either the intent test or essential facilities doctrine only attaches in limited circumstances. However, *Aspen Skiing* remains good law, and there is some indication that courts may apply refusal to deal liability to check abuses of dominance in the digital content.[118]

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facility). See also Spencer Weber Waller and William Tasch, *Harmonizing Essential Facilities*, 76 Antitrust L J 741, 745–58 (2010) (observing that the European Union, Australia, New Zealand, South Africa, Israel, Canada, and other countries recognize some version of the essential facilities doctrine).

[114] See Brett Frischmann and Spencer Weber Waller, *Revitalizing Essential Facilities*, 75 Antitrust L J 1, 3 ("[T]he Supreme Court has dealt with the essential facilities doctrine through an apparent strategy of death by dicta, all but disavowing its prior case law on the subject."); id at 9 ("[T]he Court in *Trinko* appeared to go out of its way to restrict, and nearly reject, the essential facilities doctrine."). See also *Trinko*, 540 US at 410–11 ("This conclusion [no liability] would be unchanged even if we considered to be established law the 'essential facilities' doctrine crafted by some lower courts . . . . We have never recognized such a doctrine . . . and we find no need either to recognize it or to repudiate it here.") (citation omitted).

[115] Evaluating whether providing access to a facility is feasible under the essential facilities doctrine requires "difficult judgments about the impact of forced sharing on the efficient and safe functioning of the facility." See *Competition and Monopoly* at *128 (cited in note 25).

[116] Id at *127–29.

[117] See Frischmann and Waller, 75 Antitrust L J at 21 (cited in note 114) ("Infrastructure theory helps us identify when facilities are . . . candidates for open access via essential facilities or other related doctrines, such as common carriage.").

[118] See, for example, *FTC v Qualcomm*, 2019 WL 2206013, *81–85 (ND Cal) (citing *Aspen Skiing* favorably and concluding that Qualcomm has a duty to license its standard-essential patents to rival modem chip suppliers). But see generally *FTC v Qualcomm*, 2019 WL 3977818 (9th Cir) (staying the injunction and noting disagreement between the FTC and the DOJ regarding whether Qualcomm has a duty to deal).

B. Recent Data Scraping Cases with Refusal to Deal Implications

Internet platforms have occasionally been challenged for allegedly exclusionary conduct.[119] Courts have been hesitant to impose liability under Section 2, possibly for fear of discouraging innovation in the digital economy or because the anticompetitive threat that internet monopolists pose is only slowly becoming understood.[120] Two recent cases addressed the competitive implications of internet platforms controlling access to data. They discussed the antitrust concerns that arise when firms use data scraping prohibitions to shut off access to public information. Both cases addressed the possibility that refusal to deal liability could attach in those circumstances, but neither thoroughly engaged with the case law to adjudicate the issue.

In *hiQ Labs, Inc v LinkedIn Corp*,[121] hiQ, a start-up that gathered and analyzed data from public LinkedIn profiles,[122] sued LinkedIn, a professional networking platform, for preventing hiQ from data scraping.[123] After hiQ had collected and processed LinkedIn data for several years, LinkedIn implemented IP blocks targeting hiQ's bots and sent hiQ a "cease and desist" letter in 2017, demanding hiQ to stop scraping LinkedIn's data. LinkedIn claimed that further data collection would be unauthorized entry on its servers in violation of the CFAA.[124]

hiQ argued that the prohibitions were an abuse of LinkedIn's dominance under California's Unfair Competition Law[125] (UCL), which incorporates federal antitrust law against monopolization,[126] because LinkedIn sought to disadvantage hiQ's analytics services

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[119] See, for example, *PeopleBrowsr, Inc v Twitter, Inc*, 2013 WL 843032, *1 (ND Cal) (PeopleBrowsr alleged Twitter anticompetitively denied it access to Twitter user data); *eBay, Inc v Bidder's Edge, Inc*, 100 F Supp 2d 1058, 1073 (ND Cal 2000) (eBay was unsuccessfully accused of anticompetitively preventing companies from gathering auction data from its website); *LiveUniverse, Inc v MySpace, Inc*, 304 Fed Appx 554, 555–57 (9th Cir 2008) (plaintiff video content provider unsuccessfully alleged that MySpace abused its dominance under a refusal to deal theory by prohibiting its users from sharing LiveUniverse content on their profiles); *Craigslist Inc v 3Taps Inc*, 942 F Supp 2d 962, 967 (ND Cal 2013).

[120] See generally Eleanor Tyler, *2019 Outlook: Online Giants Loom Large in Antitrust Law, Policy* (Bloomberg, Dec 31, 2018), archived at http://perma.cc/7PKA-K5NU.

[121] 273 F Supp 3d 1099 (ND Cal 2017).

[122] Unlike Facebook, which shields user profiles behind password protections, LinkedIn lets users make their data searchable by the public. See id at 1104.

[123] Id.

[124] Id.

[125] Cal Bus & Prof Code § 17200 et seq.

[126] See *hiQ*, 273 F Supp 3d at 1117.

while promoting its own.[127] The Northern District of California granted a preliminary injunction because the court considered it plausible that LinkedIn restricted hiQ's public data access in order to limit competition with its in-house analytic services.[128]

LinkedIn argued that the decision granting the preliminary injunction should be reversed because, under *Trinko*, it was not obligated to provide competitors access to data in its possession. LinkedIn further argued it had valid business justifications for its refusal, namely preventing hiQ from free riding on its investments in professional networking and protecting its users' privacy.[129] Lastly, LinkedIn claimed hiQ could not invoke the antitrust laws to protect its scraping when that behavior was itself illegal under the CFAA.[130]

hiQ and amici countered that shutting off access to public data makes the internet less open and dynamic, to the detriment of innovation and consumer welfare. Furthermore, they claimed that LinkedIn sought to accept the benefits of publishing data while avoiding the costs, in that it had profited from the web traffic and advertising revenues enjoyed by public websites while seeking to prevent its competitors from analyzing the data it publicized.[131]

In September 2019, the Ninth Circuit affirmed the preliminary injunction on the grounds that hiQ's business model depended on public data, which could only be feasibly accessed

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[127] Id at 1118.

