PRIVACY & ANTITRUST REFORM: HOW TO AVOID THE STARFISH PROBLEM

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INTRODUCTION

In the shadows, individual privacy is eroding. In many ways, this slow breakdown of the membrane between private and public information is brought on by the platforms¹ that observe and record users' every move, e.g., Alphabet,² Meta,³ and ByteDance.⁴ These direct observations, however, are just part of the surveillance story. Platforms exist in a complex ecosystem where data is shared, licensed, and bought among a variety of firms. By accessing diverse nodes of information outside themselves, platforms can probe ever deeper into the lives and thoughts of users. Consequently, these insights allow platforms to better serve their customers (e.g., businesses with marketing needs), who pay a premium to steer users in desired directions.

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¹ The term "platform" in this Essay is used to refer to the dominant platform-based technology companies, particularly those that derive much of their revenue from advertising. See Sangeet Paul Choudary, *The Architecture of Digital Labour Platforms: Policy Recommendations on Platform Design for Worker Well-Being, in 3* INT'L LABOUR ORG., FUTURE OF WORK RSCH. PAPER SERIES 1, 1–2 (2018) (detailing the use of the term).

² Google reorganized under the name Alphabet in 2015. See Conor Dougherty, Google to Reorganize as Alphabet to Keep Its Lead as an Innovator, N.Y. TIMES (Aug. 10, 2015), https://www.nytimes.com/2015/08/11/technology/google-alphabet-restructuring.html [https://perma.cc/D6QY-UW82].

³ Formally known as "Facebook." *See* Mike Isaac, *Facebook Renames Itself Meta*, N.Y. TIMES (Nov. 10, 2021), https://www.nytimes.com/2021/10/28/technology/facebook-meta-name-change.html [https://perma.cc/FF7G-EZLX].

⁴ The popular social media app, TikTok, is owned by ByteDance. *See ByteDance*, CRUNCHBASE, https://www.crunchbase.com/organization/bytedance [https://perma.cc/6G4N-52H7].

Recently, a growing number of academics and policymakers (and academics turned policymakers) have begun to reject rigid conceptions of antitrust law and consider, among other things, the role antitrust can play in the protection of individual privacy. This reimaging coincides with the growing tide of technoscepticism pushing policymakers to pursue antitrust reform with urgency and vigor.⁵ One of the loudest cries within the reform movement is to "break up big tech."⁶ Undoing consummated mergers and acquisitions would presumably limit the data that platforms could easily access and would spur competition on privacy dimensions.⁷ However, conversations surrounding post-merger reviews often fail to consider the information ecosystems in which platforms operate. This Essay seeks to address this omission and argues that while antitrust can

At the federal level, the push for antitrust reform can be seen by President Biden's selections of antitrust reform advocates for positions within his administration, such as Lina Khan, Tim Wu, and Jonathan Cantor; through Federal Trade Commission litigation; and by various bipartisan legislative proposals. See Martha C. White, Momentum Is Building for Antitrust Reform. Here's What That Means for Big Tech, TIME (Nov. 12, 2021), https:// time.com/6116953/antitrust-reform-big-tech-congress-biden/ [https://perma.cc/3BUT-Y5V6]. Similarly, state attorneys general and lawmakers are pursuing antitrust litigation and reform. See Cat Zakrzewski, State Attorneys General Appeal Court's Dismissal of Their Facebook Antitrust Suit, WASH. POST (Jan. 14, 2022), https://www.washingtonpost.com/tec hnology/2022/01/14/facebook-antitrust-lawsuit-appeal-states/ [https://perma.cc/8VN3-ZFK5] (quoting New York attorney general, Letitia James, about an antitrust lawsuit against Meta: "We're filing this appeal with the support of almost every state in the nation because we will always fight efforts to stifle competition, reduce innovation, and cut privacy protections, even when we face a goliath like Facebook."); Ben Brody, The Real Action for Tech Regulation Is Far From Washington, D.C., PROTOCOL (Jan. 11, 2022), https://www.protocol.com/policy/state-tech-22-nys [https://perma.cc/manage/create?fo lder=16531] (describing antitrust reform bills in New York and Arizona); John D. McKinnon & Brent Kendall, States to Move Forward with Antitrust Probe of Big Tech Firms, WALL ST. J. (Aug. 19, 2019), https://www.wsj.com/articles/attorneys-general-to-move-forwardwith-antitrust-probe-of-big-tech-11566247753 [https://perma.cc/Y6XC-GX69].

⁶ Sara Morrison, *Elizabeth Warren's Plan to Break Up Big Everything*, VOX (Apr. 5, 2022), https://www.vox.com/recode/23003056/elizabeth-warren-big-tech-mergers [https://perma.cc/VQ6Y-2ANX] (describing Senator Elizabeth Warren's efforts to break up big tech platforms); AMY KLOBUCHAR, ANTITRUST: TAKING ON MONOPOLY POWER FROM THE GILDED AGE TO THE DIGITAL AGE 302–05 (2021) (discussing Senator Amy Klobuchar's desire to have mergers periodically reviewed to see if they have materially harmed competition); Jessica Mathews, *The FTC Is 'Not Going to Back Down' on Big Business*, FORTUNE (Jan. 20, 2022), https://fortune.com/2022/01/20/ftc-lina-khan-files-antitrust-case-against-meta-facebook-big-tech-big-business/ [https://perma.cc/FU9W-PFFQ] (describing the Federal Trade Commission's efforts to reverse certain Meta mergers).

