

Written Testimony of

Morgan Harper
Director of Policy and Advocacy
American Economic Liberties Project

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Testimony

Chair Lee, Ranking Member Booker, Members of the Subcommittee, thank you for holding this hearing and the opportunity to testify.

Here’s the thesis of my testimony. It is stark and bracing, but something the evidence supports. Big Tech firms have become *too big to govern*, and every day that goes by without curtailing their power to operate as private governments, presents a threat to our children, our economy, and our national security. These companies need to be broken up, and their leaders personally held accountable for the lawlessness they have unleashed on America.

I am the Director of Policy and Advocacy at the American Economic Liberties Project, a research and advocacy organization dedicated to addressing the problem of concentrated economic power across the economy to improve conditions for workers, honest businesses, and consumers.

Since founding in 2020, we have made it our priority to investigate and draw attention to an industry marked by extraordinary economic and political power: Big Tech. These companies – including Google, Meta, Apple, and Amazon – have grown so large that their combined market cap now exceeds the GDP of most countries.¹ And while their growth is laudable in some respects, these companies swiftly pulled the ladder up behind them to block others’ growth. This is not just a story about American innovation and success. Big Tech monopolies have grown so dominant, and engaged in conduct so destructive, that they now threaten to snuff out the spark of future tech innovation – including within their own companies. Engineers have no incentive to innovate or are bogged down by company bureaucracy, while managers are disincentivized from making disruptive improvements as they may devalue skills or relationships “that give them power.”²

¹ The top ten largest tech companies have a combined market cap that is greater than China’s GDP in 2023. *See, e.g.*, Abdulkadir Gonyol, Mehmet Selcuk Guclu, “World’s top 10 tech companies worth more than China’s GDP,” AA, July 23, 2024,

<https://www.aa.com.tr/en/economy/world-s-top-10-tech-companies-worth-more-than-china-s-gdp/3283342/>.

² Mark Lemley and Matt Wansley, “How Big Tech Is Killing Innovation,” The New York Times, June 13, 2024, <https://www.nytimes.com/2024/06/13/opinion/big-tech-ftc-ai.html>.

After government and private lawsuits, multiple federal courts have found that Google in particular obtained its dominance by illegally maintaining a monopoly in various markets, from internet search to app distribution on Android phones. Under the first Trump and subsequent Biden Administrations, the Justice Department and Federal Trade Commission brought additional monopolization cases against Meta, Apple, and Amazon.

I. Big Tech's Harms

Despite the federal government's efforts to hold tech monopolies accountable – efforts which have been joined by dozens of State Attorneys General from across the political spectrum – the conduct and harms that catalyzed a new era of surging antitrust enforcement continue. Though these harms have been copiously studied and well documented,³ including in the House Subcommittee on Antitrust's 2020 Investigation of Competition in Digital Markets,⁴ they are worth revisiting to appreciate the risks Big Tech's sustained market power poses:

Google has promoted harmful and unhelpful rehab centers for users with drug addictions.⁵

Amazon allegedly advertised “suicide kits” to teenagers, recommending that customers who purchased sodium nitrite – a food preservative that is deadly in high doses – also buy a scale to measure the dosage, an anti-vomiting drug, and a handbook on assisted suicide.⁶ Parents of a 16 and 17-year-old sued the company for their children's deaths. Ebay voluntarily prohibited the sale of this drug, while Amazon continued to sell the product.⁷

Apple illegally copied a U.S. company's pulse oximetry technology in several models of the Apple Watch, after talks to strike a deal for use of the technology broke down.⁸

³ American Economic Liberties Project, “Big Tech Abuses,” <https://www.economicliberties.us/big-tech-abuse-tracker/>.

⁴ U.S. House of Representatives, Committee on the Judiciary, “Investigation of Competition in Digital Markets,” Majority Staff Report, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, 2020 https://democrats-judiciary.house.gov/uploadedfiles/competition_in_digital_markets.pdf

⁵ Michael Smith, Jonathan Levin, and Mark Bergen, “Why It Took Google So Long to End Shady Rehab Center Ads,” Bloomberg, September 26, 2017, <https://www.bloomberg.com/news/features/2017-09-26/why-it-took-google-so-long-to-end-shady-rehab-center-ads>; Lucy Handley, “Google set to reinstate ads for rehab centers after an expose showed scammers were targeting vulnerable people,” CNBC, April 17, 2018, <https://www.cnbc.com/2018/04/17/google-set-to-reinstate-ads-for-rehab-centers-after-an-expose-showed-scammers-were-targeting-vulnerable-people.html>.

⁶ Joe Hernandez, “A parents’ lawsuit accuses Amazon of selling suicide kits to teenagers,” NPR, October 9, 2022, <https://www.npr.org/2022/10/09/1127686507/amazon-suicide-teenagers-poison>; Susannah Frame, “Several families sue Amazon for selling ‘suicide kits’ to their now deceased children,” King 5 News, February 2, 2024, <https://www.king5.com/article/news/investigations/investigators/amazon-suicide-kits-lawsuit/281-2dc93e25-b667-4093-aa31-5791704386f2>.

⁷ Susannah Frame, “Amazon seeks to get lawsuit connected to ‘suicide kits’ dismissed,” King 5 News, February 9, 2024, <https://www.king5.com/article/news/investigations/investigators/amazon-seeks-suicide-kit-lawsuit-dismissed/281-1a873d6a-0b87-446e-a43d-32b96867519f>.

⁸ Bobby Allyn, “Apple stops selling latest Apple Watch after losing patent case,” NPR News, December 18, 2023, <https://www.npr.org/2023/12/18/1220125508/apple-watch-series-9-ultra-2-masimo-patent>.

And Meta executives including CEO Mark Zuckerberg misled the public, claiming its social media platforms were safe. At the same time, the company downplayed the risks of children and teenagers being bullied, harassed, compulsively online, lonely, or sexually solicited. Meanwhile, Zuckerberg decided in 2017 that the top priority for the company was teenagers.⁹

More recently, Google's A.I. model Gemini has given unsafe and untrue responses, including threatening a college student, telling them they are "a waste of time and resources, ... [] a stain on the universe. Please die. Please."¹⁰ At the same time, Google has quietly deployed A.I. into users' workspaces.¹¹

And the Big Tech companies – including Google and Amazon – continue to harm children in other ways—including by allowing child sexual abuse material (CSAM) to exist on their platforms, or by sending websites hosting this illegal content money via online advertising.¹² For their part, advertisers are left unable to track or control whether their advertisements appear next to harmful or illegal content.¹³

Small businesses and consumers also suffer under Big Tech's power. Amazon has been accused of charging Prime members more for the exact same items than is charged to non-Prime shoppers, despite telling Prime members that their expedited shipping services are free with subscription.¹⁴ Amazon collects fees up to 50% of sellers' revenue and deters online retailers from offering their goods at lower prices outside of Amazon, raising prices for millions of consumers.¹⁵

Businesses have reported not appearing accurately in Google searches, being pushed far down after the Google-owned content, or disappearing entirely from search results and Google Maps—where customers can't find them and their sales drop.¹⁶ In fact, only about 36% of all Google

⁹ Natasha Singer, "How Mark Zuckerberg's Meta Failed Children on Safety, States Say," The New York Times, June 22, 2024, <https://www.nytimes.com/2024/06/22/technology/zuckerberg-instagram-child-safety-lawsuits.html>.

¹⁰ Alex Clark and Melissa Mahtani, "Google AI chatbot responds with a threatening message: 'Human... Please die,'" CBS News, November 20, 2024, <https://www.cbsnews.com/news/google-ai-chatbot-threatening-message-human-please-die/>.

¹¹ Shasha Leonard, "Google Quietly Installed A.I. to My Workspace. Getting Rid of It Was Creepy.," Slate, January 29, 2025, <https://tech.yahoo.com/general/articles/google-quietly-installed-workspace-getting-182941258.html>.

¹² Thomas Germain, "How big tech's ad systems helped fund child abuse online," BBC News, February 8, 2025, <https://www.bbc.com/future/article/20250207-how-google-amazon-and-microsoft-funnelled-ad-money-to-a-site-hosting-child-abuse-images>.

¹³ Thomas Germain, "How big tech's ad systems helped fund child abuse online," BBC News, February 8, 2025, <https://www.bbc.com/future/article/20250207-how-google-amazon-and-microsoft-funnelled-ad-money-to-a-site-hosting-child-abuse-images>;

¹⁴ Braden Bjella, "'It starts off \$9 higher': Shopper says Amazon charges Prime customers more for items," Daily Dot, December 4, 2024, <https://www.dailydot.com/news/amazon-charging-more-prime-members/>.

¹⁵ Federal Trade Commission, ("FTC"), "FTC Sues Amazon for Illegally Maintaining Monopoly Power," press release, September 26, 2023, <https://www.ftc.gov/news-events/news/press-releases/2023/09/ftc-sues-amazon-illegally-maintaining-monopoly-power>

¹⁶ Kellen McGovern Jones, "Google's Damaging Loop: Small Business Owners Trying to Bounce Back From Suspension Woes," The Dallas Express, March 21, 2025,

searches in the U.S. make it past the Google ecosystem.¹⁷ Just this month, Texas small business owners reported their business disappearing from search results, sending sales plummeting. They could only access a customer service representative to address the problem after agreeing to purchase advertising from Google.

And in recent weeks, a report found that when Google had trouble selling its artificial intelligence product as a separate add-on, it simply bundled it with existing products and businesses and upped the price of Google Suite – following Microsoft’s lead.¹⁸

Big Tech monopolists also suppress speech or deplatform users. Google has been accused of pulling Reddit, podcasts, and other apps from the Play Store without explanation, one of the few ways app developers can reach phone users.¹⁹ In February of this year, the Federal Trade Commission (FTC) requested information from the public to better understand how tech companies change users’ access to services based on speech.²⁰ They have already received nearly 2,000 comments from the public. One commenter noted that they lost years worth of photos – with no chance of recovering them – when Facebook banned their account without explaining what the individual did to violate their policies.²¹

II. *Big Tech Disregards the Rule of Law*

Rather than fixing these harms, *too big to govern* tech firms instead try to thwart the law and make their own rules.

<https://dallasexpress.com/metroplex/googles-damaging-loop-small-business-owners-trying-to-bounce-back-from-suspension-woes/>; John S. Kiernan, “Google Quality Issues: Part of an Intentional Strategy?,” Wallet Hub, February 19, 2025, <https://wallethub.com/blog/google-quality-issues-report/147091>.

¹⁷ John S. Kiernan, “Google Quality Issues: Part of an Intentional Strategy?,” WalletHub, February 19, 2025, <https://wallethub.com/blog/google-quality-issues-report/147091>.

¹⁸ Michael Crider, “Google couldn’t sell AI for Workspace, so it upped the price and bundled it,” PC World, January 15, 2025,

<https://www.pcworld.com/article/2578255/google-couldnt-sell-ai-for-workspace-so-it-upped-the-price-and-bundled.html>; Jon Victor and Aaron Holmes, “Google and Microsoft Force Customers to Pay for AI,” The Information, <https://www.theinformation.com/articles/google-and-microsoft-force-customers-to-pay-for-ai>.

¹⁹ Ron Amadeo, “Google Play bans open source Matrix client Element. citing “abusive content,” Ars Technica, January 30, 2021,

<https://arstechnica.com/gadgets/2021/01/google-play-bans-open-source-matrix-client-element-citing-abusive-content/>; Reddit, “More issues with Google Play (suspended for Hate Speech...), 2018,

https://www.reddit.com/r/androiddev/comments/96kpsf/more_issues_with_google_play_suspended_for_hate/;

Manuel Vonaul, “Hiroshi Lockheimer personally apologizes for Podcast Addict Play Store takedown, app now restored,” Android Police, May 19, 2020,

<https://www.androidpolice.com/2020/05/19/podcast-addict-pulled-play-store-allegedly-violating-coronavirus-policy/>

²⁰ FTC, “Federal Trade Commission Launches Inquiry on Tech Censorship,” press release, February 20, 2025, <https://www.ftc.gov/news-events/news/press-releases/2025/02/federal-trade-commission-launches-inquiry-tech-censorship>.

²¹ Regulations.gov, “Notice: Request for Public Comments Regarding Technology Platform Censorship,” FTC, February 20, 2025, <https://www.regulations.gov/document/FTC-2025-0023-0001/comment>.

Meta has openly violated a privacy consent decree with the FTC meant to limit their ability to monetize young people's data.²² This is the *third* time the FTC has taken action against Meta/Facebook for privacy violations.

Apple has landed back in court for “malicious non-compliance” with a federal court order aimed at restoring fair competition in the App Store.²³

Despite a court order finding Google has illegally foreclosed competition through its exclusive control of online distribution channels, the company continues to explore exclusionary default agreements similar to those already found illegal.²⁴

In the Google Search case, it was revealed that Google General Counsel Kent Walker had laid out a series of systemic, illegal policies to evade antitrust scrutiny. Sensitive discussions were moved “off the record” into chat formats, employee chats were then automatically deleted after 24 hours, and lawyers were copied on all ordinary business emails to hide more evidence through false claims of attorney-client privilege.²⁵ Executives and employees from the top down at Google engaged in these illegal practices, even while under Department of Justice (DOJ) investigation and legally required to preserve information.²⁶ Despite all of this, Kent Walker continues to advise policymakers and shape the narrative on AI policy, including AI ethics.²⁷

²² FTC, “FTC Proposes Blanket Prohibition Preventing Facebook from Monetizing Youth Data,” press release, May 3, 2023, <https://www.ftc.gov/news-events/news/press-releases/2023/05/ftc-proposes-blanket-prohibition-preventing-facebook-monetizing-youth-data/>.

²³ Sarah Perez, “Epic plans to contest Apple’s ‘bad-faith’ compliance with court ruling over App Store,” tech Crunch, January 17, 2024, <https://techcrunch.com/2024/01/17/epic-plans-to-contest-apples-bad-faith-compliance-with-court-ruling-over-app-store/>; Russell Brandom, “Apple must allow other forms of in-app purchase, rules judge in Epic v. Apple,” The Verge, September 10, 2021, <https://www.theverge.com/2021/9/10/22662320/epic-apple-ruling-injunction-judge-court-app-store/>;

²⁴ Michael Burkhardt, “Apple preparing Google Gemini integration with Apple Intelligence,” 9 to 5 Mac, February 22, 2025, <https://9to5mac.com/2025/02/22/apple-intelligence-google-gemini-soon/>.

²⁵ American Economic Liberties Project, “Kent Walker Influencer Tracker,” <https://www.economicliberties.us/data-tools/kent-walker-influence-tracker/>; Letter to Chief Trial Counsel George Cardona, State Bar of California, from the American Economic Liberties Project, October 21, 2024, <https://www.economicliberties.us/wp-content/uploads/2024/10/Kent-Walker-CA-State-Bar-Complaint-American-Economic-Liberties-Project.pdf>.