[128] It is not clear exactly what theory of monopolization the court envisioned. LinkedIn's scraping prohibition might be exclusionary in that it "leveraged" LinkedIn's monopoly power in the *professional networking market* to enter the *professional analytics market*. Alternatively, the prohibition might have been an attempt to monopolize the professional analytics market itself. See id.

[129] See Appellant's Opening Brief, *hiQ Labs, Inc v LinkedIn Corp*, No 17-16783, *21–22 (9th Cir filed Oct 3, 2017) (available on Westlaw at 2017 WL 4518160) (LinkedIn Opening Brief).

[130] See Appellant's Reply Brief, *hiQ Labs, Inc v LinkedIn Corp*, No 17-16783, *26–27 (9th Cir filed Dec 11, 2017) (available on Westlaw at 2017 WL 6371609) (LinkedIn Reply Brief).

[131] See Plaintiff-Appellee hiQ Labs, Inc's Answering Brief, *hiQ Labs, Inc v LinkedIn Corp*, No 17-16783, *1–3 (9th Cir filed Nov 20, 2017) (available on Westlaw at 2017 WL 5632775) (hiQ Answering Brief). See also Electronic Frontier Foundation Brief at *3 (cited in note 9):

> These rules [for data access] should not allow the handful of companies that collect massive amounts of user data to reap the benefits of making that information publicly available online—*i.e.*, more Internet traffic and thus more data and more eyes for advertisers—while at the same time limiting use of that public information.

through LinkedIn public profiles.[132] The court doubted the propriety of LinkedIn's data scraping prohibition under the UCL, explaining that "[i]f companies like LinkedIn, whose servers hold vast amounts of public data, are permitted selectively to ban only potential competitors from accessing and using that otherwise public data, the result—complete exclusion of the original innovator in aggregating and analyzing the public information—may well be considered unfair competition."[133]

Furthermore, the court dismissed LinkedIn's proffered justifications for the scraping prohibition. LinkedIn could not credibly argue that the prohibition served its users' privacy because, like hiQ, LinkedIn shared its users' data with third-parties for commercial purposes.[134] Similarly, LinkedIn could not persuasively claim the prohibition was justified as a measure against free riding because LinkedIn did not claim ownership of the data at issue, and users clearly intended to make their profiles publicly accessible.[135] By ruling against LinkedIn, the court showed its concern that giving companies "free rein to decide . . . who can collect and use data . . . risks the possible creation of information monopolies that would disserve the public interest."[136]

In an earlier data scraping case, *Authenticom, Inc v CDK Global, LLC*,[137] an analytics firm called Authenticom scraped and analyzed data from car dealer websites operated by defendants CDK Global and Reynolds. Before 2015, CDK's website was open to the public, permitting Authenticom to scrape its data, while Reynolds's website was closed to those without password credentials.[138] In 2015, CDK closed its website, citing cybersecurity concerns, which effectively prevented Authenticom from gathering and analyzing data.[139] Concurrently, CDK and Reynolds entered

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132 *hiQ Labs, Inc v LinkedIn Corp*, 2019 WL 4251889, *5 (9th Cir).

133 Id at *9.

134 Id at *6.

135 Id.

136 *hiQ*, 2019 WL 4251889 at *15. While hiQ's success at the preliminary injunction stage indicates that courts may consider refusal to deal liability for scraping prohibitions, it is noteworthy that hiQ alleged abuse of dominance under the UCL rather than the Sherman Act, as the UCL allows for more expansive monopoly liability than federal antitrust law. The UCL proscribes all violations of the federal antitrust laws but also prohibits "conduct that threatens an incipient violation of an antitrust law, or violates the policy or spirit of one of those laws." *hiQ*, 273 F Supp 3d at 1117 (emphasis added) (citation omitted). See also *Cel-Tech Communications, Inc v Los Angeles Cellular Telephone Co*, 973 P2d 527, 565 (Cal 1999) (Baxter concurring in part and dissenting in part).

137 874 F3d 1019 (7th Cir 2017).

138 Id at 1021–22.

139 Id at 1022.

bilateral agreements to share data with each other.[140] CDK and Reynolds both offered analytics services that competed with Authenticom and were able to demand significantly higher prices after CDK denied Authenticom access.[141]

Authenticom sued CDK, alleging that its data sharing agreement was an unreasonable restraint of trade under Section 1 of the Sherman Act.[142] Notably, Authenticom did not bring claims under Section 2 because neither CDK nor Reynolds had monopoly power in the dealer management service market.[143] No antitrust law imposes a duty to deal on firms without monopoly power, so the refusal to deal doctrine would be at best persuasive outside the Section 2 context.

Nonetheless, the district court granted a preliminary injunction, which required CDK and Reynolds to give Authenticom limited access to their websites so it could gather the data necessary to continue providing analytics services.[144] The injunction implied Authenticom had a right to access the data under the antitrust laws, which could only arise under a Section 2 refusal to deal theory.[145] The Seventh Circuit overturned the injunction because CDK's decision to close its website to scrapers was separate from the defendants' data sharing agreement. Therefore, even if the data-sharing agreement violated Section 1, the proper remedy would be to remove the offending restraint of trade, not to create a new contractual relationship that forced the defendants to "do business with Authenticom on terms to which they did not agree."[146]

Furthermore, the court indicated that this particular case would fall outside the scope of *Aspen Skiing* even if allegations had been brought under Section 2. Forcing Reynolds to open a website that had always been closed to the public and empowering a court to dictate the terms of a new business relationship

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140 Id.