⁷ For readability, this Essay will use the term "mergers" when referring to both mergers and acquisitions, which are two distinct but related concepts. With a merger, two business entities come together to form a new entity. By contrast, an acquisition involves one entity being absorbed by another with only the absorbing entity surviving. *See* Christina Majaski, *Mergers and Acquisitions: What's the Difference*, INVESTOPEDIA (Apr. 30, 2021), https://www.investopedia.com/ask/answers/021815/what-difference-between-merger-and-acquisition.aspn [https://perma.cc/HDS9-H98Q].

help prevent and curtail privacy harms, it can only do so if reform occurs alongside the creation and implementation of a comprehensive data protection regime.

This Essay proceeds in three Parts. Part I describes the privacy harms caused by tech monopolies and reviews the legal efforts to reduce their power and size. Part II explains how any privacy gains afforded by such reform efforts will be quickly lost due to the data environment in which tech platforms operate. The Essay concludes by identifying legislative complements to post-merger review aimed at preventing data consolidation.

I. PRIVACY HARMS AND COMPETITION

Since inception, tech platforms in the United States have been relatively free to collect user data and capitalize on data analytics, machine learning, and psychological vulnerabilities to create new ways of engaging and influencing users. The power platforms have over user choice directly interferes with users' privacy, and these invasions only grow more nefarious the larger platforms become.

A. The Big Harm in Big Data

Privacy is a tortuous concept. To discuss it, this Essay turns to the accessible framework articulated by Daniel Solove.⁸ For Solove, activities that harm privacy are on a spectrum of control—the more control a user has over their data, the more privacy the user has. Thus, a platform that merely collects information is less harmful than one that both collects and shares that information. Correspondingly, a platform that utilizes insights drawn from observations to influence individual decisionmaking gives the user the least control over their data.⁹ This lack of "decisional privacy" is at the core of what it means to be free and is the biggest privacy threat posed by platforms, thus it is the focus of this Essay.¹⁰

⁸ See Daniel J. Solove, A Taxonomy of Privacy, 154 U. PA. L. REV. 477, 489 (2006).

⁹ See id. at 561. For a thorough discussion of Solove's privacy framework and its role in identifying antitrust violations, see Gregory Day & Abbey Stemler, *Are Dark Patterns Anticompetitive*?, 72 ALA. L. REV. 1, 16–18 (2020).

¹⁰ See Ryan Calo, Digital Market Manipulation, 82 GEO. WASH. L. REV. 995, 1010 (2014) ("Trouble arises when firms start looking at the consumer behavior dataset to identify consumer vulnerabilities. Emerging methods of big data present a new and vastly more efficient way to identify cognitive bias by attempting to pinpoint profitable anomalies. Rather than hypothesize and then test a promising deviation, as a lab experimenter would, firms can work backward from raw data.").

Examples of platforms invading decisional privacy abound. In 2021, internal documents from Instagram's operations revealed that Meta knew its services were targeting teenage girls with customized content that harmed their mental health and drove some to develop eating disorders.¹¹ In 2018, the Cambridge Analytica scandal demonstrated how political operatives can use Facebook data to influence elections by microtargeting voters who were susceptible to misinformation.¹²

Similarly, YouTube's recommendation algorithm, which notably drives seventy percent of all YouTube's views,¹³ has been shown to assist in the political radicalization of viewers and possibly influence political outcomes.¹⁴ A large-scale audit of YouTube videos in Brazil demonstrated that viewers of political videos were consistently led to more and more extremist content. In an article reporting on the study, the *New York Times* even connected YouTube's algorithm with the election of the far-right Brazilian president, Jair Bolsonaro, who was an active and popular YouTube personality.¹⁵

Meta and Google are far from the only questionable actors in the algorithmic-driven influence game. Other platforms exploit cognitive vulnerabilities to capture user attention and generate advertising revenues. For example, one of the newest tech behemoths, TikTok,

12 Alex Hern & Carole Cadwalladr, *Revealed: Aleksandr Kogan Collected Facebook Users' Direct Messages*, THE GUARDIAN (Apr. 13, 2018), https://www.theguardian.com/uk-news /2018/apr/13/revealed-aleksandr-kogan-collected-facebook-users-direct-messages

[https://perma.cc/6NP6-23PZ]; Matthew Rosenberg, Nicholas Confessore & Carole Cadwalladr, *How Trump Consultants Exploited the Facebook Data of Millions*, N.Y. TIMES (Mar. 17, 2018), https://www.nytimes.com/2018/03/17/us/politics/cambridge-analytica-trum p-campaign.html [https://perma.cc/J2BZ-A7VX]. As stated by the Cambridge Analytica's whistleblower, Christopher Wylie: "We exploited Facebook to harvest millions of people's profiles [and] built models to exploit what we knew about them and target their inner demons." Carole Cadwalladr & Emma Graham-Harrison, *Revealed: 50 Million Facebook Profiles Harvested for Cambridge Analytica in Major Data Breach*, THE GUARDIAN (Mar. 17, 2018), https://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election [https://perma.cc/66EX-KKUX].