²⁶ *United States et. al., v. Google LLC*, “Plaintiffs’ Closing Statement: Turned “History Off,”” <https://www.justice.gov/d9/2024-05/421665.pdf>; X, Jason Kint, August 23, 2024, https://x.com/jason_kint/status/1827167214069297654; *United States et. al., v. Google LLC*, Case 1:23-cv-00108-LMB-JFA, August 23, 2024, “Appendix C: Examples of Google Employees Spoliating Chats,” https://storage.courtlistener.com/recap/gov.uscourts.vaed.533508/gov.uscourts.vaed.533508.1203.3_1.pdf; Ben Edelman, “Google Discover Violations in United States v. Google (Ad Tech),” December 3, 2024, <https://www.benedelman.org/google-ads-discovery-violations/>.

²⁷ American Economic Liberties Project, “Kent Walker Influencer Tracker,” <https://www.economicliberties.us/data-tools/kent-walker-influence-tracker/>; Martin Ford, “The Next Steps for Responsible AI,” The Atlantic, <https://www.theatlantic.com/sponsored/google/the-next-steps-for-responsible-ai/3968/>.

Apple also sought to hide evidence in its' antitrust case against Epic, "routinely and intentionally mislabel[ing] documents as attorney-client privileged" when legal advice was not exchanged.²⁸

And in 2022, as members of this subcommittee know all too well, while Congress was advancing legislation to address Big Tech's harms, Big Tech companies spent over \$90 million dollars in lobbying and over \$200 million in advertisements to kill those efforts.²⁹ More recently, Big Tech CEOs have contributed hundreds of millions of dollars to President Trump's campaign³⁰ and inauguration,³¹ even though - or perhaps because - their companies face federal litigation aimed at fundamentally changing their business models and unlocking a new wave of fair competition.

Big Tech firms are also changing long-standing corporate law. In recent weeks, Delaware lawmakers rushed through a law to shield controlling shareholders from litigation over conflicts of interest and self-dealing.³² The initiative was prompted in part by rumors that CEO Mark Zuckerberg was preparing to pull Meta out of Delaware and reincorporate in a jurisdiction that

²⁸ *Epic Games, Inc., v. Apple Inc.*, "Response of Epic Games to Apple's Opposition to Discovery Sanctions," March 14, 2025,

https://storage.courtlistener.com/recap/gov.uscourts.cand.364265/gov.uscourts.cand.364265.1356.0_1.pdf.x

²⁹ Kayla Gaskins, "Big Tech companies spend \$95M to block anti-trust bill," CBS Austin, September 7, 2022, <https://cbsaustin.com/news/nation-world/big-tech-companies-spend-95m-to-block-anti-trust-bill-epublican-ags-laws-uit-latest-fight-over-social-medias-role-in-public-discourse-eric-schmitt-jeff-landry-twitter-facebook-google-meta-in-stagram-free-speech-censorship-misinformation-content-warnings?photo=1>; Taylor Giorno, "Big Tech lobbying push helped block bipartisan bills that aimed to curb anti-competitive behavior," Open Secrets, December 20, 2022, <https://www.opensecrets.org/news/2022/12/big-tech-lobbying-push-helped-block-bipartisan-bills-that-aimed-to-curb-alleged-anti-competitive-behavior/>; Apple, Amazon, Facebook, and Google spent an estimated \$250 million to kill various legislation. *See, e.g.*, Steven Pearlstein, "Here's the inside story of how Congress failed to rein in Big Tech," The Washington Post, July 6, 2023,

<https://www.washingtonpost.com/opinions/2023/07/06/congress-facebook-google-amazon-apple-regulation-failure/> and Emily Birnbaum, "Big Tech Divided and Conquered to Block Key Bipartisan Bills," Bloomberg, <https://www.bloomberg.com/news/articles/2022-12-20/big-tech-divided-and-conquered-to-block-key-bipartisan-bills>

³⁰ Elon Musk contributed more than \$250 million to pro-Trump groups in the 2024 election. *See, e.g.*, Theodore Schleifer and Maggie Haberman, "Elon Musk Backed Trump With Over \$250 Million, Fueling the Unusual 'RBG PAC'," The New York Times, December 5, 2024,

<https://www.nytimes.com/2024/12/05/us/politics/elon-musk-trump-rbg-election.html>; Raphael Hernandez, Lauren Arantani and Will Craft, "Revealed: the tech bosses who poured \$394.1 million into US elections – and how they compared to Elon Musk," The Guardian, December 7, 2024,

<https://www.theguardian.com/us-news/2024/dec/07/campaign-spending-crypto-tech-influence>.

³¹ Amazon, Meta, Google, Microsoft, along with Meta and Apple CEOs, each donated \$1 million to President Trump's inaugural committee. *See, e.g.*,

<https://www.commoncause.org/articles/big-tech-is-donating-millions-to-trumps-inauguration/>.

³² Laurel Kilgour, "'Get it Right for Elon Musk'," Boondoggle, March 18, 2025,

<https://boondoggle.substack.com/p/get-it-right-for-elon-musk>; CNBC, FOIA Response re Delaware law, https://fm.cnb.com/applications/cnbc.com/resources/editorialfiles/2025/03/18/CNBC_copy_20250312_DE_Governor_FOIA_response38.pdf; Lora Kolodny, "Meta's potential exit from Delaware had governor worried enough to call special weekend meetings," CNBC, March 19, 2025,

<https://www.cnb.com/2025/03/19/meta-billions-of-dollars-at-stake-in-overhaul-delaware-corporate-law.html>; Luke Goldstein, "Meta Helped Write a Delaware Law Protecting Mark Zuckerberg," The Jacobin, March 28, 2025,

<https://jacobin.com/2025/03/meta-delaware-musk-zuckerberg-litigation>; Lora Kolodny, "Tesla's law firm drafts Delaware bill that could salvage Musk pay package," CNBC, February 18, 2025,

<https://www.cnb.com/2025/02/18/firm-representing-musk-tesla-drafts-bill-for-delaware-corporate-law.html>

gives minority shareholders fewer rights. It is no coincidence that Meta is currently facing several “books and records” investigations from shareholders.

And when the country of Australia tried to force Meta to share ad revenue, they pulled news content from Facebook users in the country altogether.³³

When laws run counter to their profit motives, too big to govern Big Tech firms will change or circumvent laws, or bribe politicians to block new ones from ever getting on the books. Only remedies that reduce their power can bring an end to this lawlessness. And now, as today’s panel of witnesses reflects, there is bipartisan consensus to implement such solutions.

III. Big Tech Remedies: Personal, Structural, & Behavioral

If the goal is to meaningfully deter illegal conduct from reoccurring, the single most important remedy must include personal accountability for the executives whose decisions put the accumulation of profit and power over the law. In recent years, the Justice Department has expressed a renewed commitment to bringing criminal charges under the federal antitrust laws, resulting in the first guilty plea in 50 years for a violation of Section 2 of the Sherman Act.³⁴ Aside from criminal sanctions, federal agencies should continue bringing civil claims against individual corporate executives, as the FTC has in its case against Amazon Prime’s nonconsensual enrollment scheme, where three executives are named as defendants.³⁵ Law enforcers should continue to bring criminal and civil claims under the federal antitrust laws against individuals where the facts and evidence support that Congressionally-authorized action.

Federal district courts will also play a key role in unfettering markets from the stranglehold of tech monopolies. And those district courts possess broad discretion to provide both structural and behavioral relief. The purpose of structural remedies should be to eliminate incentives to engage in anti-competitive conduct in the first place, while behavioral remedies are meant to prevent firms from engaging in specific anti-competitive or unfair conduct.³⁶ Beyond these remedial categories, all remedies should be forward looking and designed to open up markets to competition and innovation. This means not just focusing on what the market looks like today,

³³ Annika Burgess, “Meta is ending its deals to pay for Australian news content. This is how it could change your Facebook and Instagram feeds,” ABC News Australia, March 1, 2024, <https://www.abc.net.au/news/2024-03-02/facebook-google-news-media-deal-media-pay-meta/103534342>.

³⁴ Norton Rose Fulbright, “US DOJ files first criminal charge under Sherman Act Section 2 in nearly 50 years,” November 2022, <https://www.nortonrosefulbright.com/en-tr/knowledge/publications/14f4c7e7/us-doj-files-first-criminal-charge-under-sherman-act-section-2-in-nearly-50-years>.

³⁵ FTC, “FTC Adds Senior Executives Who Played Key Roles in Prime Enrollment Scheme to Case Against Amazon,” press release, September 20, 2023, <https://www.ftc.gov/news-events/news/press-releases/2023/09/ftc-adds-senior-executives-who-played-key-roles-prime-enrollment-scheme-case-against-amazon>.

³⁶ Lee Hepner and Laurel Kilgour, “Google Broke Internet Search. It’s Time to Break Up Google. Remedies to Jump-Start Competition in the Google Search Antitrust Litigation,” AELP, November 2024, p. 9, <https://www.economicliberties.us/wp-content/uploads/2024/11/AELP-Google-Remedies-Brief-111124-Clean.pdf>.

but how current restraints may affect how those markets could evolve, and how to eliminate the ability and incentive for monopolies to reemerge.³⁷ Courts have the legal authority and broad discretion to decide which remedies are applied in antitrust cases.³⁸

It is important for both structural and behavioral remedies to be included in antitrust enforcement. For the last several decades, regulators and academics often have viewed structural remedies as too radical, and enforcement has relied heavily on behavioral remedies³⁹—often turning courts into glorified hall monitors and actually increasing bureaucracy. But in fact, structural remedies are a free market solution that have been deployed by courts and Congress for more than one hundred years.⁴⁰

This approach to remedies has emerged in recent antitrust litigation against Big Tech companies brought by both private plaintiffs and the DOJ and the FTC—many which started under the first Trump administration, proceeded during the Biden Administration, and early signs indicate it will likely continue in the second Trump Administration.⁴¹

For example, in the DOJ's Google Search case which has found Google liable as a monopoly, the government's proposed framework includes a mandatory divestiture of Chrome, a structural remedy, and a ban on Google paying to be the default search provider on mobile devices, as it has done with Apple, a behavioral remedy. The proposed framework also suggests a behavioral prohibition on Android OS self-preferencing Google Search, an idea drawn from Senator Klobuchar's bipartisan American Innovation and Online Choice Act.

³⁷ Remedies must unfetter markets from exclusionary conduct, pry them open to competition, deny the fruits of its statutory violations, and prevent the company from monopolizing the same and other related markets in the future. *See, e.g.*, *Microsoft*, 253 F.3d at 103 (quoting *Ford Motor Co. v. United States*, 405 U.S. 562, 577 (1972) and *United States v. United Shoe Mach. Corp.*, 391 U.S. 244, 250–51 (1968)); *Zenith Radio Corp. v. Hazeltine Rsch., Inc.*, 395 U.S. 100, 132–33 (1969); *Int'l Boxing Club of N.Y., Inc. v. United States*, 358 U.S. 242, 262 (1959); *United States et. al., v. Google LLC*, (2024). <https://www.justice.gov/atr/media/1378046/dl>; Lee Hepner and Laurel Kilgour, "Google Broke Internet Search. It's Time to Break Up Google. Remedies to Jump-Start Competition in the Google Search Antitrust Litigation," AELP, November 2024,

<https://www.economicliberties.us/wp-content/uploads/2024/11/AELP-Google-Remedies-Brief-111124-Clean.pdf>.

³⁸ Courts are empowered to "prevent future violations and eradicate existing evils." *See, e.g.*, *United States v. Microsoft Corp.*, 253 F.3d 34, 101 (D.C. Cir. 2001) (quoting *United States v. Ward Baking Co.*, 376 U.S. 327, 330–31 (1964)).

³⁹ John E. Kwoka and Dianna L. Moss, "Behavioral Merger Remedies: Evaluation and Implication for Antitrust Enforcement," The American Antitrust Institute,

https://www.antitrustinstitute.org/wp-content/uploads/2011/11/AAI_wp_behavioral-remedies_final.pdf.

⁴⁰ Rory Van Loo, "In Defense of Breakups: Administering a "Radical" Remedy," *Cornell Law Review*, November 10, 2020, <https://live-cornell-law-review.pantheonsite.io/wp-content/uploads/2020/12/Van-Loo-final.pdf>; Nicholas Shaxson and Claire Godfrey, "Breaking Up the Giants of Harm," *Balanced Economy Project*, July 2024, https://static1.squarespace.com/static/65c9daef199ea70aa66592fe/t/669fbd0c2eb5af1a35e127c8/1721744673541/Breaking+Up+the+Giants+of+Harm%2C+Balanced+Economy+Project_July+2024.pdf; Kent Walker, "DOJ's staggering proposal would hurt consumers and America's global technological leadership," *Google Blog*, November 21, 2024, <https://blog.google/outreach-initiatives/public-policy/doj-search-remedies-nov-2024/>; *See, e.g.*, *Standard Oil, AT&T, JPMorgan*, railroad companies; *United States v. E.I du Pont de Nemours & Co.*, Supreme Court noting that breaking up companies was "the most important of antitrust remedies." 366 U.S. 316 at 330, 331. (1961).

⁴¹ AELP, "Federal Big Tech Litigation,"

https://www.economicliberties.us/wp-content/uploads/2025/03/Lawsuits-and-Legislation_How-Antitrust-Will-Shape-the-Future-of-Big-Tech-31325.pdf.

The proposed set of structural and behavioral remedies opens the possibility for alternative search engines, including those that offer users greater privacy and security, to gain a foothold in the market.⁴² One could imagine a search platform that caters to teenagers where parents can exercise more control over the types of sites that appear on the search engine results page. Emerging startups that take an A.I.-first approach to search would have a fair chance to reach scale. News publishers and other businesses could choose to partner with search engines that reliably direct users to their sites, rather than being forced to allow Google to siphon away site visits through A.I. summaries if they want to show up in search results at all. While the exact form of future innovation cannot be predicted with certainty, the history of antitrust enforcement shows that especially at technological inflection points, vigorous enforcement unlocks the potential of startups with disruptive ideas.⁴³

In addition, the DOJ's proposed framework importantly rejects common past failed approaches to only impose behavioral remedies. For example, in *Apple v. Epic Games*, the court found that Apple's anti-steering policies – which prevent app developers from telling users about a different storefront that isn't Apple's iOS store – are anticompetitive. This has allowed Apple to take up to a 30 percent cut of all transactions. The judge ordered Apple to halt this policy.⁴⁴ In response, Apple allowed developers to link users to non-Apple payments –but charged a 27 percent commission that, when coupled with credit card processing fees, made it uneconomical for developers to actually use.⁴⁵ Apple's disregard for behavioral remedies highlights the importance for courts to impose structural remedies as well.⁴⁶ It comes as no surprise that in the Google Search case,⁴⁷ Google is only suggesting the court impose behavioral remedies.⁴⁸

The other federal big tech cases against Google, Apple, Meta, and Amazon are at earlier stages, but will also require structural and behavioral remedies to check the power of those companies.