141 *Authenticom*, 874 F3d at 1023.

142 Authenticom alleged the sharing agreements were unreasonable restraints of trade in that they eliminated competition in the data integration industry. Id.

143 Id at 1026 ("Authenticom has not argued that either Reynolds or CDK has sufficient market power on its own to trigger either a monopolization or an attempt-to-monopolize claim under section 2 of the Sherman Act.").

144 Id at 1024.

145 *Authenticom*, 874 F3d at 1026.

146 Id.

would offend the principles of *Trinko*.[147] The court did not foreclose the possibility, however, that an internet monopolist operating a public website could be liable under Section 2 for exclusionary data scraping prohibitions.[148]

hiQ and *Authenticom* show that plaintiffs are beginning to raise antitrust concerns regarding scraping prohibitions in the courts. These cases raise the possibility of using refusal to deal liability to address those concerns. However, because neither case involved a Section 2 claim and both evaluated preliminary injunctions, rather than the full merits,[149] neither case thoroughly adjudicated whether data scraping prohibitions may be unlawful under Section 2. Part III addresses this unresolved question.

III. IMPOSING REFUSAL TO DEAL LIABILITY FOR DATA SCRAPING PROHIBITIONS

Whether a monopolist can incur Section 2 liability for denying competitors access to public data remains an open question after *hiQ* and *Authenticom*. This Part analyzes the propriety and feasibility of imposing refusal to deal liability for data scraping prohibitions. It assumes a fact pattern in which a hypothetical internet monopolist denies its competitor access to public data through scraping prohibitions.[150] Furthermore, it takes as given that the hypothetical defendant possesses monopoly power in the relevant market[151] and that the hypothetical plaintiff competes

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147 Id ("[T]his case is a far cry from *Aspen Skiing*, which represented the high-water mark in section 2 cases for a duty-to-deal theory.").

148 By limiting the case to the facts, the court did not foreclose the possibility of other scraping prohibitions violating Section 2.

149 See *hiQ*, 273 F Supp 3d at 1120; *Authenticom*, 874 F3d at 1026–27.

150 It is easy to imagine future cases similar to these idealized facts because tech companies often spar over access to data. In 2010, for example, Google and Facebook reciprocally blocked each other's access to users' contact information. See Alexei Oreskovic, *Google Bars Data from Facebook as Rivalry Heats Up* (Reuters, Nov 5, 2010), archived at http://perma.cc/AM4M-WJRJ. If Google had alleged that Facebook's measures to prevent data collection were intended to protect its social media monopoly against threats from Google+, that hypothetical litigation could have involved refusal to deal liability for scraping prohibitions. Similarly, the news that Facebook deliberately withholds user data from competitors while freely supplying that data to companies that pose no threat could invite refusal to deal claims. See Solon and Farivar, *Mark Zuckerberg Leveraged Facebook User Data* (cited in note 1).

151 In this context, monopoly power would entail dominance over an internet-based market, such as social/professional networking, e-commerce, or search.

with the defendant in that market.[152] Part III.A argues that restrictions on data access pose a significant threat to digital competition, and refusal to deal liability for scraping prohibitions provides an incremental step toward more robust antitrust enforcement to confront that threat. Part III.B contends that scraping prohibitions should be analyzed through an intent test framework. Part III.C argues that operating a public website and freely supplying data to the public should be considered a "course of dealing" with internet users, broadly. Finally, Part III.D proposes a balancing standard for adjudicating whether scraping prohibitions are exclusionary and outlines the factors courts should consider when applying that standard.

A. Liability for Data Scraping Prohibitions as an Incremental Solution to Digital Antitrust Concerns

The appropriateness of imposing refusal to deal liability for scraping prohibitions depends on whether digital monopolists' ability to restrict data access poses a serious risk to competition. If digital monopolists have not harmed consumers and their control of data poses no significant barrier to entry, as Chicago School proponents would likely suggest, Section 2 liability for data scraping prohibitions would be unnecessary. However, if Chicago School critics are correct that access to data is required for viable competition in the digital economy, scraping public data may enable rivals to gather information and pose a competitive check on incumbent monopolists. It is difficult to say conclusively which view is correct, especially because the harms contemplated by exclusionary conduct in the digital economy consist of less innovation or less internet vibrancy rather than more quantifiable harms like higher prices or lower quantities.[153]

Because data is a crucial input for digital product development, it is evident that data access has become critical to internet

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[152] This is similar to the fact pattern in *hiQ* though without complications regarding which market LinkedIn allegedly sought to monopolize. See note 128.

[153] See Khan, 126 Yale L J at 721–22 (cited in note 46) ("[I]t is fair to say that a concern for innovation or non-price effects rarely animates or drives investigations or enforcement actions."); Kenneth Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in National Bureau of Economic Research, *The Rate and Direction of Inventive Activity: Economic and Social Factors* 609, 619–22 (Princeton 1962) (arguing that the scale of innovation depends on the amount of market competition).

competition and likely will become even more so.[154] Therefore, companies with access to data have an advantage that they may use for exclusionary ends. Furthermore, multisided platforms,[155] like Facebook, Google, Amazon, and LinkedIn, can leverage their scale to gather considerable shares of useful internet data.[156] For example, LinkedIn certainly controls a significant portion of professional network data relevant for companies offering analytics in that field.[157] Lastly, the risk that data access restrictions could reduce innovation and dynamism in the digital economy, though less salient than the threat of higher prices, is cause for concern and should be a focus of the Section 2 enforcement regime.