13 See Joan E. Solsman, YouTube's AI Is the Puppet Master over Most of What You Watch, CNET (Jan. 10, 2018), https://www.cnet.com/tech/services-and-software/youtube-ces-2018-neal-mohan/ [https://perma.cc/QV7G-KZ88].

14 See Karen Hao, YouTube Is Experimenting with Ways to Make Its Algorithm Even More Addictive, MIT TECH. REV. (Sept. 27, 2019), https://www.technologyreview.com/2019/ 09/27/132829/youtube-algorithm-gets-more-addictive/ [https://perma.cc/Q3D4-8N58].

15 Max Fisher & Amanda Taub, *How YouTube Radicalized Brazil*, N.Y. TIMES (Aug. 11, 2019), https://www.nytimes.com/2019/08/11/world/americas/youtube-brazil.html [htt ps://perma.cc/LJU4-3RR6].

¹¹ See Georgia Wells, Jeff Horwitz & Deepa Seetharaman, Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show, WALL ST. J. (Sept. 14, 2021), https:// www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-companydocuments-show-11631620739 [https://perma.cc/NK2F-JFSN].

owned by the Chinese company ByteDance Ltd., observes user viewing behavior and learns how to provide users content perfectly tailored to their desires.¹⁶ Using brain scans, a 2021 study suggested that TikTok's short and algorithmically personalized videos activate the reward centers of the brain more so than random, non-tailored videos.¹⁷ The researchers concluded that TikTok's design may "progressively transform recreational use into a habit, then compulsion in vulnerable individuals."¹⁸ From these examples there is little doubt that platforms can and do invade decisional privacy. The next question then becomes what can be done about it. One proposed answer is to reform U.S. antitrust law.

B. More Competition, More Privacy?

From the troves of data mined from their networks, dominant platforms can unite consumers and sellers faster and at a lower cost than their smaller rivals (e.g., Twitter,¹⁹ Etsy²⁰).²¹ This explains, in part,

¹⁶ This algorithmic tailoring is largely driven by machine learning. See Howard A. Shelanski, Information, Innovation, and Competition Policy for the Internet, 161 U. PA. L. REV. 1663, 1679 (2013) (explaining that data is "a strategic asset that allows a platform to maintain a lead over rivals and to limit entry into its market"); Alex Hern, Google Says Machine Learning Is the Future. So I Tried It Myself, THE GUARDIAN (June 28, 2016), https://www.theguardian.com/technology/2016/jun/28/google-says-machine-learning-is-the-future-so-i-tried-it-myself [https://perma.cc/P4LX-ZRS8].

¹⁷ Conghui Su, Hui Zhou, Liangyu Gong, Binyu Teng, Fengji Geng & Yuzheng Hu, Viewing Personalized Video Clips Recommended by TikTok Activates Default Mode Network and Ventral Tegmental Area, 237 NEUROIMAGE 1 (2021). See also Ben Smith, How TikTok Reads Your Mind, N.Y. TIMES (Dec. 5, 2021), https://www.nytimes.com/2021/12/05/business /media/tiktok-algorithm.html [https://perma.cc/5AEX-BLSM]; Amalie MacGowan, The TikTok Algorithm Knew My Sexuality Better Than I Did, REPELLER (July 8, 2020), https:// repeller.com/tiktok-algorithm-bisexual/ [https://perma.cc/AG9C-5SU4] (reporting how TikTok microtargeted one user so well that the platform seemed to recognize her sexuality as she was discovering it herself).

¹⁸ Su et al., *supra* note 17, at 1.

¹⁹ As of April 2022, Twitter had a market cap of approximately \$37 billion. *Twitter, Inc. (TWTR)*, YAHOO! FIN., https://finance.yahoo.com/quote/TWTR?p=TWTR [https://perma.cc/RNE7-H5T9].

²⁰ As of April 2022, Etsy had a market cap of approximately \$12 billion. *Etsy, Inc.* (*ETSY*), YAHOO! FIN., https://finance.yahoo.com/quote/ETSY/ [https://perma.cc/FT29-CZA7].