⁴² Cassandra Cassidy, "Google antitrust ruling could spark new search engines," Morning Brew, August 7, 2024, <https://www.morningbrew.com/stories/2024/08/07/google-antitrust-ruling-could-spark-new-search-engines>.

⁴³ Martin Watzinger, Thomas A. Fackler, Markus Nagler, Monika Schnitzer, "How Antitrust Enforcement Can Spur Innovation: Bell Labs and the 1956 Consent Decree," *American Economic Journal: Economic Policy*, Vol 12, No. 4, November 2020, <https://www.aeaweb.org/articles?id=10.1257%2Fpol.20190086>.

⁴⁴ Russell Brandom, "Apple must allow other forms of in-app purchase, rules judge in Epic v. Apple," The Verge, September 10, 2021, <https://www.theverge.com/2021/9/10/22662320/epic-apple-ruling-injunction-judge-court-app-store>.

⁴⁵ Lauren Feiner, "Why Epic's lawsuit against Apple just won't quit," The Verge, May 28, 2024, <https://www.theverge.com/2024/5/28/24158911/apple-v-epic-evidentiary-hearing-app-store-payments>.

⁴⁶ Emma Roth, "Epic's Tim Sweeny calls Apple App Store changes 'hot garbage'," The Verge, January 25, 2024, <https://www.theverge.com/2024/1/25/24050696/epic-games-tim-sweeney-apple-app-store-response>.

⁴⁷ *United States v. Google LLC (2020)*.

⁴⁸ *United States v. Google LLC (2020)*, "Defendant Google LLC's Proposed Final Judgement," December 20, 2024, https://storage.courtlistener.com/recap/gov.uscourts.dcd.223205/gov.uscourts.dcd.223205.1108.1_1.pdf; AELP, "Google's Proposed Remedies Are Predictably and Woefully Inadequate," press release, December 23, 2024, <https://www.economicliberties.us/press-release/googles-proposed-remedies-are-predictably-and-woefully-inadequate/>.

Momentum in the courts, however, is no reason for Congress to slow down. Congress already has recognized the need for structural reform of the tech industry by introducing bills like Senator Lee’s bipartisan AMERICA Act, which would amend the Clayton Act to prevent conflicts of interest in the digital advertising market. While the Justice Department awaits a decision in its case against Google’s alleged digital advertising monopoly, which will likely be subject to years of appeals regardless of the outcome, Congress can act today to structurally separate the advertiser network, ad exchange, and publisher inventory. Doing so would provide badly needed oxygen to a market that has been suffocating under Big Tech’s control and provide an immediate lifeline to journalists, publishers, advertisers, and the open distributed web.

Similarly, Congress should pass Senator Blumenthal’s bipartisan Open App Markets Act (OAMA) that would prevent Apple and Google– from self-preferencing their own app stores or requiring developers to use their products.⁴⁹ The Department of Justice’s case against Apple for monopolizing the smartphone market could also eventually address anti-competitive conduct in the app store market but on a much longer timeline.

Congress must also pair strong rules of the road with sufficient resources for antitrust agencies to enforce existing and future antitrust laws.

IV. Competition Promotes National Security & Innovation, Not Big Tech

Like many monopolists before them, Big Tech companies and their executives often cite any potential change to business models reducing their market dominance as “endanger[ing]”⁵⁰ the public and posing a threat to U.S. national security and global competitiveness in the technology industry. As their theory goes, Congress and the American public must accept their power over our lives, including the harms, or risk losing the future to China.

Reality suggests something different.

First, Big Tech is not offering superior privacy or security.⁵¹ For instance, the amount of data that Amazon has on its customers has become so unwieldy that the company’s own security vision “couldn’t even map all of it, much less [] defend it[.]”⁵² And now, the company no longer allows its customers to control their own voice data on Echo devices to expand “generative A.I.

⁴⁹ U.S. Senate, S.2710, Open App Markets Act, 117th Congress, <https://www.congress.gov/bill/117th-congress/senate-bill/2710/cosponsors>.

⁵⁰ Kent Walker, “DOJ’s staggering proposal would hurt consumers and America’s global technological leadership,” Google Blog, November 21, 2024, <https://blog.google/outreach-initiatives/public-policy/doj-search-remedies-nov-2024/>.

⁵¹ Aliza Vigderman and Gabe Turner, “The Data Big Tech Companies Have On You,” Security.org, March 10, 2025, <https://www.security.org/resources/data-tech-companies-have/>; Anna Desmarais, “Big Tech shares millions of user accounts with US authorities, report finds,” Euro News, March 3, 2025, <https://www.euronews.com/next/2025/03/03/big-tech-shares-millions-of-user-accounts-with-us-authorities-report-finds/>;

⁵² Will Evans, “Amazon’s Dark Secret: It Has Failed to Protect Your Data,” Wired, November 18, 2021, <https://www.wired.com/story/amazon-failed-to-protect-your-data-investigation/>.

features.”⁵³ And Meta has failed to protect users data –particularly children– and refuses to notify users directly of such breaches.⁵⁴

Second, far from challenging the interests of the Chinese government and economy to protect the U.S., Big Tech companies are integrating and cooperating with Chinese companies for their own gain. For example, Google has built A.I. centers in Beijing,⁵⁵ and considered forming a partnership with Tencent –to buy out its competitor Epic⁵⁶– a Chinese cloud service giant. Amazon has built data centers throughout China. Doing so much data-intensive business in a country where the government exercises direct control over the economy, presents a clear conflict of interest to U.S. national security.⁵⁷ And if there is any doubt about Big Tech’s loyalties, one need look no further than a former Meta employee’s revelation that Mark Zuckerberg offered to let Xi Jinping, the leader of the Chinese government, name his child to improve Facebook’s business prospects in the country.⁵⁸

As the defense industry also becomes more reliant on technology and Big Tech companies, national security risks grow. Just as consolidation of large defense contractors has increased costs and reduced the quality and availability of equipment, the dependence of the defense industry on Big Tech will likely exacerbate these existing dynamics, creating further national security vulnerabilities.⁵⁹

Finally, big tech firms are not producing cutting-edge innovation, especially in A.I.

Earlier this year, the Chinese-based company Deepseek released an A.I. model that produced results using far less computational power than many of the models on which Big Tech has

⁵³ Pieter Arntz, “Amazon disables privacy option, will send your Echo voice recordings to the cloud,” Malware Bytes, March 18, 2025, <https://www.malwarebytes.com/blog/news/2025/03/amazon-disables-option-to-store-echo-voice-recordings-on-your-device>.

⁵⁴ See, e.g., American Economic Liberties Project, “Big Tech Abuses,” <https://www.economicliberties.us/big-tech-abuse-tracker/>.

⁵⁵ Fei-Fei Li, “Opening the Google AI China Center,” Google Blog, December 13, 2017, <https://blog.google/around-the-globe/google-asia/google-ai-china-center/>.

⁵⁶ Liv Ngan, “Court documents reveal Google considered partnering with Tencent to take over Epic,” Eurogamer, November 21, 2023,

<https://www.eurogamer.net/court-documents-reveal-google-considered-partnering-with-tencent-to-take-over-epic>.

⁵⁷ Ganesh Sitaraman, “The National Security Case for Breaking Up Big Tech,” Vanderbilt University Law School, January 30, 2020,

<https://scholarship.law.vanderbilt.edu/cgi/viewcontent.cgi?article=2483&context=faculty-publications>.

⁵⁸ Economic Times, “Meta insider claims Mark Zuckerberg requested Xi Jinping to name his unborn child. What is part of Meta’s China strategy?,” March 17, 2025,

<https://economictimes.indiatimes.com/magazines/panache/meta-insider-claims-mark-zuckerberg-requested-xi-jinpin-g-to-name-his-unborn-child-what-is-part-of-metas-china-strategy/articleshow/119122268.cms?from=mdr>.

⁵⁹ U.S. Department of Defense, “Consolidation of Defense Industrial Base Poses Risks to National Security,” DOD News, February 16, 2022,

<https://www.defense.gov/News/News-Stories/Article/Article/2937898/dod-report-consolidation-of-defense-industrial-base-poses-risks-to-national-sec/>;

Ganesh Sitaraman, “The National Security Case for Breaking Up Big Tech,” Vanderbilt University Law School, January 30, 2020,

<https://scholarship.law.vanderbilt.edu/cgi/viewcontent.cgi?article=2483&context=faculty-publications>.

relied. Though since its debut, issues around Deepseek’s accuracy and security have emerged,⁶⁰ the fact remains that Deepseek introduced a model of A.I. that likely relies on less computational power than the models upon which U.S. Big Tech firms have relied.⁶¹ The Big Tech A.I. models are gas guzzlers and Deepseek has introduced a lighter-weight model likely to influence future development.⁶²

And just last fall at its annual Worldwide Developers Conference,⁶³ Apple failed to follow through on a long-promised live demo of “personalized Siri,” featuring their generative A.I. product, part of “Apple Intelligence.” This was the first time since the 1980s that Apple released the concept video of a promised new product instead of performing a demonstration of the product.⁶⁴

And though Google had the capabilities, the company delayed releasing a large language model based chat bot because it was difficult to “properly tie [the LLM chat bot] to their existing search and advertising product markets.”⁶⁵

Big tech landing here should come as no surprise. AT&T, a monopolist of the 1930s, showed this same instinct to hold back technology when they sat on the recording technology that was the basis for answering machines, out of fear it would hurt their phone business. History

⁶⁰ Dimitar ‘Mix’ Mihov, “DeepSeek Took AI by Storm, Then Came The Red Flags,” Forbes, February 10, 2025, <https://www.forbes.com/sites/dimitarmixmihov/2025/02/10/deepseek-took-the-ai-space-by-storm-then-came-the-red-flags/>

⁶¹ Lina M. Khan, “Stop Worshiping the American Tech Giants,” The New York Times, February 4, 2025, <https://www.nytimes.com/2025/02/04/opinion/deepseek-ai-big-tech.html>.

⁶² Babak Hodjat, “Cognizant: Is DeepSeek Really AI’s Sputnik Moment?,” March 28, 2025, <https://aimagazine.com/articles/cognizant-is-deepseek-really-ais-sputnik-moment>.

⁶³ Apple, “WWDC24 Highlights,” June 10, 2024, <https://www.apple.com/newsroom/2024/06/wwdc24-highlights/>; Ewan Spence, “Apple is Caught In Its Own Dangerous Catch-22,” Forbes, March 16, 2025, <https://www.forbes.com/sites/ewanspence/2025/03/16/apple-intelligence-failures-siri-open-ai-generative-ai-wwdc-promises/>; John Gruber, “Something Is Rotten in the State of Cupertino,” Daring Fireball, March 12, 2025, https://daringfireball.net/2025/03/something_is_rotten_in_the_state_of_cupertino?ref=sidebar.

⁶⁴ John Gruber, “Something Is Rotten in the State of Cupertino,” Daring Fireball, March 12, 2025, https://daringfireball.net/2025/03/something_is_rotten_in_the_state_of_cupertino

⁶⁵ Reed Showalter and Laura Edelson, “Captured Innovation: Technology Monopoly Response to Transformational Development,” The University of Chicago, Business Law Review, <https://businesslawreview.uchicago.edu/print-archive/captured-innovation-technology-monopoly-response-transformational-development>; Nico Grant & Cade Metz, “A New Chat Bot Is a ‘Code Red’ for Google’s Search Business,” The New York Times, December 21, 2022, <https://www.nytimes.com/2022/12/21/technology/ai-chatgpt-google-search.html>; Aaron Mok, “ChatGPT, the Scary-Smart AI Chatbot Generating Buzz Around the Internet, May Pose a Threat to Google’s Ad Business, Says Former Exec,” Business Insider, <https://www.businessinsider.com/chatgpt-may-hurt-googles-ad-business-former-exec-says-report-2022-12>; Parmy Olson, “Google Faces a Serious Threat From ChatGPT,” Bloomberg, December 7, 2022, <https://www.bloomberg.com/opinion/articles/2022-12-07/chatgpt-should-worry-google-and-alphabet-why-search-w-hen-you-can-ask-ai>.

repeatedly shows that increases in concentration leads to weak productivity growth, declining investment,⁶⁶ and stifled innovation.⁶⁷

Only through antitrust enforcement to break up AT&T in the 1970s was the technology to create the modern internet unleashed. When the federal government sued AT&T and required it to sell Western Electric — barring it from venturing outside its core hardware business — this allowed for innovation that led to the creation of the iPhone.⁶⁸ Europe and Japan, however, adopted a “national champions” model, shielding their tech giants from competition and eventually falling behind.⁶⁹

V. Conclusion

America, and this subcommittee, are at a crossroads with regard to big tech. If Congress chooses to do nothing or makes changes on the margins, these *too big to govern* firms will maintain their power, continue seeding lawlessness, and oversee U.S. technology falling further behind. Only a combination of executive accountability and strong structural and behavioral remedies implemented across the markets in which Big Tech operates will reduce their power sufficiently to address the litany of harms they inflict, restore the rule of law and unlock the type of innovation that keeps America competitive, and our nation and children safe. Over 60 percent of voters agree that Big Tech firms need to be broken up.⁷⁰ At a time when the public is increasingly skeptical the government can deliver for them, no half measure will do. Congress must break up big tech and restore freedom in the U.S. technology industry to improve the lives of American children, consumers, businesses of all sizes, and workers.

⁶⁶ Thomas Philippon, “The Economics and Politics of Market Concentration,” *The Reporter*, December 1, 2019, <https://www.nber.org/reporter/2019number4/economics-and-politics-market-concentration>; Thomas Philippon, “Causes, Consequences, and Policy Responses to Market Concentration,” ASPEN Economic Strategy Group, November 21, 2019,

<https://www.economicstrategygroup.org/publication/causes-consequences-and-policy-responses-to-marketconcentration/>; C. Lanier Benkard, Ali Yurukoglu, and Anthony Lee Zhang, “Concentration in Product Markets,” FTC, April 2021, https://www.ftc.gov/system/files/documents/public_events/1588356/zhangyurukoglubenkard.pdf.

⁶⁷ Mitsuru Igami, Shoki Kusaka et al., “Welfare Gains from Product and Process Innovations: The Case of LCD Panels, 2001- 2011,” July 11, 2024, p. 4, https://conference.nber.org/conf_papers/f205854.pdf.

⁶⁸ CNN, “The U.S. Government’s long history of suing AT&T,” ABC Action News, November 24, 2017, <https://www.abcactionnews.com/news/national/the-us-government-s-long-history-of-suing-at-t>.

⁶⁹ FTC, “Remarks by Chair Lina M. Khan As Prepared for Delivery Carnegie Endowment for International Peace,” March 13, 2024, https://www.ftc.gov/system/files/ftc_gov/pdf/2024.03.13-chair-khan-remarks-at-the-carnegie-endowment-for-intl-peace.pdf.