These concerns militate in favor of liability for anticompetitive scraping prohibitions. However, Chicago School adherents who wish to limit refusal to deal enforcement are right to worry that overactive courts can distort markets and that enforced sharing could harm competition by disincentivizing investment. While it is probable (or at least possible) that liberal access to data would create a more vibrant digital economy, it is also possible that preventing monopolists from guarding their data would disrupt their investment expectations and hinder innovation in the long run.

Luckily, thanks to the broad language of Section 2 and the common law, the incrementalist approach courts have taken in defining its prohibitions offers a solution to the antitrust concerns posed by monopolists' control of data.[158] One benefit of a common law approach is that courts can take small steps in one direction

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[154] See Symons and Bass, *Me, My Data and I* at *25 (cited in note 4) ("[C]ompanies which control large amounts of data raise barriers to entry for potential rivals because they do not have the same ability to use the data to make competitive products.").

[155] The antitrust risks associated with scraping prohibitions are not limited to multisided platforms but, because these platforms have a unique capacity to accumulate data, their use of scraping prohibitions to restrict data access is particularly concerning. See Part II.B.

[156] See Stucke, 2 Georgetown L Tech Rev at 275 (cited in note 2) ("Through [Apple, Google, Amazon, and Facebook's] leading platforms, a significant volume and variety of personal data flows. The velocity in acquiring and exploiting this personal data helps these companies obtain significant market power.").

[157] See Scraping Hub Brief at *20 (cited in note 19):

> LinkedIn is plainly attempting to ensure that no firm other than itself is able to profitably analyze the mountains of publicly-available information that it maintains on its servers. LinkedIn seeks that result not by producing superior analytical products, but by excluding its competitors from information that its users have placed in the public domain.

[158] See Part I.

while leaving themselves a path back if new rules appear imprudent. Furthermore, this approach lets courts experiment their way toward efficient rules.[159]

In comporting with the Sherman Act common law process, imposing refusal to deal liability for anticompetitive scraping prohibitions offers an incremental step toward more vigorous antitrust enforcement regarding restrictions on data access.[160] Liability for those prohibitions will allow courts to test, in a minimally invasive way, whether more robust monopoly enforcement in the internet context will discourage investment or lead to a more competitive digital environment.

Furthermore, data scraping prohibitions offer a fitting context to expand refusal to deal liability because several of the Court's primary worries in *Trinko* are of little concern. For example, the Court's fear that refusal to deal liability would turn courts into central planners is not relevant in this context. Compelling digital monopolists to permit automated collection of public data does not require courts to set prices, quantities, or other commercial terms because the data had previously been offered to web users for free. There is also little reason to believe enforced sharing will induce collusion in the data scraping context. Apart from programmatically accessing the monopolists' servers, scrapers and monopolists would have no meaningful interactions, as scraping does not require affirmative assistance from the monopolist. In addition, false positives (that is, incorrectly condemning scraping prohibitions as exclusionary) would be unlikely to disincentivize monopolists' investments in the public data scraping context. Monopolists have chosen to make this data available to the public for free. While they have invested considerably in the platforms on which users publicize the data, they have calculated that freely supplying it to the internet encourages web traffic and benefits their businesses.[161] It is unlikely they would be discouraged from

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[159] See generally Oliver Wendell Holmes Jr, *The Path of the Law*, 10 Harv L Rev 457 (1897).

[160] Some commentators have argued that refusal to deal liability could obtain under rare circumstances when defendants close their platforms with intent to extend their monopoly power by denying competitors access to unique data. See Howell, *Big Data and Monopolization* at *18–22 (cited in note 21).

[161] Some argue Section 2 liability for data scraping prohibitions will encourage monopolists to withdraw data from the public by imposing password authentication. See, for example, LinkedIn Opening Brief at *15 (cited in note 129). However, this seems unlikely because the platform business model directly benefits from greater viewership. Furthermore, it stands to reason that companies that could profitably cloister data behind password protections or paywalls would have already done so.

investing just because they are compelled to allow access to that information through automated means. Lastly, unlike the telecommunications industry in *Trinko*, the internet platform industry is lightly regulated.[162] According to the Court's reasoning in *Trinko*, antitrust enforcement may add more value in this context because no other statutory framework exists to deter and remedy anticompetitive harms.

B. The Case for the Intent to Monopolize Test

If courts are willing to proscribe anticompetitive data scraping prohibitions through the refusal to deal doctrine, as this Comment argues they should, they must consider whether to analyze prohibitions under the intent test or the essential facilities framework. The essential facilities doctrine may seem like an intuitively appealing framework for analyzing scraping prohibitions because data is an indispensable resource for internet competition. However, the intent test is preferable for several reasons. First, the essential facilities doctrine has never been endorsed by the Supreme Court and has been fairly unsuccessful in the lower courts.[163] The Court has also refused to give the doctrine credence and has cast its propriety into doubt without explicitly overruling it.[164] Therefore, from a pragmatic perspective, plaintiffs face an uphill battle when seeking antitrust liability on essential facilities grounds.

The essential facilities doctrine also allows for less consideration of valid business justifications. Some courts argue applying it runs a greater risk of improperly condemning procompetitive behavior.[165] Given *Trinko*'s anxiety regarding false positives,[166] lower courts may be more willing to find data scraping prohibitions exclusionary if the test gave defendants adequate opportunity to defend their behavior.

Relatedly, the intent test allows for more case-by-case analysis because it hinges on whether a monopolist intended to reduce

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[162] See Rana Foroohar, *Why We Need to Regulate the Tech Platforms* (Financial Times, Nov 5, 2017), online at http://www.ft.com/content/84f402ac-bfc0-11e7-b8a3-38a6e068f464 (visited Apr 30, 2019) (Perma archive unavailable).