²¹ Tim O'Reilly, What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software, 65 COMMS. & STRATEGIES 17, 24 (2007) ("Network effects from user contributions are the key to market dominance in the Web 2.0 era.").

why the combined value of Alphabet²² and Meta²³ is over \$2 trillion, which is more than the GDP of *most* of the world's countries, including Italy, Canada, and South Korea.²⁴ For humans, these numbers are incomprehensibly large—stacked in one-dollar bills, \$10 trillion would get us to the moon and back again.²⁵

The enormity of tech giants consistently raises questions of monopoly power and its ill effects on privacy.²⁶ Yet, under current interpretations of U.S. antitrust law, regulators have been limited in their responses to these concerns. These limitations come from outdated indicia of economic welfare such as output, supply, and prices that courts use to assess harms caused by market concentration.²⁷ Since platforms often offer their services at low to zero cost to consumers, until recently, they have avoided any real antitrust scrutiny.²⁸

However, there is movement afoot. A new cadre of scholars, consumer advocates, regulators, and lawmakers are demanding that

25 The number of objects a human can instantly perceive is a mere seven, and a stack of one trillion one-dollar bills would reach a quarter of the way to the moon or cover the state of Delaware twice over. *See Any Way You Stack It, \$14.3 Trillion Is a Mind-Bender*, NPR (June 4, 2011), https://www.npr.org/2011/06/04/136930966/how-much-is-14-3-trillion-it-s-a-brain-teaser [https://perma.cc/H3TN-LPEG]; *Grasping Large Numbers*, THE ENDOWMENT FOR HUM. DEV., https://www.ehd.org/science_technology_largenumbers. php [https://perma.cc/3EBB-8G72].

26 AUTORITÉ DE LA CONCURRENCE & BUNDESKARTELLAMT, COMPETITION LAW AND DATA 24 (2016) ("[T]here may be a close link between the dominance of the company, its data collection processes and competition on the relevant markets, which could justify the consideration of privacy policies and regulations in competition proceedings.").

27 Most modern antitrust cases are reviewed under the consumer welfare standard, which focuses almost exclusively on the prices charged to consumers. *See* ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 90 (1978); Joshua D. Wright, *The Antitrust/Consumer Protection Paradox: Two Policies at War with Each Other*, 121 YALE L.J. 2216, 2233–35 (2012).

28 See John M. Newman, Antitrust in Zero-Price Markets: Foundations, 164 U. PA. L. REV. 149, 160 (2015) (finding "multiple examples of courts creating de jure antitrust immunity by declining to apply antitrust scrutiny in zero-price contexts. These courts have done so on the grounds that the antitrust laws cannot apply in the absence of prices."). See also John M. Newman, Antitrust in Digital Markets, 72 VAND. L. REV. 1497 (2019).

²² As of April 2022, Alphabet had a market cap of approximately \$1.5 trillion. *Alphabet Inc. (GOOG)*, YAHOO! FIN., https://finance.yahoo.com/quote/GOOG?p=GOOG&.tsrc=fin-srch [https://perma.cc/RZG7-XWVP].

²³ As of April 2022, Meta had a market cap of approximately \$542.5 billion. *Meta Platforms, Inc. (FB)*, YAHOO! FIN., https://finance.yahoo.com/quote/FB?p=FB&.tsrc=fin-srch [https://perma.cc/QE25-XEDE].

²⁴ GDP (Current \$US), THE WORLD BANK, https://data.worldbank.org/indicator /NY.GDP.MKTP.CD?most_recent_value_desc=false [https://perma.cc/NVH7-6CNV]. See also Shira Ovide, Big Tech Has Outgrown This Planet, N.Y. TIMES (Oct. 12, 2021), https://ww w.nytimes.com/2021/07/29/technology/big-tech-profits.html [https://perma.cc/U8HB-L98J].

antitrust law be overhauled, as its focus on neoclassical economics is no longer relevant or effective. Some of these individuals also argue that privacy harms can be alleviated if reform occurs.²⁹

Proposals to update antitrust have been made on both sides of the aisle. Among the least controversial are those that would increase filing fees for merger reviews so that the Federal Trade Commission (FTC) and Justice Department's Antitrust Division can have more resources to review mergers and enforce existing laws.³⁰ Other proposals focus on data portability and requirements for tech platforms to create some basic standard of interoperability.³¹ The most ink has been spilled, however, over proposals aimed at preventing future mergers and breaking up existing behemoths. These proposals are the ones that primarily address the connection between privacy and antitrust.

The merger behavior of dominant platforms is astonishing. For example, Alphabet made almost two hundred mergers from 2001 through 2018, spending billions in the process.³² Specific legislative