⁷⁰ Abby Springs et. al., “Following the State of the Union, Voters Strongly Support Biden’s Legislative Agenda,” Data for Progress, press release, February 10, 2023, <https://www.dataforprogress.org/blog/2023/2/10/following-sotu-voters-strongly-support-bidens-legislative-agenda>.

Attachments:

- 1) "Google Broke Internet Search. It's Time to Break Up Google. Remedies to Jump-Start Competition in the Google Search Antitrust Litigation," American Economic Liberties Project, November 2024
- 2) "Big Tech Abuses," American Economic Liberties Project, March 2025
- 3) "Federal Big Tech Litigation," American Economic Liberties Project, March 2025

GOOGLE BROKE INTERNET SEARCH. IT'S TIME TO BREAK UP GOOGLE.

Remedies to Jump-Start Competition in the Google Search Antitrust Litigation

Lee Hepner and Laurel Kilgour

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I. INTRODUCTION

Google is one of the largest companies in the world, but that simple statement understates its power and reach. Through its flagship search engine, Google exercises extraordinary control over the flow of information across the internet and society. Over more than two decades, it expanded its business offerings, achieving dominance in not just search but also online ads and the distribution of smartphone apps. Almost all of us interact with Google every day, whether we realize it or not.

But Google did not achieve market dominance solely on its merits or through fair competition. Instead, the company engaged in various anti-competitive and exclusionary conduct, resulting in illegal monopolies in the markets for Android app distribution and in-app payments,¹ general internet search, and search text advertising.² In addition, multiple pending federal and state lawsuits allege that Google has illegally maintained a trifecta of monopolies in open web digital advertising.³ The effect of Google's various illegal monopolies has been to diminish competition, restrict new market entry, and, ultimately, undermine innovation.

The landmark case against Google Search was initiated under the Trump administration in October 2020, joined by a bipartisan group of 38 state attorneys general, and diligently pursued under the Biden administration. Following a 10-week trial, the D.C. District Court ruled in favor of the United

¹ *Epic v. Google*, N.D. Cal., Case No. 3:20-cv-05671 (jury verdict rendered on December 11, 2023).

² *United States et al. v. Google* ("Google Search"), D.D.C., Case No. 1:20-cv-03010 (opinion rendered on August 5, 2024).

³ *United States et al. v. Google* ("Google Ad Tech"), E.D. Va., Case No. 1:23-cv-00108 (pending); *Texas et al. v. Google*, E.D. Tex., Case No. 4:20-cv-00957 (pending).

States on August 5, 2024, marking the first major win in a Section 2 illegal monopolization case in a quarter-century.

The Court now turns to the equally, if not *more*, significant question of how to remedy Google's illegal monopoly. An ineffective remedy would render the hard-fought liability finding toothless. Crafting an effective remedy is a creative policymaking endeavor as much as it is an exercise in applying legal precedent. The Court has broad discretion to pry open competition in relevant markets and prevent the reemergence of monopoly as the experience of internet search evolves. To that end, the Justice Department has provided a preliminary remedies framework that suggests a comprehensive approach to relieving the affected markets from Google's monopoly grip.⁴

Even the most principled remedy is no remedy at all if implementation is kept in limbo for years while the monopolist consolidates its power. Would-be rivals like Neeva and Branch have shut down or withered on the vine in the face of Google's monopoly grip. Several other potential rivals have created innovative alternatives to Google but have failed to achieve more than a nominal share of the market. Meanwhile, Google has indicated its intent to appeal the Court's ruling, which could result in a multi-year delay in the implementation of a final remedies order.⁵ The Court can anticipate this multi-year delay by adopting interim relief, including by preventing Google from entering further exclusionary contracts, which were at the core of Google's liability. The Court may also order a moratorium on further acquisitions in the affected and related markets.

This brief explores many of the remedies available to the Court in the *Google Search* antitrust litigation. In doing so, this brief seeks to elevate the below principles:

- **Remedies must be structural to eliminate incentives to engage in anti-competitive conduct.** The most effective means of eliminating anti-competitive behavior is to remove incentives for that behavior to occur in the first place. For this reason, the Court should favor a structural breakup of Google, including both Android and Chrome, into separate business entities. Profit-maximizing corporations are likely to interpret behavioral orders strictly and narrowly, and courts should resist the imposition of remedies that are easily circumvented.
- **Remedies must include both structural and behavioral relief.** There is no silver bullet to address Google's anti-competitive conduct. An effective remedy will need to comprehensively address structural barriers to market entry as well as anti-competitive conduct that would risk the reemergence of monopoly in the affected and adjacent markets.
- **Remedies must jump-start competition and anticipate the future of search.** Existing and nascent rivals must be able to meaningfully differentiate and monetize their products while availing themselves of opportunities to distribute them. As the market for internet search

⁴ *Supra*, note 2, Dkt. No. 1052 (“Notice of Plaintiffs’ Proposed Remedy Framework”).

⁵ Anticipating the length of delay requires a great degree of speculation. Judge Mehta of the D.C. District Court anticipates arriving at a final remedies order in August 2025, at which point Google may file a Notice of Appeal to the D.C. Circuit Court of Appeals. The median time from Notice of Appeal to disposition in the D.C. Circuit is 12 months, or until Fall 2026. Either party may then file a Petition for Cert to the Supreme Court, which could delay implementation of a remedy until 2028.

evolves, including with the advent of artificial intelligence (AI), durable competition can be achieved by allowing rivals fair and reasonable access to search infrastructure, including Google’s web index and AI language model.

- **Remedies must be easily administered and enforceable.** The Court can facilitate an administrable remedy, while minimizing costly, ongoing oversight, through the appointment of independent monitors with requisite experience in technology, structural separation, and workplace protocols. This brief provides an expansive view of compliance and enforcement remedies, including whistleblower anti-retaliation protections and a prohibition against Google’s systematic destruction of records.

In Section II of this report, we outline relevant legal authority supporting a broad and flexible approach to thinking about remedies. In Section III, we provide a technological digest of Google Search and other relevant markets, to ground a remedies discussion in an understanding of how a general search engine works. In Section IV, we provide a cursory overview of the use of structural and behavioral remedies historically, and make an argument for a combination of both structural and behavioral remedies in the instant case. In Section V, we propose numerous structural and behavioral remedies aimed at prying open competition in existing and future related markets. Here, we also propose remedies that would end Google’s systematic destruction of records, prevent retaliation and surveillance in the workplace, and minimize ongoing court supervision.

While the recommendations in this brief are specific to the Google Search case, this remedies framework nevertheless provides a methodology that is adaptable to the consideration of remedies in other antitrust litigation, for technology markets and beyond.

II. COURTS HAVE BROAD DISCRETION TO IMPOSE REMEDIES THAT INDUCE COMPETITION IN MARKETS

Courts have broad discretion to implement a range of remedies that (1) restore competition to markets that have been closed off by Google’s illegal restraints, (2) prevent future violations of the law, including in markets that were not at issue in the case – especially in emerging markets, such as AI search, where Google is poised to leverage its monopoly power to choke competition – and (3) deprive Google of its ill-gotten gains. Below, we outline key legal authorities that support a broad and flexible approach to crafting effective remedies.

1) Courts have broad discretion to craft remedies that fit the particular case.

- “[District courts] are vested with large discretion to model their judgments to fit the exigencies of the particular case.” *Int’l Salt Co. v. United States*, 332 U.S. 392, 400–01 (1947) (citing *United States v. Crescent Amusement Co.*, 323 U.S. 173, 185 (1944) and *United States v. National Lead Co.*, 332 U.S. 319 (1947)).
- The court’s authority “is **flexible and capable of nice ‘adjustment** and reconciliation between the public interest and private needs as well as between competing private

claims.” *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 131 (1969) (quoting *Hecht Co. v. Bowles*, 321 U.S. 321, 329–30 (1944)).

- The court enjoys “**large discretion** to model [its] judgment [] to fit the exigencies of the particular case,” such as the importance of scale. *Int’l Salt Co. v. United States*, 332 U.S. 392, 400–01 (1947).
- “As a general matter, **a district court is afforded broad discretion to enter that relief it calculates will best remedy the conduct it has found to be unlawful.**” *United States v. Microsoft Corp.*, 253 F.3d 34, 105 (D.C. Cir. 2001).

2) An effective remedy must restore competition in a market that has been closed off by illegal restraints.

- “In an equity suit, the end to be served is not punishment of past transgression, nor is it merely to end specific illegal practices. A public interest served by such civil suits is that they effectively **pry open to competition a market that has been closed by defendants’ illegal restraints. If this decree accomplishes less than that, the Government has won a lawsuit and lost a cause.**” *Int’l Salt Co. v. United States*, 332 U.S. 392, 401 (1947).
- “Antitrust relief should **unfetter a market from anticompetitive conduct** and ‘**pry open to competition** a market that has been closed by defendants’ illegal restraints.” *Ford Motor Co. v. United States*, 405 U.S. 562, 577–78 (1972).

3) An effective remedy is forward-looking and must prevent future violations of the law.

- Having established a violation of the antitrust laws, the Court has broad power to fashion a remedy that “**prevent[s] future violations and eradicate[s] existing evils.**” *United States v. Microsoft Corp.*, 253 F.3d 34, 101 (D.C. Cir. 2001).
- The Court may “**restrain acts ... whose commission in the future, unless enjoined, may fairly be anticipated** from the defendant’s conduct in the past.” *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 132 (1969).
- “[T]he Court is obliged not only to suppress the unlawful practice but to take such reasonable action as is calculated to **preclude the revival of the illegal practices.**” *Fed. Trade Comm’n v. Nat’l Lead Co.*, 352 U.S. 419, 430 (1957).
- Injunctive relief for monopolization “**is not limited to prohibition of the proven means by which the evil was accomplished, but may range broadly through practices connected with acts actually found to be illegal.**” *United States v. U.S. Gypsum Co.*, 340 U.S. 76, 88–89 (1950).

- “[I]t is well settled that **once the Government has successfully borne the considerable burden of establishing a violation of law, all doubts as to the remedy are to be resolved in its favor.**” *United States v. E. I. du Pont de Nemours & Co.*, 366 U.S. 316, 334 (1961).

4) The remedy must deprive the monopolist of their ill-gotten gains.

- “Adequate relief in a monopolization case should put an end to the combination and **deprive the defendants of any of the benefits of the illegal conduct**, and break up or render impotent the monopoly power found to be in violation of the Act.” *United States v. Grinnell Corp.*, 384 U.S. 563, 577 (1966).
- “To require divestiture of theatres unlawfully acquired is not to add to the penalties that Congress has provided in the antitrust laws. Like restitution it merely **deprives a defendant of the gains from his wrongful conduct**. It is an equitable remedy designed in the public interest to **undo what could have been prevented** had the defendants not outdistanced the government in their unlawful project.” *Schine Chain Theaters, Inc. v. United States*, 334 U.S. 110, 128 (1948).
- “To the extent that these acquisitions were **the fruits of monopolistic practices or restraints of trade**, they should be divested.” *United States v. Paramount Pictures*, 334 U.S. 131, 152 (1948).

III. A TECHNOLOGICAL ANATOMY OF GOOGLE SEARCH

Crafting a remedy that rids the market of Google’s monopoly and jump-starts competition where it is likely to exist requires a basic understanding of the technological infrastructure underlying Google’s GSE and Search Text Ads products. Google’s GSE includes distinct technologies that interact with each other to form a Search supply chain, or “stack.” Included in that supply chain are the various agreements Google maintains to secure default distribution, which facilitates Google’s significant scale advantage.

Google’s General Search Engine (GSE)

- **Web Crawler:** The first step in developing a search engine is to crawl the web.⁶ GSEs crawl the web using an automated program that starts with a list of websites, or “seed URLs,” extracts content and metadata from those websites, then identifies new hyperlinks to iteratively scan the internet. Because websites are constantly changing and the web is constantly growing, a web crawler constantly recrawls the web to track web updates and index new content.⁷ Some websites update more regularly than others, and Google programs

⁶ *United States et al. v. Google LLC*, No. 1:20-cv-03101-APM, D.I. 1033, 14 (D.D.C. Aug. 5, 2024), <https://www.courtlistener.com/docket/18552824/1033/united-states-of-america-v-google-llc/> (“Opinion”).

⁷ *Id.*, at 14-15.

the rate at which pages are recrawled based on estimates of how often various pages are updated. The bandwidth required to fetch documents comes at a “very significant cost.”⁸

- **Web Index:** A web index is a database of the publicly available internet that can be returned if a user asks for it.⁹ If a site is not in the index, it will not be presented to users in response to a query. Only Google and Bing create fulsome web indexes that generate accessible results, although DuckDuckGo indexes portions of the web, and Apple maintains a large index that it does not use to offer a search results page. According to the testimony heard at trial, as of 2020 Google maintained a web index of “hundreds of billions” of documents, after filtering trillions of pages for the “useful parts of the web.”¹⁰ Filters can be modified or adjusted over time to expand or exclude the documents contained in an index.
- **Query Data and Other Identifiers (e.g., QBST, Navboost):** Google relies on user data to decipher what a user means when a query is typed imprecisely. Google’s immense scale provides access to petabytes of user data that are expensive to store.¹¹ The cost of processing data is another significant expense. It increases as the amount of data being processed increases, which presents a barrier to entry for competitors or would-be competitors, including Apple. Apple estimates that it would cost \$6 billion annually, on top of what it already spends developing search capabilities, to run a GSE.

For instance, Query-Based Salient Terms (QBST) is a Google signal that helps respond to queries by identifying words or pairs of words that should appear prominently on a web page relevant to the query (e.g., “1600 Pennsylvania Avenue” and “White House”).¹² Navboost is another signal that pairs queries with documents by memorizing user click data.

- **Search Engine Results Page (SERP):** Search engines produce information responsive to a query on a search engine results page (SERP). Most SERPs contain some mixture of advertisements, organic links, and “vertical offerings,” or specialized information like information about flights, hotels, and restaurants. SERPs can be syndicated across different websites.
- **Knowledge Graphs and Other Modules:** Google’s search engine results page contains more than just a list of responsive links. The SERP may also contain “knowledge graphs” and other information modules, depending on the type of query. Informational search queries, for instance, may trigger an AI-generated query response, or “AI Overview,” at the top of the SERP, which typically summarizes information outlined in the below responsive links. Transactional queries may produce a module including products for sale, for booking flights,

⁸ Testimony of Pandurang Nayak, *United States et al. v. Google LLC*, No. 1:20-cv-03101-APM, 6304:24 (D.D.C. Aug. 5, 2024).

⁹ Opinion, at 15.

¹⁰ *Supra*, note 8, at 6332:4.

¹¹ Opinion, at 22.

¹² Opinion, at 15.

or integration with Google Maps to show nearby restaurants. Relevant to the market for search text advertisements, some queries will produce a module containing sponsored ads, which are triggered by monetizing keywords in a commercial query.