[163] Of a sample of eighty-two notable essential facilities cases, only seven resulted in verdicts for the plaintiffs. 2 *Antitrust Laws and Trade Regulation* § 25.04 at *21 (cited in note 69).

[164] See Frischmann and Waller, 75 Antitrust L J at 3 (cited in note 114). See also Part II.A.4.

[165] See 2 *Antitrust Laws and Trade Regulation* § 25.04 at *22 (cited in note 69).

[166] *Trinko*, 540 US at 414.

competition by refusing to deal. By contrast, the essential facilities doctrine focuses on whether it is necessary and feasible for a monopolist to allow access to the resource in question.[167] An improper ruling for the plaintiff under an intent theory will likely create narrower precedent for that reason because imposing liability on the monopolist is contingent on the monopolist's state of mind in that circumstance rather than the nature of the resource itself. Courts may be more likely to extend liability under the intent test after *Trinko* because they will have less reason to fear the precedential effect of false positives.

C. Freely Supplying Data to the Public as a Voluntary Course of Dealing

Despite the advantages of the intent test, some of its requirements pose challenges for proscribing anticompetitive data scraping prohibitions. Most notably, the voluntary course of dealing element could pose a significant hurdle.[168] The *Trinko* court held in Verizon's favor because its dealings with competitors were compelled by statute, making clear that a prior voluntary relationship was a key factor for liability under *Aspen Skiing*.[169]

While this is an exacting standard, freely supplying data to the public should be considered a voluntary course of dealing with internet users at large. Just as users of Facebook and Google have commercial relationships with those companies despite enjoying their products for free, the fact that public data is offered at no cost should have little bearing on whether internet monopolists have created a voluntary relationship by supplying it to the web.

Furthermore, monopolists supplying data to the public do not do so for charitable reasons. In exchange for granting access to the data, they benefit from greater web traffic and the accompanying revenues.[170] They are party to a quasi-contractual relationship in which they barter data for viewership.

Moreover, no court has stressed that the existing course of dealing need be strictly contractual for refusal to deal liability to attach. *Trinko* primarily emphasized that the relationship should be *voluntary*—that is, not compelled by law.[171] Unlike *Trinko*,

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167 See Frischmann and Waller, 75 Antitrust L J at 3 (cited in note 114).

168 See Part II.A.2.

169 *Trinko*, 540 US at 409. See also Part II.A.2.

170 See Electronic Frontier Foundation Brief at *3 (cited in note 9).

171 See *Trinko*, 540 US at 409.

there is no indication that companies involuntarily supply data to the public.

Post-*Trinko*, lower courts have insisted on voluntary courses of dealing largely because enforced sharing is less likely to induce collusion among firms in existing business relationships, and existing business relationships do not require courts to set prices or other commercial terms.[172] As noted above in Part III.A, these concerns are less relevant for data scraping prohibitions, so courts may view the voluntary course of dealing requirement as less vital in the scraping context. To the extent that courts are hesitant to find prior courses of dealing when websites simply distribute data to the public, perhaps liability for refusal to deal could be limited to circumstances in which a website provider knows (and tacitly allows) data scrapers to gather and process data from their sites, as was the case in *hiQ*.[173]

Lastly, while some lower courts have insisted on longstanding commercial relationships to satisfy the course of dealing element, others consider the presence of a course of dealing as merely probative evidence that the monopolist intended its refusal to deal to be exclusionary.[174] Therefore, perhaps courts will not dwell on the nature of the relationship between the scraper and the digital monopolist but will instead holistically evaluate the evidence of exclusionary intent.

D. Courts Should Apply an Effects-Balancing Test to Assess Exclusionary Conduct in Data Scraping Cases

Courts must also determine a standard for assessing whether a given data scraping prohibition is exclusionary. Over time, courts and enforcement agencies have offered several tests for defining exclusionary conduct. Among those tests are (1) the effects-balancing test, (2) the profit sacrifice test, (3) the no economic

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172 See, for example, *Novell*, 731 F3d at 1074–75.

173 *hiQ*, 273 F Supp at 1107 ("[D]espite the fact that hiQ has been aggregating LinkedIn's public data for five years with LinkedIn's knowledge, LinkedIn has presented no evidence of harm, financial or otherwise resulting from hiQ's activities.").

174 Compare *Steward Health Care System, LLC v Blue Cross & Blue Shield of Rhode Island*, 311 F Supp 3d 468, 484 (D RI 2018) ("[N]o prior course of dealing is immaterial."), quoting *Helicopter Transport Services, Inc v Erickson Air-Crane Incorporated*, 2008 WL 151833, *9 (D Or), with *Louisiana Wholesale Drug Co v Shire LLC*, 754 F3d 128, 135 (2d Cir 2014) (finding refusal to deal liability was unavailable because the defendant "did not terminate any prior course of dealing—let alone a 'presumably profitable' one").

sense test, (4) the equally efficient competitor test, and (5) the disproportionality test.[175] The Supreme Court has not specified a test to apply for refusal to deal litigation. In *Trinko*, the Court noted in dicta that, to conclude a monopolist's refusal to deal is exclusionary, there should be some indication the monopolist sacrificed short-term profits for long-run exclusionary gain, but the Court did not mandate the profit sacrifice test, specifically, to make that assessment.[176] Therefore, lower courts may conduct whichever test they consider suitable to assess whether prohibitions are anticompetitive.[177] This Section first argues that courts should apply the effects-balancing test, and then evaluates the primary arguments that they should consider regarding scraping prohibitions' competitive effects and their valid business justifications.