²⁹ See Cristina Caffarra & Johnny Ryan, Why Privacy Experts Need a Place at the Antitrust Table, PROMARKET (July 28, 2021), https://promarket.org/2021/07/28/privacy-expertsantitrust-data-harms-digital-platforms/ [https://perma.cc/S8EQ-7URL]; Makan Delrahim, Assistant Att'y Gen., Dep't of Just., "... And Justice for All": Antitrust Enforcement and Digital Gatekeepers (Jun. 11, 2019), https://www.justice.gov/opa/speech/assistantattorney-general-makan-delrahim-delivers-remarks-antitrust-new-frontiers [https://perma .cc/N9K8-4MUD] ("[D]iminished quality is also a type of harm to competition. As an example, privacy can be an important dimension of quality. By protecting competition, we can have an impact on privacy and data protection. Moreover, two companies can compete to expand privacy protections for products and services"); Dina Srinivasan, Why Privacy Is an Antitrust Issue, N.Y. TIMES (May 28, 2019), https://www.nytimes.com/2019/05/28 /opinion/privacy-antitrust-facebook.html [https://perma.cc/RT5T-AVXE]; James Pethokoukis, 5 Questions for Tim Wu on Big Tech, Antitrust, and The Consumer Welfare Standard, AM. ENTER. INST. (Feb. 19, 2019), https://www.aei.org/economics/5-questions-for-tim-wuon-big-tech-antitrust-and-the-consumer-welfare-standard/ [https://perma.cc/K493-2BL U]; Lina M. Khan & David E. Pozen, A Skeptical View of Information Fiduciaries, 133 HARV. L. REV. 497, 528 (2019).

³⁰ See Graham J. Hyman & Gregory E. Heltzer, Senate Passes Bill to Substantially Increase HSR Merger Filing Fees for Deals Greater Than \$5 Billion, NAT'L L. REV. (June 10, 2021), https://www.natlawreview.com/article/senate-passes-bill-to-substantially-increase-hsr-merg er-filing-fees-deals-greater-5 [https://perma.cc/FJ6E-ZEFA].

³¹ See, e.g., Augmenting Compatibility and Competition by Enabling Service Switching (ACCESS) Act, H.R. 3849, 117th Cong. (2021). This bill was introduced by Rep. Mary Gay Scanlon (D-Pa.) and co-sponsored by Rep. Burgess Owens (R-Utah). See also Tim De Chant, Five New Bills Aim to Break up Big Tech Platforms, Force Them to Play Nice, ARS TECHNICA (June 14, 2021), https://arstechnica.com/tech-policy/2021/06/five-new-bills-aim-to-break-up-big-tech-platforms-force-them-to-play-nice/ [https://perma.cc/VFZ3-T6RJ].

³² *The Google Acquisition Tracker*, CB INSIGHTS, https://www.cbinsights.com/researchgoogle-acquisitions [https://perma.cc/V2GQ-8EE2]. *See also* SUBCOMM. ON ANTITRUST, COM. & ADMIN. L. OF THE COMM. ON THE JUDICIARY, INVESTIGATION OF COMPETITION IN

proposals to tackle mergers include the Platform Competition and Opportunity Act, which would prohibit platforms from acquiring competitive threats and increase scrutiny on mergers that entrench platform market power.³³ On the flip side, the Merger Enforcement Improvement Act would make post-merger reviews easier by requiring platforms to submit data annually to the FTC or assistant attorney general about the impacts their mergers have had on the price and the quality of products and services.³⁴

Reform efforts have also been led by Lina Kahn, who was appointed chair of the FTC in 2021. Kahn seems skeptical of Big Tech, and her appointment has been considered "earth-shattering" for what it could mean for the regulation of platforms.³⁵ The FTC is currently pursuing Meta in the attempt to undo its acquisition of the messaging platform WhatsApp under violations of Section 2 of the Sherman Act,³⁶ and the FTC is also attempting to rewrite merger guidelines to prevent future consolidation.³⁷

Halting mergers or undoing them completely to improve privacy is intriguing on a theoretical level as it will presumably increase competition and give users the option to choose platforms that will

DIGITAL MARKETS: MAJORITY STAFF REPORT AND RECOMMENDATIONS (2020) (describing mergers by Meta, Alphabet, Amazon, and Apple).

³³ Platform Competition and Opportunities Act, H.R. 3826, 117th Cong. § 1 (2021).

³⁴ Merger Enforcement Improvement Act, S. 306, 116th Cong. (2019); *Klobuchar Introduces Legislation to Modernize Antitrust Enforcement and Promote Competition*, U.S. SENATOR AMY KLOBUCHAR (Feb. 1, 2019), https://www.klobuchar.senate.gov/public/index.cfm /2019/2/klobuchar-introduces-legislation-to-modernize-antitrust-enforcement-and-promo te-competition [https://perma.cc/FW38-EQ7R]. *See also* AMY KLOBUCHAR, ANTITRUST: TAKING ON MONOPOLY POWER FROM THE GILDED AGE TO THE DIGITAL AGE 302–05 (2021) (discussing the Act's role in post-merger review).

³⁵ See Sheelah Kolhatkar, *Lina Khan's Battle to Rein in Big Tech*, NEW YORKER (Nov. 29, 2021), https://www.newyorker.com/magazine/2021/12/06/lina-khans-battle-to-rein-in-big-tech [https://perma.cc/LR59-88VP].

³⁶ FTCv. Facebook, Inc., No. 20-3590, 2022 WL 103308, at *2–3 (D.D.C. Jan. 11, 2022) (overcoming a motion to dismiss).