Distribution of Google's GSE and Access to Scale

- **Android OS and Google's Chrome Web Browser:** The Android operating system (OS) and Chrome are Google's subsidiary distribution mechanisms for its search engine. The Android OS is an open-source operating system that allows third-party developers to create new smart devices and technologies by customizing the Android system to the device or technology.¹³ Although the codebase for the Android OS is open source, Google has also developed proprietary software to offer its own features.¹⁴ Android is also a means by which Google distributes its Google Search widget, Chrome web browser, Google Play Store, and other preloaded apps, subject to agreements with mobile device manufacturers, called mobile application distribution agreements (MADAs). Chrome is a web browser that "serves as a crucial link between Google's advertising business and its other online services, particularly Google Search and YouTube."
- **Google Search Widget:** A search widget is another access point for Google's search engine, and it appears on Android devices as a fillable bar in the center of the device's home screen. The default placement of the Google Search widget on Android devices is secured by a MADA with device manufacturers.¹⁵
- **Mobile Application Distribution Agreements (MADAs):** MADAs are agreements between Google and Android original equipment manufacturers (OEMs). Google has entered into MADAs with all Android OEMs, including Sony, Motorola, and Samsung, among others.¹⁶ The MADA requires Android OEMs to preload certain applications, including the Google Play Store, Google's Chrome browser, and the Google Search widget, and Google views the MADA as securing "baseline distribution of [its] apps on Android."¹⁷
- **Other Search Distribution Agreements:** Search distribution is how a search engine reaches consumers at various access points. Search providers have multiple channels to make accessible their search engine to users on mobile and desktop devices, including the search bar integrated into browsers, search widgets on Android device home screens, search applications, preset bookmarks within the default browser, alternative browsers, and direct web search. The **Google-Apple Internet Services Agreement (ISA)**, the **Mozilla Revenue Share Agreement (RSA)**, and the above **Mobile Application Distribution Agreements (MADAs)** between Google and device manufacturers are all examples of search distribution agreements. These distribution agreements are a critical source of the scale and data

¹³ Opinion, at 8.

¹⁴ See, e.g., David Ruddock, "What is AOSP?," [esper.io](https://www.esper.io/blog/aosp-missing-features-google-gms), April 22, 2022, <https://www.esper.io/blog/aosp-missing-features-google-gms>.

¹⁵ Opinion, at 120.

¹⁶ Opinion, at 118.

¹⁷ Opinion, at 118-120.

necessary to improve Google’s search engine. Google monetizes its vast distribution through the sale of advertisements, generating revenue that Google then reinvests into securing exclusive distribution agreements.

Search Text Advertising

- **Text Ads:** There are two primary types of search ads sold on GSEs: general search text ads and shopping ads, or product listing ads (PLAs.) Text ads resemble the organic links on a SERP and typically appear toward the top of the SERP with a “sponsored” designation.¹⁸ There is a direct relationship between a GSE’s scale and its monetization of search advertising.¹⁹ Text ads are the predominant form of advertising on Google, and they make up 80% of Google search ads by revenue;²⁰ 92.5% of Google’s advertisers purchase only text ads.²¹ Advertisers allocate their spending on general search text ads in proportion to the market share of a given GSE.²² Text ads are purchased through keywords. A query that includes an advertiser’s selected keywords might trigger an advertisement from that source.²³
- **Text Ad Auctions:** Text ads are sold through an auction. Text ads are not sold on the same auction as PLAs. Google designs the auction and controls the underlying inputs that affect the ultimate price generated by the auction.²⁴
- **Google Ads:** Google Ads refers to the network of advertisers that utilizes Google advertising tools to purchase display ads across the open web.²⁵ Google is able to maintain an unrivaled pool of network demand because of its control over publisher advertising inventory – via its publisher ad server – and because of the unrivaled scale of its GSE. Google used its dominance and monopoly power in general internet search and search text advertising to build a huge network of advertiser demand and data amassed through user surveillance on the open internet.²⁶

The Future of Search: Artificial Intelligence

- **Large Language Models (MUM, LaMDA, PaLM, PaLM2):** Large language models (LLMs) are computational systems that capture patterns in language. LLMs begin with extremely large corpuses of text, requiring access to vast troves of data. Data can either be freely available or

¹⁸ Opinion, at 60.

¹⁹ Opinion, at 59.

²⁰ *Id.*, at 62.

²¹ *Id.*

²² *Id.*, at 79.

²³ *Id.*, at 63.

²⁴ Opinion, at 82.

²⁵ Plaintiffs’ Proposed Findings of Fact and Conclusions of Law, *United States, et al. v. Google, Inc.*, E.D. VA., Case No. 1:23-cv-00108, Dkt. No. 1172, at 27.

²⁶ *Id.*, at 1.

very difficult and expensive to obtain.²⁷ Training an LLM is computationally intensive and hugely expensive, requiring substantial capital investment.²⁸ Google has developed multiple LLMs: MUM, LaMDA, PaLM, and PaLM2.

- **AI Overviews, Chatbots, and Other Downstream Applications:** Downstream from LLMs are developers who need access to foundational models, as well as the ability to tweak a model to create various consumer-facing applications. “AI Search” includes query-responsive chatbots, like Google’s own Gemini chatbot (formerly known as Bard). Chatbots are capable of providing responses to search queries in the form of text or audio that approximates speech. Google’s SERP now includes an AI-generated summary in a “knowledge graph.” Chatbots may aggregate information that would otherwise appear in a SERP or require navigation to third-party websites.

For noncommercial queries, which make up 80% of the queries that take place on Google’s search engine, the SERP may include a section that provides an AI-generated summary of content contained on third-party websites. This AI-generated summary may deter users from clicking links, as they may have done previously, and in turn may have the effect of keeping users within Google’s walled garden.

IV. A PRIMER ON STRUCTURAL AND BEHAVIORAL REMEDIES

Remedies typically fall into two buckets: structural and behavioral.²⁹ Broadly speaking, structural remedies seek to eliminate incentives that would make anti-competitive conduct possible or likely in the first place, while behavioral remedies seek to prevent firms from engaging in specific forms of conduct.³⁰ Structural remedies like disgorgement or unbundling of technological properties may also seek to pry open competition by diminishing network effects and encouraging competition where it is likely to occur more immediately.

Although firm breakups have been characterized as extreme or difficult to administer, for long periods of antitrust history, courts have viewed structural remedies as the best way to address violations of the antitrust laws.³¹ In *U.S. v. E.I. du Pont de Nemours & Co*, 366 U.S. 316 (1961) (“du Pont”), the Supreme Court opined, “divestiture has been called the most important of antitrust remedies. It is simple, relatively easy to administer, and sure. It should always be in the forefront of a

²⁷ Tejas Narechania and Ganesh Sitaraman, *An Antimonopoly Approach to Governing Artificial Intelligence*, Vanderbilt Policy Accelerator, October 2023.

²⁸ *Id.*

²⁹ Some remedies, like mandatory licensure of intellectual property, or open access to application programming interfaces (APIs), may fall into a gray area between contract-based behavioral remedies and quasi-structural divestiture of intellectual property rights.

³⁰ Lina Khan, “The Separation of Platforms and Commerce,” 119 *Columbia Law Review* 973, 980 (2019).

³¹ Rory Van Loo, “In Defense of Breakups: Administrating a ‘Radical’ Remedy,” 105 *Cornell L. Rev.* 1955, 1962 (2020).

court's mind when [an anti-competitive merger] has been found."³² So it was when the Supreme Court upheld a structural breakup of Standard Oil in 1911, despite Standard Oil's arguments that the breakup would destroy shareholder value and diminish economic performance.³³ No such calamities ensued. Instead, the value of Standard Oil's successor companies appreciated at an astonishing rate. The aggregate value of Standard Oil's successors' shares appreciated by 47% in the year following implementation of the breakup.³⁴ So too was this the case in the wake of the 1984 breakup of AT&T, where patenting in the affected sector grew by 19% more than comparable sectors in the wake of the breakup.³⁵

As applied in the Google Search antitrust litigation, structural remedies may include the breakup and sale of business lines, like Google's Android operating system or Chrome browser, into standalone companies. As discussed below, breaking up business lines into separate corporate entities will pry open competition for placement in these key distribution channels while eliminating the incentives for Android or Chrome to maximize revenue for their parent corporation. Structural (or quasi-structural) remedies may also include mandatory interoperability and open access to the core technological infrastructure underlying the general search market — such as Google's web index or AI large language model — where barriers to independent entry are high but the potential for beneficial competition at the consumer-facing product level is robust.

On their own, behavioral remedies are less effective at curbing anti-competitive behavior and are further complicated by the need for ongoing monitoring and court supervision. As with the analysis of structural remedies, this has been true throughout the history of antitrust enforcement. A behavioral decree against the Aluminum Co. of America ("Alcoa") in 1912, for instance, failed to prevent Alcoa from illegally maintaining its alumina production monopoly, which grew its market share from 72% to 90% over the following quarter-century, until it faced renewed antitrust action.³⁶ Today, more than a century after Alcoa's failed behavioral order, the Justice Department is seeking to break up Live Nation,³⁷ 15 years after a consent decree failed to curb the entertainment conglomerate's anti-competitive conduct.³⁸

Recent antitrust enforcement against Google and other tech platforms provides further evidence of the limits of behavioral remedies. For example, the implementation of search engine "choice screens" in the European Union has failed to meaningfully chip away at Google's durable 90% share

³² *United States v. E. I. du Pont de Nemours & Co.*, 366 U.S. 316, 334 (1961).

³³ *Supra*, note 31, at 1975 (Standard Oil had argued that its structure was comprised of "many parts, but each part has its place, and if a part is taken out, the whole structure is disintegrated.").

³⁴ William E. Kovacic, "Designing Antitrust Remedies for Dominant Firm Misconduct," 31 *Conn. L. Rev.* 1285, 1299 (1999).

³⁵ Martin Watzinger and Monika Schnitzer, "The Breakup of the Bell System and its Impact on US Innovation," CEPR Discussion Paper No. 17635, <https://cepr.org/publications/dp17635>.

³⁶ *United States v. Aluminum Co. of Am. (Alcoa)*, 148 F.2d 416, 423 (2d Cir. 1945).

³⁷ Complaint, *United States et al. v. Live Nation*, S.D.N.Y., Case No. 1:24-cv-03973 (May 24, 2024).

³⁸ Katherine Van Dyck and Lee Hepner, "The Case Against Live Nation-Ticketmaster," American Economic Liberties Project, January 2024, <http://www.economicliberties.us/wp-content/uploads/2024/01/20240104-AELP-Livenation-Brief-FINAL.pdf>.

of the search market.³⁹ Research has since shown that to have a meaningful effect on competition, the timing, display, and content of choice screen auctions must be designed with a level of specificity at odds with the court's reluctance to micromanage business decisions.⁴⁰ In a separate EU enforcement action against Google's dominance over comparison shopping services (the *Google Search (Shopping)* decision of 2017), disputes over Google's interpretation of that order have persisted — and Google's market position has grown stronger.⁴¹ In *Epic v. Apple*, shortly after Apple's implementation of a federal order requiring it to allow developers to use other purchase mechanisms for in-app purchases, the parties found themselves back in court over Apple's alleged "bad faith compliance" with the behavioral order.⁴²

Behavioral remedies are nevertheless essential components of a comprehensive remedy order and are best considered as a means of bootstrapping "surer" and "cleaner" structural relief. For instance, a breakup of Google and Android is futile if the firms simply replicate their monopoly with the same exclusionary agreements that led to the Court's finding of antitrust liability. Similarly, if the Court merely terminates Google's exclusionary distribution agreements, Google may still maintain its monopoly in the relevant market by self-preferencing its own products across its various business lines, which serve as distribution channels for search and search-related products.

V. PROPOSED REMEDIES FOR GOOGLE SEARCH

As described above, it is the obligation of the Court to deprive Google of the benefits of its illegal monopoly, restore competition to the markets for general search and search text ads, and prevent the re-formation of Google's monopoly power in another form. Here, we discuss a range of potential remedies, which are best considered in combination.

STRUCTURAL REMEDIES

Divestiture of Android Into a Standalone Business. In his Opinion, Judge Mehta found that Google's default search agreements, including through the Android OS, supplied Google with "unequalled query volume that is effectively unavailable to rivals."⁴³ At trial, evidence showed that on Android devices, 80% of all queries flowed through a search access point that defaulted to Google.⁴⁴ Over

³⁹ Tim Cowen, Sophia Yakhno, and Lara Greiff, "Learning from the EU's Mistakes: What To Do About Google's Dominance in Search," *The Sling*, June 14, 2024, <https://www.thesling.org/learning-from-the-eus-mistakes-what-to-do-about-googles-dominance-in-search/>.

⁴⁰ Jesper Akesson, Michael Luca, Gemma Petrie, and Kush Amlani, "Can browser choice screens be effective?," Mozilla, accessed November 2024, https://research.mozilla.org/files/2023/09/Can-browser-choice-screens-be-effective_-Mozilla-experiment-report.pdf.

⁴¹ Thomas Höppner, "Google's (Non-) Compliance with the EU Shopping Decision," September 28, 2020, <https://ssrn.com/abstract=3700748>.

⁴² Lauren Feiner, "Why Epic's lawsuit against Apple just won't quit," *The Verge*, May 28, 2024, <https://www.theverge.com/2024/5/28/24158911/apple-v-epic-evidentiary-hearing-app-store-payments>.

⁴³ Opinion, at 228.

⁴⁴ *Id.*

50% of all search revenue on Android devices flows through the Google Search widget alone.⁴⁵ Lacking evidence of a pro-competitive justification for Google’s exclusionary default placement through this key distribution channel, the Court found that the government had established a violation of Section 2 of the Sherman Act based on Google’s exclusive distribution agreements with Android device manufacturers (in addition to other exclusive default agreements referenced herein).

Google’s control of Android limits innovation of the Android OS – and operating systems more broadly – to meet only the specifications required of Google’s own proprietary app ecosystem. Upstream, Google’s control of Android may restrict innovation among device manufacturers, which are currently bound in their design choices by an imperative to distribute the Android OS. Downstream, Google’s control of Android has knock-on effects on competition at the app level. There is currently limited, if any, incentive for the Android OS to meet the technological needs required of potentially innovative products that would compete with Google’s own proprietary apps.

To frame it differently, absent a divestiture of Android, there exists a natural and unavoidable incentive for Google to take actions that maximize its own profit, including by engaging in conduct that continues to exclude rivals from access to consumers and scale data via phones that are preloaded with the Android OS.⁴⁶

Divestiture of Android, paired with the behavioral restrictions discussed below, eliminates Google’s incentive to foreclose access to rival apps and creates potential competition in markets including the relevant markets in the underlying case.