1. The effects-balancing test for evaluating exclusionary conduct.

A good standard for evaluating exclusionary conduct strikes the right balance of decision and error costs, which fosters competition, promotes judicial administrability, and provides firms with legal clarity.[178] For that reason, courts should apply the effects-balancing test to assess whether data scraping prohibitions are exclusionary.[179] Effects-balancing is preferable to arguably clearer and more administrable standards, such as the

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[175] *Competition and Monopoly* at *viii–x (cited in note 25). See Part I.A for a more complete discussion of the various tests courts and enforcement agencies have developed for assessing exclusionary conduct.

[176] Indeed, the Antitrust Modernization Commission considered whether a balancing standard would be appropriate for evaluating allegedly exclusionary conduct in refusal to deal cases, notwithstanding the *Trinko* Court's emphasis on profit sacrifice. The Commission's primary concerns with that standard related to its administrability, not its consistency with the governing case law. Antitrust Modernization Commission, *Report and Recommendations* at *102 (cited in note 67).

[177] Many courts have adopted a profit-sacrifice standard in the wake of *Trinko*. See, for example, *Novell*, 731 F3d at 1080 n 5; *SmithKline Beecham Corp v Abbott Laboratories*, 2014 WL 6664226, *4 (ND Cal). However, other courts have adopted the balancing standard for evaluating exclusionary conduct advanced in *United States v Microsoft Corp*, 253 F3d 34, 59 (DC Cir 2001) to assess refusals to deal. See, for example, *URL Pharma, Inc v Reckitt Benckiser, Inc*, 2015 WL 5042911, *7–9 (ED Pa) (analyzing whether the procompetitive effects of the defendant's refusal to deal outweighed its anticompetitive consequences).

[178] See Thomas A. Lambert, *Defining Unreasonably Exclusionary Conduct: The 'Exclusion of a Competitive Rival' Approach*, 92 NC L Rev 1175, 1204–05 (2014).

[179] If a monopolist's scraping prohibition were found to be exclusionary, a court would have broad discretion regarding the appropriate remedy. For example, the court could enjoin the offending behavior (in this case, denying competitors data access), or it could award the plaintiff treble damages based on the harm the scraping prohibition caused to

profit-sacrifice test (which asks whether the monopolist chose to forgo short-term profits for an exclusionary purpose)[180] or disproportionality test (which asks whether the conduct's anticompetitive effect vastly outweighs its procompetitive results) because it will reduce the false negatives inherent to those tests. The balancing test is the broadest standard that courts employ, and it would allow liability whenever they determine data scraping prohibitions would impede competition in the digital economy. It is particularly well-suited to the data scraping context because, as previously noted, some scrapers gather data for illegitimate purposes.[181] Therefore, a fact-intensive inquiry into a monopolist's motivations for shutting access is necessary to avoid false positives while condemning scraping prohibitions that restrain competition.

The effects-balancing approach surely imposes significant decision costs because requiring courts to evaluate the net competitive effect of a monopolist's conduct demands significant judicial resources.[182] Because it is an amorphous balancing standard rather than a bright-line rule, the effects-balancing test might also provide prospective defendants with less ex ante legal guidance. Relatedly, the balancing approach could be difficult to execute because assessing all of the results of a monopolist's behavior would be complicated.[183] The Chicago School may favor tests that prioritize administrability over accuracy and that encourage restraint in antitrust enforcement. However, the Chicago paradigm underestimates the unique threat digital monopolists pose to competition by controlling stores of data, and the Chicago School's antitrust regime generally fails to check anticompetitive restrictions on data access.[184] A broader, more inclusive standard is necessary

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the competitor's business. See generally Spencer Weber Waller, *The Past, Present, and Future of Monopolization Remedies*, 76 Antitrust L J 11 (2009).

[180] Despite the *Trinko* Court's dicta regarding evidence of profit sacrifice in refusal to deal cases, the profit-sacrifice test is particularly ill-suited to the data scraping context. Monopolists do not seek immediate returns when they post public data online, so it would be impractical to ask whether their decision to cut off access evidenced a short-term profit sacrifice.

[181] See notes 11–12 and accompanying text.

[182] See Antitrust Modernization Commission, *Report and Recommendations* at *102–03 (cited in note 67).

[183] For criticisms of the effects-balancing approach, see *Competition and Monopoly* at *37–38 (cited in note 25).

[184] See Antitrust Modernization Commission, *Report and Recommendations* at *102–04 (cited in note 67).

to correct the anticompetitive threat digital monopolists pose in this context.[185]

2. Net competitive effects of data scraping prohibitions.

In evaluating whether data scraping prohibitions are anticompetitive under an effects-balancing approach, courts should analyze several factors. First, courts should consider both the monopolist's intended purpose for its scraping prohibition and the scraper's intended use for the public data. For example, did the monopolist selectively shut off data access to businesses with which it competes while welcoming scraping bots from noncompeting businesses?[186] This might indicate the monopolist seeks to deploy the prohibitions specifically to impair rivals' ability to compete.

Second, courts should consider the nature of the public data.[187] For example, will denying competitors access to the data chill innovation in the digital economy, or is the data inessential or available elsewhere? Relatedly, courts should consider whether restricting access to data will prevent competitors from offering products that consumers demand, much like the court in *Aspen Skiing* determined that the monopolist had denied consumers the ability to purchase joint tickets.[188]

Courts should next consider the scraper's motivations for gathering data. Is the scraper collecting information simply to create a knockoff version of the monopolist's website, or does the scraper intend to create a novel product or insight? Scrapers who gather information to offer new innovations benefit consumers with greater variety and efficiency. They should be entitled to more antitrust protection than those who simply copy preexisting ideas from monopolists.