³⁷ Cecilia Kang, *Regulators Aim to Rewrite Rules for Big Mergers*, N.Y. TIMES (Jan. 18, 2022), https://www.nytimes.com/2022/01/18/technology/regulators-aim-to-rewrite-rules -for-big-mergers.html [https://perma.cc/986U-GSQG].

better protect their privacy.³⁸ Competition, after all, can explain why Apple tries to distinguish itself on privacy dimensions.³⁹

In 2021, Apple made the choice to modify its system to require software installed on its devices (commonly known as "apps") to ask users if they wish to have their actions tracked by app developers while using the app.⁴⁰ With the direct presentation of this choice, eighty percent of all Apple users opted out of tracking, thus improving their privacy and abating all types of Solove's harms.⁴¹ Unfortunately for Meta, it claimed that Apple's change hurt its sales growth,⁴² and its stock price subsequently dropped by over twenty-five percent when first quarter 2022 earnings were announced.⁴³ This drop wiped out over \$250 billion of Meta's market value—the single biggest drop of any one company's value in U.S. history.⁴⁴ Accordingly, Apple has been identified as the de facto regulator of Meta.⁴⁵

40 Joanna Stern & Nicole Nguyen, *iPhone Apps Asking to Track You? Answers to Your iOS* 14.5 Privacy Questions, WALL ST. J. (Apr. 7, 2021), https://www.wsj.com/articles/iphoneapps-asking-to-track-you-answers-to-your-ios-14-5-privacy-questions-11617800400?mod=artic le_inline [https://perma.cc/4ZJ9-ETZR].

41 See Suzanne Vranica, Big Tech Privacy Moves Spur Companies to Amass Customer Data, WALL ST. J. (Dec. 2, 2021), https://www.wsj.com/articles/big-tech-privacy-moves-spurcompanies-to-amass-customer-data-11638456544?page=1 [https://perma.cc/ZNX8-EFE7].

42 Sarah E. Needleman, *Facebook Posts Slower Sales Growth with Apple Privacy Policy*, WALL ST. J. (Oct. 25, 2021), https://www.wsj.com/articles/facebook-expected-to-post-slower-sales-growth-with-apple-privacy-policy-11635154200?mod=article_inline [https://perma.cc /U7JQ-DEHF] (discussing Meta's sales growth projections).

43 Thyagaraju Adinarayan & Jan-Patrick Barnert, *Meta Erases \$251 Billion in Value, Biggest Wipeout in History*, BLOOMBERG (Feb. 3, 2022), https://www.bloomberg.com/news/articles/2022-02-03/meta-set-for-200-billion-wipeout-among-worst-in-market-history [https://perma.cc/C7TN-XVK4].

44 See id.

45 Michael Liedtke, *Apple and Facebook Face Off Over iPhone Privacy Update*, L.A. TIMES (Apr. 26, 2021), https://www.latimes.com/world-nation/story/2021-04-26/apples-iphone-privacy-clampdown-arrives-after-7-month-delay [https://perma.cc/6X8D-W35K].

³⁸ There is also historical evidence to suggest that such breakups would encourage more competition. *See* Eleanor M. Fox & Donald I. Baker, *Antitrust and Big Tech Breakups: Piercing the Popular Myths by Cautious Inquiry*, CPI ANTITRUST CHRON., Oct. 2021, at 12–14 (discussing the success of the AT&T structural separation in the early 1980s, while simultaneously also distinguishing that breakup with calls to break-up big tech); Akshay Jagtap, Aakash Biswas & James Blaney, *The Antitrust Legacy of Standard Oil in Today's World*, THE WAY AHEAD (Nov. 1, 2021), https://jpt.spe.org/twa/the-antitrust-legacy-of-standard-oil-in-todays-world [https://perma.cc/45QH-XSDJ] (discussing the benefits of breaking up Standard Oil, which at one point controlled ninety percent of the United States' oil refineries and pipelines).

³⁹ See, e.g., Apple Advances Its Privacy Leadership with iOS 15, iPadOS 15, mac OS Monterey, and watchOS 8, APPLE (Jun. 7, 2021), https://www.apple.com/newsroom/2021/06/apple-advances-its-privacy-leadership-with-ios-15-ipados-15-macos-monterey-and-watchos-8/ [http s://perma.cc/3DKX-AAWE].

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Breaking up tech monopolies would also limit firms' access to firstparty data (i.e., data collected through direct observations of user behavior).⁴⁶ However, as the next Part shows, increased competition and decentralization will not necessarily lead to greater privacy for users.

III. BEYOND FIRST-PARTY DATA: THE STARFISH PROBLEM

Through mergers and acquisitions, platforms naturally can acquire vast amounts of first-party data.⁴⁷ Regardless of consolidation, however, platforms can also amass data from outside firms in the form of second-party (i.e., first-person data shared directly with the platform) and third-party data (i.e., second-party data from a variety of sources which is compiled and organized).⁴⁸ Therefore, if mergers are reversed entirely under a new antitrust regime, policymakers will likely confront a starfish problem.⁴⁹

Just as starfish have the incredible ability to regrow limbs and, in some cases, their entire bodies,⁵⁰ platforms will do the same when it comes to data. By losing access to some first-party data, platforms will simply rely more heavily on second- and third-party data. Of course, the quality of the data will be reduced and the cost of acquiring it will be higher, the new limb—while not as good as the old—will still be able to function. Consequently, platforms that rely on targeting and manipulating users to attract advertisers will still be able to invade those users' decisional privacy if they wish.