As with any divestiture remedy, the Court will be concerned with ensuring that Android is capable of standing on its own as an independent business entity. But courts have also historically favored structural divestitures where there was a prior merger between the firms and where firms have maintained separate branding. Android meets both of these prerequisites: Android was acquired by Google in 2005 and maintains distinct branding under the Alphabet/Google umbrella. The Justice Department may seek additional discovery regarding the organizational structure of Android within Alphabet and its monetization or subsidization by other Google business lines, as well as delineating which aspects of Android are proprietary rather than open source, so that the Court may assess how best to sever Android while maintaining its viability as a standalone firm.

Android is, to some extent, customizable by third-party developers seeking to create new smart devices and technologies by customizing the Android system.⁴⁷ The Justice Department may nevertheless seek to discover further information regarding limits to the adaptability of Android that may hinder the development of third-party technologies.

⁴⁵ *Id.*

⁴⁶ Steve Salop, “Why an Android Divestiture is a Necessary Google Search Remedy,” ProMarket, September 20, 2024, <https://www.promarket.org/2024/09/20/why-an-android-divestiture-is-a-necessary-google-search-remedy/>.

⁴⁷ Opinion, at 8.

Divestiture of Chrome Web Browser. In addition to considering a structural divestiture of Android, the Justice Department may seek divestiture of Google's web browser, Chrome. The principal purpose of Chrome, as revealed during the underlying liability proceedings, is as a distribution mechanism for Google's search engine. One approach to rectifying Google's exclusive control of this distribution channel would be to mandate a choice screen or other neutral design that allows users to select a non-Google search engine. Because users of Google's web browser are more likely to exercise loyalty to Google products, any such choice screen option would be most effective if Google Search were not an available option.

Another option would be to structurally separate Chrome from Google, rendering Chrome a standalone entity. If paired with a restriction against Google placing its search engine on the newly formed Chrome's web browser, a structural separation could engender competition between other search engines for access to this distribution channel. An important area of inquiry is whether Chrome can stand on its own as a viable separate entity. The Justice Department may seek additional information regarding the extent to which Chrome is subsidized by other Google business lines, and whether Chrome would be able to replace that subsidy with sufficient self-generated revenue.

Divestiture of Properties Within Google's Digital Advertising Network. Google generates extraordinary amounts of revenue through its digital advertising business. The barriers to entry to the general search text advertising market are the same as the barriers to entering the market for general search but are compounded by the additional costs and resources required to build an ad platform to deliver text ads.⁴⁸ To some extent, addressing Google's illegal monopolization of the market for general search will address Google's monopolization of the market for search text ads. Distinct remedies pertaining to Google's alleged monopolization of various markets of open web display ads may flow from Google's potential liability in the parallel but separate Google Ad Tech antitrust litigation.⁴⁹

The Court may nevertheless seek to structurally separate business lines within Google's advertising network that pertain specifically to the relevant market for general search text advertising. Any such remedy should seek to remove Google's unilateral control over key inputs to advertising auctions that influence the ultimate price that advertisers pay. The Court may also order divestiture of Google's ad network, Google Ads.

Compulsory, Nonexclusive Licenses to Google's Web Index, Ranking Algorithm, and Large Language Model. Separate and apart from a structural separation of business lines like Android OS or the Chrome web browser, the Justice Department may also seek divestiture of other technological assets in the form of a compulsory, nonexclusive license to Google's competitors or potential competitors. Any such license must include the ability for the licensee to make independent changes to relevant code, including to enhance data security, to alter the weight assigned to different signals that inform the ranking of search results, or other changes that seek to

⁴⁸ Opinion, at 190.

⁴⁹ *United States, et al. v. Google, Inc.*, E.D. Va., Case No. 1:23-cv-00108.

improve search engine quality.

Viewpoints may differ regarding the respective value to potential competitors of a web index, ranking algorithm, or database that flows from Google's significant scale advantages. Some competitors may find it easy to create a web index but very difficult to approximate Google's QBST or NavBoost, which rely on query data only accessible through Google's incomparable scale.

The Court should also consider mandating a compulsory, nonexclusive license to Google's large language models. There are at least two legal bases for such a remedy. First, Google's LLMs were likely trained on vast stores of data derived from Google's expansive web index and other scale advantages, which were attained through illegal means. Compelling divestiture of Google's LLMs is therefore consistent with depriving Google of its ill-gotten gains. Second, because LLMs are very expensive to train and require significant capital investment that is not available to rivals, including downstream developers, compelling open access to Google's LLMs eliminates a significant barrier to entry for potential app-level competitors that may seek to compete with Google Gemini.

Fair, Reasonable, and Nondiscriminatory (FRAND) Access to Google Search, Including Underlying Technological Components. The Court may also require access to Google Search results via real-time APIs on fair, reasonable, and nondiscriminatory (FRAND) terms.⁵⁰ FRAND access to Google Search should also include the ability of competitors to access and modify Google's web index, ranking algorithm, LLM model parameters, and "triggers," which determine whether knowledge graphs appear on the SERP. To the extent that FRAND access may be accomplished without requiring access to any user data, this is an attractive remedy for privacy-sensitive rivals and their consumers. Providing access to Google Search results on FRAND terms is distinct from merely licensing or syndicating a copy of Google's SERP, as it would also allow potential competitors to re-rank and mix search results and allow other search engines⁵¹ to differentiate their products based on qualitative metrics like enhanced privacy, improved design, and customization of the user interface and results page.⁵²

Unbundle Search, Search Ads, and Other Knowledge Graphs to Allow Competitors to Customize and Monetize Their Own SERPs. Potential rivals may syndicate search results from either Google or Bing. But merely licensing a copy of the SERP of Google or Bing foregoes opportunities for beneficial competition and independent monetization of the SERP by rivals. Unbundling the components of a SERP would augment the locus of control over the user search experience from the Google SERP to alternative non-Google search input properties and allow competitors to create curated search

⁵⁰ DuckDuckGo, "Creating Enduring Competition in the Search Market," September 12, 2024, <https://spreadprivacy.com/creating-enduring-competition-in-the-search-market/>.

⁵¹ For this and other remedies that relate to access to data, the Court may choose to set limitations to safeguard national security, such as by disqualifying rivals controlled by adversarial nations from receiving licenses, based on standards already reflected in official U.S. policy. See, e.g., U.S. Department of the Treasury, "CFIUS Laws and Guidance," <https://home.treasury.gov/policy-issues/international/the-committee-on-foreign-investment-in-the-united-states-cfius/cfius-laws-and-guidance>.

⁵² *Id.*

experiences for their users. For instance, if a user inputs a query for a restaurant, a rival search engine may want to include a knowledge graph other than Google Maps. Informational search queries may or may not trigger an AI Overview, and rival search engines can incorporate non-Google elements while deciding whether to provide an overview at all. Unbundling Google's search services product from its search text advertising product would unlock competition among advertisers and rival exchanges.

Cancellation or Mandatory Licensure of Google's Trademark. Among the ill-gotten gains of Google's monopoly in the relevant markets is the strength of Google's brand. The strength of Google's brand helps to explain why non-Google defaults are less effective when the alternative lacks Google's universally recognized brand recognition.⁵³ To maximize the efficacy of other remedies in this case, including FRAND access to upstream Google technologies by downstream GSE competitors, the Court should allow – but not require – rival GSEs to use the “Google” trademark, or some version of a “Powered by Google” designation.

BEHAVIORAL REMEDIES

Prohibit Revenue Share for Default or Priority Placement on All Search Access Points. At the core of Google's illegal monopoly are its various exclusive default agreements, which facilitate the distribution of its search engine and produce data and scale advantages inaccessible to any of its existing or potential rivals. The centrality of this conduct to Google's liability renders dissolution of these agreements – including the Google-Apple ISA, the Mozilla RSA, and Google's MADAs and RSAs with Android OEMs – the most obvious remedy.

To render this behavioral remedy maximally effective, the Court should prohibit Google from paying to be the default search engine on any device, browser, operating system, or other search distribution channel. That would also include barring Google from paying for the priority display of its Search widget on any device or operating system. Google currently has the resources to outbid any other search engine rival, with perhaps the lone exception of Microsoft.

The Court should likewise prohibit Google from setting its search engine as the default in its own Chrome web browser. This remedy will force a quasi-structural separation between Google's web browser and search engine. Doing so would create competition between rivals for default placement within Google Chrome and deprive Google of foreclosing access to this key distribution channel.

To the extent that AI chatbots hold the potential to revolutionize the market for internet search, including by becoming their own search access point, a remedy that prohibits exclusive default placement of Google's search engine should also apply to Google's Gemini chatbot. This would

⁵³ Opinion, at 208.

include prohibiting Google from entering into an agreement that exclusively integrates Google Gemini into Apple devices, something that is rumored to be in development this year.⁵⁴

The Court may also consider barring Google from entering into any agreement with third-party websites or other data stores that would otherwise enhance Google's search engine or LLM to the exclusion of existing or potential rivals. For instance, earlier this year, reports emerged that Google had entered into an agreement with Reddit, giving Google potentially exclusive access to a valuable repository for user-generated content for purposes of enhancing search results and training Google's LLM.⁵⁵ Such deals foreclose access to important sources of data to Google's rivals and threaten to further inhibit competition in the relevant markets at issue in the Google Search case.

Prohibit Anti-Competitive Conduct Between Google Search and Any Divested Entity. If the Court determines that divestiture of Android and/or Google's Chrome web browser is an appropriate remedy, the Court must also restrict conduct that would allow for the reemergence of Google's anti-competitive conduct by contract or other means. To that end, the Court should also prohibit any form of tying, conditioning, self-preferencing, or other discrimination that favors Google Search in future dealings with any divested entity.

Moratorium on Acquisitions Related to General Search, Search Text Ads, or Future Search-Related Markets. Over the past quarter-century, Google has made well over 250 acquisitions, many of them in the fields of information technology, digital advertising, cloud storage, and artificial intelligence.⁵⁶ While the question of whether Google's market power was primarily built through acquisitions was not fully explored during the liability phase of this litigation, it is likely owed at least in part to major acquisitions, like its 2005 purchase of Android (which facilitated the transfer of Google's search dominance from desktop to mobile) and 2007 purchase of DoubleClick (which fueled Google's dominance over ad markets, including search ads).

The Supreme Court held in *Grinnell Corp.* that where a defendant's market power was achieved through acquisition, an injunction against repeat acquisitions "seems fully warranted."⁵⁷ The Justice

⁵⁴ Wes Davis, "Apple could announce a Google Gemini deal this fall," *The Verge*, June 30, 2024, <https://www.theverge.com/2024/6/30/24189262/apple-intelligence-google-gemini-deal-iphone-mac-ipad-openai-chatgpt>.

⁵⁵ Emanuel Maiberg, "Google is the Only Search Engine That Works on Reddit Now Thanks to AI Deal," *404Media*, July 24, 2024, <https://www.404media.co/google-is-the-only-search-engine-that-works-on-reddit-now-thanks-to-ai-deal/>.

⁵⁶ Notably, even as the liability phase was pending, Google pursued its *largest-ever* acquisition. See Brian Contreras, "Google Is Chasing Its Largest-Ever Acquisition. Here's How It Compares to the Search Giant's Other Multibillion-Dollar Deals," *Inc.*, July 17, 2024, <https://www.inc.com/brian-contreras/google-is-chasing-its-largest-ever-acquisition-heres-how-it-compares-to-search-giants-other-multibillion-dollar-deals.html>. Ultimately, Wiz rejected the offer and opted for an initial public offering instead, confirming that an acquisition moratorium is likely to lead to more competitive markets overall. Jess Weatherbed, "Wiz rejects Google's \$23 billion takeover in favor of IPO," *The Verge*, July 23, 2024, <https://www.theverge.com/2024/7/23/24204198/google-wiz-acquisition-called-off-23-billion-cloud-cybersecurity>.

⁵⁷ *U.S. v. Grinnell Corp.*, 384 U.S. 563, 580 (1966).

Department may seek to further establish the nexus between Google’s long history of serial acquisitions and its power in the relevant markets, and request that the Court impose a term-limited moratorium on further acquisitions that would only enhance Google’s market power.

Interim Relief to Jump-Start Competition and Apprehend Imminent Risks of Harm in Nascent Markets. The Court ruled against Google on August 5, 2024.⁵⁸ A multi-week evidentiary hearing on remedies is scheduled to begin over seven months later, on April 22, 2025, and will be followed several weeks later by post-hearing briefs and closing arguments.⁵⁹

Every day during this long interval, Google continues to reap ill-gotten gains and harm competition. Google’s ongoing anti-competitive practices harm not only the markets for general search and search text advertising but also nascent and adjacent markets, especially those relating to artificial intelligence technologies. These markets are at critical inflection points. Google’s ongoing violations threaten to foreclose crucial early opportunities for rivals to build market share and may force otherwise promising startups to exit the market entirely due to limited funding runways.

As the Justice Department itself has emphasized, “Sometimes the most meaningful intervention is when the intervention is in real time. ... [T]he beauty of that is you can be less invasive.”⁶⁰ Accordingly, the Justice Department should consider promptly seeking appropriate interim relief, including the aforementioned moratorium on acquisitions and a prohibition against Google’s entry into additional exclusive deals (especially with Apple).

REMEDIES THAT ENSURE ADMINISTRABILITY, COMPLIANCE, ENFORCEABILITY, AND DETERRENCE.

Appoint Nonconflicted Monitors and Create a “Technical Committee” to Oversee the Implementation of Remedies, Field Complaints, and Coordinate Across Jurisdictions. The Court should appoint a monitor and a technical committee to oversee the implementation of remedies. There is much to learn from the practical experience shared by monitors in previous cases, especially *United States v. Microsoft Corp.*⁶¹ Although the duration and amount of resources required for monitoring will vary depending on the remedy chosen, even with structural remedies, there

⁵⁸ Opinion, at 1.

⁵⁹ U.S.A. et al. v. Google LLC, No. 1:20-cv-03101-APM, D.I. 1043, 3 (D.D.C. August 5, 2024), <https://www.courtlistener.com/docket/18552824/1043/united-states-of-america-v-google-llc/>.

⁶⁰ Stephen Morris et al., “Big Tech’s AI dealmaking needs ‘urgent’ scrutiny, says US antitrust enforcer,” *Financial Times*, June 6, 2024, <https://www.ft.com/content/97b45759-36e0-4f5b-9c6a-ae0580f9a29b>; see also Press Release, “FTC, DOJ, and International Enforcers Issue Joint Statement on AI Competition Issues,” July 23, 2024, <https://www.ftc.gov/news-events/news/press-releases/2024/07/ftc-doj-international-enforcers-issue-joint-statement-ai-competition-issues>.