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[185] Other academic papers have argued for a balancing test in refusal to deal cases. See, for example, Simon Genevaz, *Against Immunity for Unilateral Refusals to Deal in Intellectual Property: Why Antitrust Law Should Not Distinguish between IP and Other Property Rights*, 19 Berkeley Tech L J 741, 762 (2004) (arguing that a "rule of reason" balancing approach is necessary to combat the anticompetitive threat of monopolists' unilateral refusals to license intellectual property).

[186] See, for example, Scraping Hub Brief at *2 (cited in note 19) ("The critical issue underlying this appeal is whether a data monopolist such as LinkedIn may criminalize perfectly proper behavior and thereby selectively bar competitors and other entities from electronically accessing data.").

[187] See Howell, *Big Data and Monopolization* at *19 (cited in note 21).

[188] *Aspen Skiing*, 472 US at 603.

Furthermore, courts should conduct classical antitrust analyses in which they evaluate the effect of a monopolist's conduct on consumer welfare. This might involve determining whether data scraping prohibitions will reduce the number of competitors in a monopolist's market, allowing them to increase prices or reduce quality for paying customers or for advertisers.[189]

Courts should lastly consider whether mandating access to public data would enable free riding in a manner that significantly reduces monopolists' incentives to invest. Monopolists will argue that supplying data to the public does not mean they consent to its use for any purpose. Courts would therefore dissuade future investments in public data if they allow free access for scrapers ex ante, which monopolists would never have agreed to.[190] Monopolists may also draw on Chicago School principles and claim requiring automated access for scrapers denies them the exclusive right to process and market their data, which impedes their efforts to maximize profits. By striking data scraping prohibitions under Section 2, courts would consequently hinder monopolists' efforts to vigorously compete and disincentivize the future development of open digital platforms, contrary to the primary aim of the antitrust laws.[191]

However, whatever investment expectations monopolists have in the data they make available to the public must be limited, considering they have already distributed the information to internet users for free. Furthermore, even if denying scrapers programmatic access to public data is the most profitable strategy from the monopolist's perspective, it is not necessarily best for the competitive health of the digital economy. Giving competitors automated access to data could put the data to more innovative uses

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189 See Steven C. Salop, *Exclusionary Conduct, Effect on Consumers, and the Flawed Profit-Sacrifice Standard*, 73 Antitrust L J 311, 331 (2006) ("[T]he evaluation is really about whether consumers are harmed from higher prices, reduced quality, or (in some cases) reduced innovation[.] Thus, a better term might well be a 'consumer harm' standard rather than a 'consumer welfare effect' standard.").

190 See, for example, LinkedIn Reply Brief at *9 (cited in note 130) ("hiQ wants LinkedIn to turn over that information in a commercially advantageous form that would allow hiQ to free-ride on LinkedIn's investment. LinkedIn has no antitrust duty to give hiQ that shortcut.").

191 See, for example, Sokol and Comerford, 23 Geo Mason L Rev at 1160 (cited in note 56) ("Using antitrust as a sword to address Big Data concerns risks reducing competition and innovation from new products.").

and improve consumer welfare, notwithstanding its effect on monopolists' bottom lines.[192] Lastly, one of the benefits of applying the intent test in conjunction with a balancing standard is that scraping prohibitions should be condemned only when monopolists use them specifically to create or maintain market power. Therefore, in instances when internet monopolists selectively deny data access for valid business purposes not intended to exclude competition, they should be free from liability under this standard.

3. Evaluating valid business justifications for data scraping prohibitions.

Courts must give monopolists adequate opportunity to present valid business justifications for their data scraping prohibitions to reduce the risk of false positives. First, courts should consider whether mandating scraper access would prevent monopolists from safeguarding their users' privacy. Perhaps users have expectations that their personal information will be used for the enumerated purposes outlined in the website's terms and conditions, and data scrapers do not abide by those terms. Nonetheless, it seems unlikely that internet users have significant privacy expectations in data they know is made available to all internet users.[193] And furthermore, ending data scraping does little to prevent third parties from acquiring users' data because internet companies routinely sell or exchange personal data with other firms.[194]

Second, courts should consider whether data scraping significantly interferes with the monopolist's website, for example, by taxing its servers. However, this may be unlikely given that scraping bots simply gather data as it appears on users' computer

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[192] See Abrahamson, 124 Yale L J at 879 (cited in note 21) (observing that public data can power a variety of applications over time—from predicting social unrest to directing humanitarian aid—and therefore "resemble technologies that support multiple rounds of innovation").

[193] But see Brief of Amicus Curiae Electronic Privacy Information Center (EPIC) in Support of Neither Party Urging Reversal, *hiQ Labs, Inc v LinkedIn Corp*, No 17-16783, *5 (9th Cir filed Oct 10, 2017) (available on Westlaw at 2017 WL 4698992) ("Users who join LinkedIn provide detailed personal information to the company, and they reasonably expect that LinkedIn will uphold its end of the bargain by protecting their data from unauthorized disclosure and misuse.").

[194] See Alexis C. Madrigal, *Facebook Didn't Sell Your Data; It Gave It Away* (The Atlantic, Dec 19, 2018), archived at http://perma.cc/VGR9-VYPN.

screens and companies rarely bar the myriad robots that engage with their sites.[195]

Lastly, courts should consider whether monopolists can justify denying scrapers access as a means to deter free riders who did not invest in the infrastructure necessary to generate this data.[196] Antitrust defendants routinely justify their conduct as necessary to prevent free riding.[197] Courts, however, lack a coherent framework to determine when monopolists disguise exclusionary measures as efforts to retain the benefits of their investments.[198] Courts should protect monopolists' investment incentives but cannot let them use free riding accusations as pretext to suffocate competition. In the scraping context, monopolists may argue that their motivation to innovate in the internet space depends on whether courts protect their data investments. But it is questionable whether granting monopolists strong property

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[195] See, for example, hiQ Answering Brief at *10 (cited in note 131) ("[C]ounsel could not identify any server impairment from hiQ's activities and conceded that LinkedIn allows other commercial enterprises, including Google and Yahoo!, to programmatically analyze the site.").