Platforms are already adept at obtaining data from sources outside themselves. Most notably, they can efficiently access second-party data from applications that operate on their systems. Take for instance, how a game like Candy Crush is tied to a Facebook user's profile and friends. To ease the transfer of data, platforms often provide app

47 See Bullock, supra note 46.

⁴⁶ See What Is First Party Data?, ONAUDIENCE, https://www.onaudience.com/resources/what-is-first-party-data [https://perma.cc/5LDK-KDU4]; Heidi Bullock, Why It's Time to Put a First-Party Data Strategy Front and Center, FORBES (July 29, 2021), https://www.forbes.com/sites/forbescommunicationscouncil/2021/07/29/why-its-timeto-put-a-first-party-data-strategy-front-and-center/ [https://perma.cc/D4FV-EZ58].

⁴⁸ See 1st Party Data, 2nd Party Data, and 3rd Party Data: What Does It All Mean?, LOTAME (May 5, 2021), https://www.lotame.com/1st-party-2nd-party-3rd-party-data-what-does-it-all-mean/ [https://perma.cc/K9MJ-7W5R] (describing data collection typologies).

⁴⁹ The starfish problem was first described by consumer advocate, Harold Feld. *See Dismembering Big Tech*, THE ECONOMIST (Oct. 24, 2019), https://www.economist.com/business/2019/10/24/dismembering-big-tech [http://perma.cc/36MK-CCBM].

⁵⁰ *Starfish*, NAT'L GEOGRAPHIC, https://www.nationalgeographic.com/animals/invertebrates/facts/starfish-1 [http://perma.cc/ES2N-8HKA].

developers and website operators with software development kits (SDKs) in exchange for access to user data.⁵¹ SDKs are toolkits that allow developers to easily create apps for a platform's specific operating systems.⁵²

The sharing of second-party data between apps and platforms is typically lawful because users putatively consent by clicking through the app's terms of service.⁵³ To illustrate, users of Lyft, the ride-sharing service, agree to allow Lyft to share their data for a variety of broad business purposes including "[p]roviding marketing and advertising services" and "[p]roviding analytics services."⁵⁴ Therefore, if Lyft used Facebook's SDK, riders' data could be shared with Meta. Mark Zuckerberg has even gone so far as to suggest that Facebook should require "full reciprocity" with developers who wanted to access Facebook user data and not just its SDKs.⁵⁵ This idea would require developers to share with Facebook all user interactions within their app. In such a world, a dating app using any user data from Facebook would have to share all chats and connections with Meta.

Platforms also obtain second-party data from customers wanting their own data to be analyzed. For example, in 2019, Meta entered into a partnership with Ascension, a chain of 2,600 hospitals, to acquire data to feed its machine learning algorithms to understand individual healthcare decisions.⁵⁶ With that partnership, at least 150 Meta

54 Lyft Privacy Policy, LYFT (June 30, 2021), https://www.lyft.com/privacy [https://perma.cc/4Q7R-KQDF]. Likewise, the "Terms of Use" for Meta's Instagram product states that users grant "a non-exclusive, royalty-free, transferable, sub-licensable, worldwide license to host, use, distribute, modify, run, copy, publicly perform or display, translate, and create derivative works of your content." *Terms of Use*, INSTAGRAM (Jan. 4, 2022), https://help.instagram.com/581066165581870 [https://perma.cc/GW4Y-ETCE].

55 Bill Goodwin, Sebastian Klovig Skelton & Duncan Campbell, *Facebook Leaks: Zuckerberg Turned Data into Dollars in Ruthless Battle with Competitors*, COMPUTERWEEKLY (Apr. 18, 2019), https://www.computerweekly.com/news/252461895/Facebook-leaks-Zuckerb erg-turned-data-into-dollars-in-ruthless-battle-with-competitors [https://perma.cc/X96Q-GZFL].

56 Rob Copeland, Google's 'Project Nightingale' Gathers Personal Health Data on Millions of Americans, WALL ST. J. (Nov. 11, 2019), https://www.wsj.com/articles/google-s-secret-

⁵¹ Sam Schechner & Mark Secada, You Give Apps Sensitive Personal Information. Then They Tell Facebook, WALL ST. J., (Feb. 22, 2019), https://www.wsj.com/articles/you-give-appssensitive-personal-information-then-they-tell-facebook-11550851636?mod=article_inline [https://perma.cc/CCA3-UN2F].

⁵² IBM Cloud Education, *SDK vs. API: What's the Difference*?, IBM (July 13, 2021), https://www.ibm.com/cloud/blog/sdk-vs-api [https://perma.cc/ZQ4A-ALVF] (explaining what SDKs are and how they work).