⁶¹ See, e.g., Jay L. Himes et al., “Antitrust Enforcement and Big Tech: After the Remedy Is Ordered,” *Stanford Computational Antitrust*, June 8, 2021, <https://law.stanford.edu/wp-content/uploads/2021/06/himes-nieh-schnell-computational-antitrust.pdf>; “Antitrust Case Studies: Microsoft,” *Stigler Center*, April 24, 2024, <https://youtu.be/2Qwmo7y3O0M?si=ikdvmA6Dtq4Spa1L&t=650>.

would likely be a transition period requiring some degree of oversight. Anyone who serves as a monitor or on a technical committee should be rigorously vetted to avoid conflicts of interest. In anticipation of the risk that Google will attempt to avoid compliance, the Court should adopt a complaint mechanism so that adversely impacted rivals – and whistleblowers – can make confidential reports directly to the monitor.

In addition, given the multiple actions that are pending against Google in various stages, the court should empower the monitor and/or technical committee to coordinate and share information with monitors overseeing remedies imposed on Google in overlapping markets and across jurisdictions, including internationally. The need to do so is far from speculative, as, for example, Judge Donato has already stated in Court that his remedy order will provide for a “technical compliance and monitoring committee.”⁶²

Mandate “History-On” Chats and End Google’s “Communicate With Care” Policy. Since at least 2008, Google executives, including longtime Chief Legal Counsel Kent Walker, created and enforced a corporate policy that caused Google to change the default history setting for all employee chats from “history on” to “history off,” which permanently deleted messages after 24 hours.⁶³ The Federal Rules of Civil Procedure required Google to suspend its auto-delete practices in mid-2019, when it reasonably anticipated the Google Search litigation. Yet Google failed to do so.⁶⁴

As a result, Google systematically destroyed an entire category of written communications every 24 hours during the Google Search litigation, resulting in the permanent destruction of “an untold volume of relevant chats, going back years.”⁶⁵ Judge Mehta recognized that the practice undermined the government’s enforcement efforts, writing that he was “taken aback by the lengths to which Google goes to avoid creating a paper trail for regulators and litigants,” adding, “[i]t is no wonder then that this case has lacked the kind of nakedly anticompetitive communications seen in *Microsoft* and other Section 2 cases.”⁶⁶

An appropriate remedy would rectify Google’s concerted effort to undermine antitrust efforts, and the enforcement of other laws, by requiring Google to retain all communications relevant to remedies, including chats, for the longer of 18 months or the duration of any monitoring or technical

⁶² Sean Hollister, “Epic judge says he’ll ‘tear the barriers’ down on Google’s app store monopoly,” *The Verge*, August 14, 2024, <https://www.theverge.com/2024/8/14/24220491/epic-google-android-app-store-monopoly-remedies-hearing>; see also European Commission, “Commission opens non-compliance investigations against Alphabet, Apple and Meta under the Digital Markets Act,” Press Release, March 25, 2024, https://digital-markets-act.ec.europa.eu/commission-opens-non-compliance-investigations-against-alphabet-apple-and-meta-under-digital-markets-2024-03-25_en.

⁶³ Memorandum of Law in Support of Plaintiffs’ Motion for an Adverse Inference, *United States, et al. v. Google*, E.D. Va., Case No. 1:23-cv-00108, Dkt. No. 1116, at 5.

⁶⁴ Memorandum in Support of the United States’ Motion for Sanctions Against Google, LLC, *United States, et al. v. Google*, D.D.C., Case No. 1:20-cv-03010, Dkt. No. 512-1, at 2.

⁶⁵ *Supra*, note 63, at 11.

⁶⁶ Opinion, at 275.

committee, consistent with Google’s default policy for “history-on” chats,⁶⁷ and eliminate the ability for employees to move discussions to “history-off” mode.

Bar Google Officials From Further Employment by Google or Any Post-Divestiture Entity. The Supreme Court has held that barring employees from employment by the defendant in a monopolization case “may be appropriate where the predatory conduct is conspicuous.”⁶⁸ Termination of employment of officials who were central to Google’s illegal monopolization strategy is critical to reinstating a culture of compliance with the law and deterring other officials from engaging in similar predatory conduct.

At least one Google official, longtime chief legal counsel and current Vice President John Kent Walker Jr., engaged in predatory conduct that likely meets the standard set forth by the Supreme Court in *Grinnell Corp.* for barring individuals from future employment by the defendant. Walker was also central to Google’s “systemic destruction of documents” and “flagrant misuse of the attorney-client privilege,”⁶⁹ which date back to the 2008 Walker Memo. In his Opinion, Judge Mehta found that Google employees “assiduously followed” the advice proffered by Walker concerning the deletion of records and misuse of attorney-client privilege,⁷⁰ and Walker may now be under investigation by the California State Bar for professional conduct violations.⁷¹

Walker is not named in Judge Mehta’s rebuke of Google’s systemic destruction of records over the course of over 15 years, and there are likely other executives whose predatory conduct contributed to Google’s illegal maintenance of monopoly. Short of separation from employment, the Court should at minimum impose a “firewall” to ensure that Walker and other implicated officials do not influence or receive any nonpublic information about the remedies phase of this case or make any public statements on Google’s behalf relating to such matters.

Prohibit Surveillance of Employee Communications. In addition to Google’s systematic destruction of evidence and “flagrant misuse” of attorney-client privilege, Google has surveilled worker communications in a manner that chills workers from expressing concerns about potentially illegal business practices at Google.

During the relevant time period in the Google Search case, Google workers have raised concerns about Google’s employee surveillance policy. In 2016, Google settled one case for \$27 million – a record settlement of its kind – alleging that Google’s confidentiality policies violated California labor law protecting the right of employees to speak about labor conditions.⁷² In 2019, Google employees

⁶⁷ *Supra*, note 64, at 1.

⁶⁸ *U.S. v. Grinnell Corp.*, 384 U.S. 563, 579 (1966)

⁶⁹ *Id.*

⁷⁰ Opinion, at 275.

⁷¹ Lauren Feiner, “Tech critics want a Google exec punished for deleted chats,” *The Verge*, October 22, 2024.

⁷² Reed Albergotti, “Google reaches \$27 million settlement in case that sparked employee activism in tech,” *Semafor*, December 1, 2023, <https://www.semafor.com/article/12/01/2023/google-reaches-27-million-employee-settlement>.

protested Google’s “attempt to silence workers,” demanding the reinstatement of colleagues who were put on leave for allegedly violating company policies about accessing sensitive internal documents.⁷³

In separate, ongoing antitrust litigation alleging Google’s illegal monopolization of numerous markets related to digital advertising, one exhibit showed that Google monitors the “internal reaction” of its employees to antitrust-related issues.⁷⁴

The Justice Department should use the remedies discovery process to request additional information regarding the extent to which it surveils its employees and to discover other corporate policies that may prevent them from voicing concern about potentially illegal business practices.

Prohibit Non-Cooperation and Non-Disclosure Agreements and Protect Whistleblowers From Retaliation. Non-cooperation and nondisclosure agreements in employer-employee contracts can have the effect of prohibiting voluntary communication between law enforcement and employees, who often possess the most direct knowledge of potentially illegal conduct. Recent disputes over contact with authorities have arisen out of the use or potential use of nondisclosure agreements at companies including OpenAI and J.P. Morgan Securities. In January 2024, the U.S. Securities and Exchange Commission settled an administrative proceeding against J.P. Morgan Securities for violating the SEC’s whistleblower rule.⁷⁵ In July 2024, employees at OpenAI, a competitor and potential competitor with Google in various relevant markets, filed a complaint alleging similar violations of the SEC’s whistleblower rule.⁷⁶

Non-cooperation, nondisclosure, or other confidentiality agreements may hinder the enforcement of federal antitrust laws and compliance with a remedial injunction in the Google Search case. The Justice Department should seek to discover the extent to which Google relies on such agreements to undermine such enforcement, including prospective efforts to curb the reemergence of Google’s anti-competitive conduct.

Regardless, as a prophylactic measure, the Court should prohibit Google from imposing any term of employment that restricts workers from cooperating with law enforcement efforts or from speaking publicly about potential illegal conduct. To that same end, the Court should provide enforceable prohibitions against whistleblower retaliation.

⁷³ Shirin Ghaffary, “Google employees protest the company’s ‘attempt to silence workers,’” Vox, November 22, 2019, <https://www.vox.com/recode/2019/11/22/20978537/google-workers-suspension-employee-activists-protest>.

⁷⁴ U.S. v. Google, E.D. Va., Case No. 1:23-cv-00108, Exh. PTX0997, <https://www.justice.gov/atr/media/1369301/dl>.

⁷⁵ Press Release, “J.P. Morgan to Pay \$18 Million for Violating Whistleblower Protection Rule,” U.S. Securities and Exchange Commission, January 16, 2024, <https://www.sec.gov/newsroom/press-releases/2024-7>.

⁷⁶ “OpenAI whistleblowers ask SEC to investigate the company’s non-disclosure agreements with employees,” Associated Press, July 15, 2024, <https://apnews.com/article/openai-whistleblower-letter-sec-b075e9fe9887ac79bbc6087a2dd85337>.

VI. CONCLUSION

Google did not come by its durable 90% share of the market for search and search text ads innocently. For antitrust liability to have practical effect, remedies must pry open competition where it is likely to occur today, while preventing the monopolist from engaging in anti-competitive conduct that risks the reemergence of monopoly in the market as it evolves. Federal district courts have broad discretion to craft remedies that serve this purpose, and appellate courts review remedies with deference to the lower court's findings of fact.

The remedies proposed in this document provide a framework for thinking about remedies not just in the *Google Search* antitrust litigation but in other antitrust litigation as well.

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BIG TECH ABUSES

The harms Amazon, Apple, Facebook, Google, and Microsoft cause are directly related to how they make money – and their monopoly power immunizes them from competitive or consumer pressure – so policy change is the only path to achieving meaningful, sustainable reform. A list of their recent abuses is below.

Amazon:

8/16/2023: Amazon Adds Fee to Sellers That Ship Product Themselves: Based on documents reviewed by [Bloomberg](#), Amazon implemented a new fee forcing third-party sellers to pay for products they sell on the Amazon Marketplace but ship themselves.

8/9/2023: Niagara County Extends Amazon Tax Breaks: Amazon gets an extension on the \$124 million subsidy for its proposed distribution center in Niagara County despite delays on the project. As Investigative Post [reports](#), this is just one more to add to the 110 facilities that have been delayed or closed in the past year-and-a-half.

2/1/2023: Amazon Faces More Penalties for Worker Safety Violations: OSHA inspections found that at Amazon warehouses in New York, Colorado and Idaho, workers faced a higher risk of lower back injuries and other musculoskeletal disorders. Reuters reporters that this \$47K fine came just two weeks after a \$60K fine for the same violations at three other facilities.

7/6/2022: UK Competition Authority Investigates Amazon for Using Third Party Data and Self-Preferencing in “Buy Box” Selections: The UK Competition and Markets Authority [launched](#) an investigation into Amazon’s anticompetitive practices with third party seller data and using marketplace features to promote in-house products over third-party seller products.

1/26/22: Washington State Attorney General Ends Amazon’s Price-Fixing Program: The Attorney General’s Office [found](#) Amazon guilty of price-fixing using its “Sold by Amazon” program.

Amazon agreed to pay a \$2.25 million fine and shut down the program that forced sellers to comply with Amazon's agreed upon prices.

11/18/21: Internal Documents Reveal Years of Grossly Inadequate Management of Customer

Data: According to an investigation by Reveal and Wired, past heads of security at Amazon warned executives of various security risks with customer data, but instead of building out the security division, the company fired those who spoke out. As a manager of the security team told the reporters, "I would tell new hires, 'Assume your budget is zero and go from there. Just be as frugal as you can.' "

6/29/21: Amazon Leverages Market Power to Force Beneficial Terms in Client Contracts,

Including Stock Purchases and Board Representation: According to corporate filings and interviews, Amazon has made at least a dozen deals with publicly traded companies that allow it to purchase stocks at below-market value. Some of the deals also give Amazon board representation and priority to outbid acquisition offerings from other corporations.

3/25/21: Internal Documents Show Amazon's Knowledge of Workers Urinating in Bottles to Meet

Company Quotas: Amazon denied the accusations made by Congress members and labor advocates until internal documents, leaked to The Intercept, showed the Company's clear knowledge of such behavior.

2/2/21: Amazon Fined \$61M for Stealing Delivery Drivers' Tips: The FTC fined Amazon \$61.7M

for taking Amazon Flex drivers' tips over a two year period to cover the difference after Amazon lowered hourly rates. Amazon had lied by promoting tip benefits (and explicitly promised 100% of tips) in sign-up terms and in advertisements meant to recruit drivers.

12/22/20: Amazon Continues its Practice of Crushing Third-Party Sellers and Industry

Competitors: The Wall Street Journal reports on a variety of anticompetitive practices Amazon is using to harm vendors and competitors. These include cloning successful products, suspending competing products on its platform, mimicking rivals like Shopify, and more.

12/4/20: NLRB Charges Amazon For Wrongfully Firing Workers: The National Labor Relations

Board filed a complaint against Amazon for firing a worker from Pennsylvania who spoke out about issues of pay and worker conditions. The hearing is scheduled for March 2021.

11/23/20: Amazon Relies on Private Operatives to Surveil Labor and Environmental

Activism: Motherboard obtained leaked documents reveal Amazon's use of private, Pinkerton

operatives to monitor employee social activism that could impact Amazon's operations.

9/22/20: Amazon Suppresses Competitors' Ability to Buy Ads on Platform: According to employees involved in advertising decisions, Amazon restricts rivals and their ability to promote competing tech gadgets on the e-commerce platform.

9/17/20: Amazon Continued to List Drugs Used for Doping after Promising to Crack Down: The Markup found over 60 drugs (unapproved by the USDA) listed on Amazon that could be used for doping. This came months after an initial investigation in which Amazon promised to clamp down on such products.

9/7/20: Amazon Removes Tens of Thousands of Reviews: A Financial Times investigation found evidence of paid review activity on the platform.

9/1/20: Amazon Posts and following Backlash, Removes New Job Listing to Monitor Labor Organizing: The company deleted two "intelligence analyst" job listings that named responsibilities around monitoring labor organizing threats following widespread outcry on social media.

7/21/20: Amazon Marketplace is Riddled with Fake Reviews and Ratings: The Markup found fake ratings and reviews on Amazon, which shifted its review process in 2019 to become less transparent.

7/21/20: The NLRB is Questioning Amazon About Unlawful Retaliation Against Its Workers: Amazon fired at least six workers who were involved in protests that criticized the company's response to the coronavirus pandemic. Amazon is now facing multiple inquiries from the National Labor Relations Board about whether these firings constituted unlawful retaliation against workers who spoke out.

7/9/20: The U.S. Treasury Department Fines Amazon for Sanctions Violations: Amazon agreed to pay \$134,523 to settle potential liability over multiple alleged sanctions violations.

6/26/20: Amazon Used Covid-19 to Increase Its Market Power: As COVID-19 spread, Amazon shut down its Seller Fulfillment Prime program, which had allowed third-party sellers to gain "Prime" status without paying for Amazon's logistics services. Since "Prime" products are given better placement in the marketplace, third-party sellers saw their sales drop even if they were selling the exact same product for a lower price, or delivering that product faster.