[196] For example, LinkedIn argued that hiQ was free riding by gathering and processing data from LinkedIn public profiles. See LinkedIn Opening Brief at *10 (cited in note 129). Evidently, LinkedIn believes it has some property interest in the data, despite not claiming ownership of it, because the user-generated data would not exist but for LinkedIn's investment in the platform. This is reminiscent of the Supreme Court's holding in *International News Service v Associated Press*, in which the Court held that a news organization had quasi-property interests in non-copyrightable factual information due to the efforts expended to gather it. Consequently, a rival organization that appropriated the news had competed unfairly. 248 US 215, 239–40 (1918). However, the idea that gathering publicly disseminated information not subject to copyright protection is unfair competition has been hotly disputed. See, for example, *Columbia Broadcasting System, Inc v DeCosta*, 377 F2d 315, 318 (1st Cir 1967) ("International News Serv[ice] . . . is no longer authoritative . . . as it prohibited the copying of published written matter that had not been copyrighted."). See also *National Basketball Association v Motorola, Inc*, 105 F3d 841, 845 (2d Cir 1997) (limiting property interests in facts to time-sensitive information and to instances when free riding on plaintiff's fact gathering would "substantially threaten[ ]" its "existence or quality").

[197] See, for example, *Fashion Originators' Guild of America, Inc v Federal Trade Commission*, 312 US 457, 461 (1941) (claiming anticompetitive group boycotts were necessary to prevent free riding on defendants' fashion innovations); *Ohio v American Express*, 138 S Ct 2274, 2289–90 (2018) (arguing vertical restraints were necessary to prevent free riding on American Express's investment in a consumer network). See also John M. Newman, *Procompetitive Justifications in Antitrust Law*, 94 Ind L J 501, 509–13 (2019) (describing how antitrust defendants justify their behavior as remedies for market failures, such as free riding).

[198] See *Leegin Creative Leather Products, Inc v PSKS, Inc*, 551 US 877, 916 (2007) (Breyer dissenting) ("[I]t is difficult to determine just when, and where, the 'free riding' problem is serious enough to warrant legal protection.").

rights over public data would foster more innovation than a competitive digital economy with liberal access to information.[199] Moreover, preventing free riding on a digital monopolist's investment might not be a compelling justification when the monopolist has distributed the data to the public at no charge. Likewise, the fact that monopolists invest in internet infrastructure should not entitle them to internalize all of its positive externalities, in this case by dictating who can access the public data they post and how.[200] In general, even the most exclusionary refusals to deal will likely feature accusations of free riding, as competitors would not seek a monopolist's business if they did not stand to gain from access to its infrastructure, intellectual property, or other investments. Consequently, allegations of free riding cannot, in themselves, quash refusal to deal claims if the doctrine is to be a viable Sherman Act enforcement tool. By leaving ample room for valid business justifications, the effects-balancing approach will allow courts to distinguish between data scraping prohibitions that improve user experience and protect monopolists' investment expectations and those prohibitions meant to neutralize competitive threats.

In sum, data scraping prohibitions pose a sufficient threat to competition to merit an antitrust remedy, and the refusal to deal doctrine offers an incremental solution to that threat. Courts should apply the intent test to assess refusal to deal liability because precedent has treated the intent test more favorably than the essential facilities doctrine and it risks fewer false positives. Furthermore, the effects-balancing test is appropriate for evaluating whether scraping prohibitions are exclusionary because it is the most inclusive and least error prone standard. Applying effects-balancing to scraping prohibitions will create a more open and dynamic internet while allowing monopolists to protect their investment when doing so would not stifle competition.

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[199] See Marina Lao, *Unilateral Refusals to Sell or License Intellectual Property and the Antitrust Duty to Deal*, 9 Cornell J L & Pub Pol 193, 215–17 (1999) (discussing economic literature that suggests challenges from rising competitors have a larger effect on firms' incentive to innovate than profits from intellectual property rights).

[200] Even intellectual property protections do not let businesses profit from every benefit of their investments. See Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 Tex L Rev 1031, 1041–42 (2005) (noting how intellectual property protections do not allow owners to internalize all social benefits of their innovations). User-generated data is generally not covered by copyright or trademark protections, so there is no reason why monopolists should expect a greater share of externalities than they would be entitled for intellectual property.

CONCLUSION

This Comment has argued in favor of imposing liability under the refusal to deal doctrine for anticompetitive data scraping prohibitions. Given the state of refusal to deal law after *Trinko* and the prevailing conservative approach to antitrust enforcement inspired by the Chicago School, liability under these circumstances would likely constitute a slight expansion of the doctrine. Furthermore, evaluating liability under an effects-balancing approach would impose significant decision costs on fact finders. However, liability under these circumstances is necessary to combat the significant competitive risk of digital monopolists selectively denying rivals access to public data for exclusionary purposes. As the internet becomes increasingly central to the economy and data becomes ever more critical to viable competition, it will be crucial to prevent dominant companies from leveraging their control of data to quell competition. Refusal to deal liability in the data scraping context offers an incremental and minimally invasive tool to combat this competitive threat. Applying the doctrine to data scaping would also be much less radical than other proposed interventions in the digital economy, such as breaking up technology companies. Courts should embrace their common law approach to antitrust jurisprudence by imposing liability whenever data scraping prohibitions would reduce competition.