⁵³ Sam Schechner, *Popular Apps Cease Sharing Data with Facebook*, WALL ST. J., (Feb. 24, 2019), https://www.wsj.com/articles/popular-apps-cease-sharing-data-with-facebook-1155 1044791 [https://perma.cc/P994-5UKG].

employees had "access to much of the data on tens of millions of patients."57

Last, platforms can and do simply buy second- and third-party data. Thus, if platforms were broken up, they could easily contract with their former parts for such data (e.g., Alphabet contracting with Nest if the two are severed). There is also a billion-dollar data brokerage industry waiting in the wings to supply tech giants with additional data about users' behavior both on- and offline—from the restaurants they patronize to how they use coupons.⁵⁸

IV. ANTITRUST REFORM MUST ALSO ADDRESS DATA CONTRACTING

To avoid the starfish problem, lawmakers must identify ways to ensure that data is decentralized after a breakup. For example, if the FTC were to separate Meta and Instagram, Congress could prohibit the newly separated firms from contracting with each other for data. Such a prohibition would have been useful for the users of WhatsApp who were falsely promised that WhatsApp would not share data with Facebook when it was acquired by Facebook in 2014.⁵⁹

Congress could also push for the passage of the Data Elimination and Limiting Extensive Tracking and Exchange Act (DELETE Act).⁶⁰ This Act would direct the FTC to create a way for users to submit a onetime request to delete all third-party data about them. The Act takes direct aim at data brokers who collect vast amounts of information from a variety of public and private sources to produce detailed profiles of users.⁶¹

59 See Ben Lovejoy, WhatsApp Will Share Your Data with Facebook Whether You Like It or Not, 9TO5MAC (Jan. 6, 2021), https://9to5mac.com/2021/01/06/whatsapp-share-your-data-with-facebook/ [https://perma.cc/U9VX-MC2Z].

60 Data Elimination and Limiting Extensive Tracking and Exchange Act, S. 3627, 117th Cong. (2022).

project-nightingale-gathers-personal-health-data-on-millions-of-americans-11573496790 [https://perma.cc/F4VK-2Q5G].

⁵⁷ Id.

⁵⁸ See Abigail, How Data Brokers Profit from Your Data (a Guide), ROBOTS.NET (Feb. 7, 2022), https://robots.net/fintech/general-fintech/how-data-brokers-profit-from-your-data -a-guide/ [https://permalink.cc/3MSU-PLBL]; Sudipto Ghosh, Facebook Pouncing on Offline User Data to Consolidate Its Ad Targeting Efforts, MARTECH SERIES (Jan. 3, 2017), https://martechseries.com/social/social-media-advertising/facebook-ready-to-pounce-on-offline-user-data/ [https://perma.cc/JS5S-BXHM] (demonstrating that Facebook has bought data from brokers in the past).

⁶¹ See Craig Timberg, Brokers Use 'Billions' of Data Points to Profile Americans, WASH. POST (May 27, 2014), https://www.washingtonpost.com/business/technology/brokers-use-bil lions-of-data-points-to-profile-americans/2014/05/27/b4207b96-e5b2-11e3-a86b-362fd544 3d19_story.html [https://perma.cc/ZDR8-N53T]; Ashley Kuempel, *The Invisible Middlemen: A Critique and Call for Reform of the Data Broker Industry*, 36 NW. J. INT' L. & BUS.

While the DELETE Act is limited to data brokers, Congress could also require platforms to provide users with the option to delete all the data they have on them. This could look similar to the "right to be forgotten" under the European Union's General Data Protection Regulation (GDPR).⁶² Such a move would certainly reduce the amount of data that platforms could contract for after their first-party data becomes limited due to merger reform.

CONCLUSION

Current antitrust frameworks myopically ignore the noneconomic harms of large technology platforms. This is a mistake. However, it is also a mistake to assume that by reforming antitrust and allowing regulators to prevent or undo mergers, privacy harms would be reduced. Platforms run on data, and despite being smaller in size, market forces will still bring data to those platforms that profitably use it. As a result, reform to U.S. antitrust law must work in tandem with reforms to data markets as a whole.

^{207 (2016) (}detailing the contours of the data broker industry); EDITH RAMIREZ, JULIE BRILL, MAUREEN K. OHLHAUSEN, JOSHUA D. WRIGHT & TERRELL MCSWEENY, FED. TRADE COMM'N, DATA BROKERS: A CALL FOR TRANSPARENCY AND ACCOUNTABILITY (2014).

⁶² Council Regulation 2016/679, 2016 O.J. (L 119) 1, art. 17 (EU) ("The data subject shall have the right to obtain from the controller the erasure of personal data concerning him or her without undue delay and the controller shall have the obligation to erase personal data without undue delay"). *See also Everything You Need to Know About the "Right to Be Forgotten"*, GDPR.EU, https://gdpr.cu/right-to-be-forgotten/ [https://perma.cc/A9AM-4HNK].