6/18/20: Amazon Failed to Properly Enforce Banned Items Rules: An investigation by the Markup revealed that Amazon, alongside its third-party marketplace, sold products the company banned. Nearly 100 listings for products categorized as drugs, spying, weapons and other dangerous items were found in a virtual back alley where mostly third-party sellers peddle prohibited goods, some of which are used for illicit and potentially criminal activities.

6/11/20: The EU Plans Formal Antitrust Charges Against Amazon Over its Treatment of Third-Party Sellers: The European Union accused Amazon of scooping up data from third-party sellers and using that information to compete against them, for instance by launching similar products.

4/27/20: New York is Investigating Amazon for Violating Whistleblower Laws: New York's Attorney General, Letitia James sent a letter to Amazon, raising concerns that the company may have broken the state's whistleblower laws when it fired a warehouse worker who helped organize a protest due to inadequate protections for warehouse workers.

2/5/20: Amazon Workers Suffer Injuries 3x the Average Worker Injury Rate: Based on the company's injury reports to the Occupational Safety and Health Administration (OSHA), Amazon's rate of injuries is three times the national average for warehouses.

1/16/20: Amazon Ignored Thousands of Banned and Blacklisted Products on Its Website: A WSJ investigation exposed a pattern of disregard for consumer safety at Amazon, which has ceded control of its website to third-parties selling thousands of banned, toxic and blacklisted products.

1/13/20: India Launches Antitrust Probe into Amazon: The Competition Commission of India said it would focus on allegations that the U.S. titans promote "preferred sellers" of goods on their platforms, which may have hurt smaller rivals.

12/23/19: Internal Documents Show Amazon Chooses Speed Over Safety in Delivery Network: A ProPublica report exposed Amazon's practice of cutting corners with its delivery network. In 2018, employees charged with inspecting new delivery stations for safety compliance noted in an internal memo that they had been unable to visit every new station prior to launch. In some stations they did manage to visit during peak season, they discovered scenes of chaos: inadequately trained managers, severe understaffing, haphazard traffic flows for delivery vans entering and exiting stations, and packages scattered on the floor. Amazon is also known to

use independent third-party contractors to deliver its products, shielding the e-commerce giant from just about every imaginable liability.

12/19/19: Amazon Uses its Market Share to Squeeze Other Businesses: The New York Times exposed many of the ways Amazon uses its size to bully and manipulate third-party sellers. Amazon reportedly forced Tumi, a luxury luggage brand, to sell through Amazon directly or be forced off the platform. Reporting also showed Amazon collects 27 cents of each dollar customers spend buying things its merchants sell, a 42% jump from five years ago. (And that doesn't include what companies pay for ads on Amazon).

11/26/19: Amazon's Trucking Operations Cause Mass Amounts of Uncompensated Environmental Harm: A report by the Economic Roundtable estimated that Amazon brings 21,500 diesel truck loads of merchandise *daily* to and from 21 Amazon warehouses in a four-county region in CA. Its trucking operations in the four-county region in 2018 created an estimated \$642 million in uncompensated public costs for noise, road wear, accidents, and harmful emissions.

11/8/19: Amazon Vendor Writes to Congress Making an Antitrust Complaint: A third-party seller published a letter explaining how Amazon raised logistics fees by 20% over the past four years until they cost as much as 35% more than competing services. The 62-page document, reviewed by Bloomberg, lays out an antitrust case.

12/2/19: OSHA Issues a Warning Letter to Amazon for Inadequate Medical Care to Injured Workers at their On-Site Medical Unit: An investigation by The Intercept and Type Investigations found multiple instances in which clinic staffers violated Amazon's own rules as well as government regulations. It also found that Amcare employees nationwide were pressured to sweep injuries and medical issues under the rug at the expense of employee health.

11/21/19: Five Senators Write Letter to Amazon Regarding Concerns Over an Affiliated Office in Ukraine Receiving Unfettered Footage: The letter cites a report from The Intercept that explained how, beginning in 2016, Ring provided its Ukraine-based research and development team virtually unfettered access to a folder on Amazon's S3 cloud storage service that contained every video created by every Ring camera around the world.

11/6/19: Amazon Leaves Third-Party Sellers Out in the Cold: As reported in Promarket.org, Amazon's shift to vertically integrate its fulfillment operations left sellers with a diminished ability to assess its performance, and therefore with limited ability to compare FBA to other options.

10/11/19: Amazon Bullies Third-Party Sellers: Amazon uses its ad placement system to extract revenue and loyalty from third-party sellers, showing an average of 7 to 11 sponsored listings on the first page of shopping results on desktop.

10/1/19: Elasticsearch Sues Amazon for Trademark Infringement: Elasticsearch sued Amazon in federal court in California for violating its trademark because Amazon called its product by the exact same name: Elasticsearch. Amazon "misleads consumers," the start-up said in its complaint.

8/29/19: Senators Write to Bezos Regarding the Sale of Unsafe Items on Amazon's Platform: Three U.S. senators wrote a letter to Amazon CEO Jeff Bezos asking him to take action to stop the sale of unsafe items and to ensure accurate warning labels on his company's giant sales platform.

8/23/19: Publishers File Lawsuit Against Audible's Copyright Violations, Citing Errors in Captioned Text: Seven U.S. publishers filed a lawsuit against Amazon's Audible, alleging its plan to offer real-time captioning of some audiobook titles violates copyright law. They noted that the text rights require a separate agreement. In the lawsuit, the publishers state that Audible Captions is prone to errors, alleging that by Audible's own admission "up to 6%" of the text may have errors.

8/2/19: Amazon Uses Public Funds to Subsidize Ring Purchases: Cities and towns around the country have paid Ring up to \$100,000 to subsidize the purchase of the company's surveillance cameras for private residents. In exchange, Amazon promised to match every dollar committed by a city.

6/12/19: Amazon Allegedly Violates Child Privacy Laws in at Least Eight States: A lawsuit claims Amazon recorded audio from millions of children without obtaining proper consent from their parents.

2/13/19: Amazon Avoids Taxes: The Institute on Taxation and Economic Policy reported Amazon nearly doubled its profits to \$11.2 billion in 2018 from \$5.6 billion the previous year

and, again, didn't pay any federal income taxes.

6/11/18: China Labor Watch Exposes Major Labor Violations within Amazon's Largest China Supplier: A report by China Labor Watch reveals that Foxconn, one of Amazon's largest China suppliers continues to violate Chinese law in its treatment of workers, among other things.

12/18/17: France Seeks Fine Following Two-Year Investigation into Amazon's Abuse of Power over Third-Party Vendors: The French government filed a complaint with the Paris Commerce Court against e-commerce company Amazon for abusing its dominant position with some suppliers. Under the complaint, which follows a two-year investigation by the DGCCRF consumer fraud watchdog, the Economy Ministry is seeking a fine of 10 million euros.

11/9/17: Indiana Dept. of Labor Outlined Numerous Labor Violations at Amazon Warehouses: After another death in an Amazon warehouse, the Indiana Department of Labor outlined four violations that could carry fines of \$7,000 each. They included a failure to "provide adequate training" and to develop and document certain safety procedures.

Apple:

5/2/22: The EU Charges Apple with Monopoly Abuse by Restricting Access to Key Technology to Control the Payment System on the iPhone: The EU Commission is moving forward with allegations over Apple's anticompetitive tactics to keep Apple Pay as the dominant mobile wallet on the iPhone.

5/27/21: Apple Continues to Restrict Consumer Choice on the iPhone: iPhone users are accustomed to the options and lack thereof on their Apple phones, but a Washington Post article highlights many of the limitations that, in a competitive market, would likely not exist.

4/30/21: EU Regulators Claim Apple Broke Competition Rules with App Store Fees: Following a complaint from Spotify in 2019 over Apple's licensing agreement, EU regulators announce preliminary view of anticompetitive behavior and abuse of market power. The EU Commission is also looking at Apple Pay, but the initial probe has not concluded.

12/20/20: Apple's iPhone Factory Apologizes for Mishandling Worker Wages: Workers in India speak out against an Apple manufacturer for exploitation. After a destructive protest shown on Indian television, Apple conducted an investigation and found multiple violations of its

supplier code of conduct, including late wage payments. The manufacturer is now on probation.

10/28/20: France Files Complaint Against Apple over Privacy Violations: France's competition authority filed an antitrust complaint addressing Apple's plan to limit third-party trackers used for mobile ads. It alleges that Apple is co-opting the concern around privacy protection for anti-competitive means.

9/26/20: Over a Dozen Companies Join Forces to Address Apple's Gatekeeping Power Over Mobile Apps: Thirteen tech companies publicly complain and push back against Apple's 30% cut on sales of paid mobile apps.

7/23/20: Italy's Antitrust Regulator Probes Apple Monopoly on Devices: Apple and Amazon are under investigation by Italian government for blocking the sale of Apple and Beats devices to legal but unauthorized resellers who might undercut prices. "This investigation is aimed at ascertaining whether Apple and Amazon have put in place an agreement restricting competition" said L'Autorit Garante della Concorrenza e del Mercato (AGCM).

7/19/20: Apple Enables iTunes Gift Card Scams: A class-action complaint lodged in July 2020 claims Apple not only enables iTunes gift card scams, which have become increasingly widespread over the past few years, but also profits from the activity.

6/16/20: EU Announces Antitrust Investigations into Apple: The European Commission launched two antitrust investigations into Apple's App Store rules and the Apple Pay platform. "It appears that Apple obtained a 'gatekeeper' role when it comes to the distribution of apps and content to users of Apple's popular devices.

4/28/20: Apple Refuses to Share COVID-19 Contact Tracker with NHS: Contact-tracing apps notify you if you're at risk of infection, based on whether you've come into contact with someone who was recently diagnosed with coronavirus. Apple refuses to collaborate despite the fact that NHS' approach aligns with many of its EU counterparts and centralizes the effort to combat COVID-19.

3/9/20: Apple Blocks Licensing Competition: An antitrust lawsuit filed in March 2020 claims that Apple and music streaming companies have built out an illegal buyer's "conspiracy" to block out licensing competition. The suit also claims that Apple has "entered into an illegal agreement" with the other named companies to "boycott PMR all while publicly performing

music works” in its repertory, adding that the defendants refuse to recognize any newcomers in the performing rights organization sphere.

3/2/20: Apple’s “Batterygate” iPhone Software Applications: Apple was exposed in a 2017 lawsuit for quietly slowing down older iPhones without consumer consent as it launched new models, to induce owners to buy replacement phones or batteries. They had to pay \$500 million to settle the lawsuit.

2/13/20: Apple Liable for Millions in Unpaid Wages: The California Supreme Court found Apple broke state law by not paying retail workers for the time they spent participating in mandatory bag and device searches, leaving the company liable for millions in unpaid wages.

2/5/20: Apple Infringes on Patents: Koss is suing Apple over the concept of wirelessly connecting to headphones or speakers, and is alleging that nearly all of Apple’s current product lineup is in infringement of Koss-held patents.

11/10/19: Apple Card Investigated for Gender Bias: New York state legislators announced that they would investigate the algorithm used by Apple Card to determine the creditworthiness of applicants. There are several accounts of women who have been declared to be higher credit risks than their husbands, despite higher credit scores or incomes.

7/26/19: Violating Consumer Privacy: A whistleblower working for the firm exposed Apple’s frequent accidental activations of Siri, allowing contractors to listen in and record customers private interactions while accessing data showing location, contact details and app data.

5/13/19: Supreme Court Allows Class Action Against Apple to Move Forward: Apple requires app developers to sell iPhone apps on its App Store, pay it a 30% commission on sales, and set a price ending in \$0.99. In Apple v. Pepper, Apple argued that because app developers set the exact price for their apps, iPhone users actually purchase apps directly from the developers. Apple protested that the iPhone users’ lawsuit would be unfair since it could be sued twice for its power over app retailing; by app developers and by users. The U.S. Supreme Court rejected Apple’s arguments. “Multiple suits are not atypical,” Kavanaugh wrote, “when the intermediary in a distribution chain is a bottleneck monopolist or monopsonist (or both) between the manufacturer on the one end and the consumer on the other end.”

4/27/19: Blocking Apps That Help with iPhone Addiction: Apple uses its power over the App Store to its advantage, restricting or blocking apps that provide parental controls or monitor

time spent on a phone. Apple's competitors complained that the company had targeted them after it created its own tool for those tasks. Apple released version 12 of its own parental control app, Screen Time, which had similar functions to the programs it blocked.

4/23/19: Student Sues Apple for \$1 Billion Over Biased Facial Recognition Tech: Apple's in-store facial recognition software caused the wrongful arrest of Ousmane Bah. The arrest warrant used a photo that didn't resemble Bah and suggested that a thief may have obtained Bah's lost learner's permit — one without a photo — and used that as a form of ID at Apple stores. In a bid to track down the suspect, Apple mistakenly connected the permit with another Bah's face.

3/13/19: Spotify Files Complaint About "Apple Tax": Spotify filed a complaint with the European Commission against Apple's fees. The complaint called the App Store's 30% commission a "discriminatory tax" that gives an unfair advantage to Apple's in-house streaming service Apple Music.

3/8/18: Apple's Labor and Human Rights Violations Skyrocket: Apple Supplier Responsibility Report revealed Apple's labor and human rights violations in the global supply chain doubling in less than a year. The report detailed 22 core violations including 10 labor violations, nine working hour falsifications, two harassment incidents, and one underage labor case involving a worker who was 15 years old. The report also described 44 major violations including 38 working hours falsification issues and two cases of underage staff.

11/6/17: Apple Secretly Moved Parts of Their Empire to Evade High Tax Rate: Apple responded to widespread criticism of its tax affairs by secretly shifting key parts of its empire to New Jersey as part of a complex rearrangement that has allowed it to keep an ultra-low tax rate, according to an analysis of Paradise Papers documents. Over the past three years, Apple has reported paying very low tax rates on its profits outside the U.S. – not much more than previously. But this remains significantly lower than all the major markets where its phones, iPads and desktop computers are sold.

7/ 18/ 17: Apple Factories Feature High Stress Work Culture and Pattern of Suicide: Brian Merchant revealed how he gained access to Longhua, the vast complex where iPhones are made and where, in 2010, unhappy workers started killing themselves. "It's not a good place for human beings," Xu a Foxconn worker in Longhua. Xu says he witnessed a suicide a few

months ago. “It wouldn’t be Foxconn without people dying,” Xu says. “Every year people kill themselves. They take it as a normal thing.”

Facebook:

12/23/22: Facebook Agrees to Another \$725M Fine Over Cambridge Analytica Data Breach:

Facebook was fined \$725 million to settle another privacy lawsuit over its misuse of users’ data that impacted over 80 million people.

9/5/22: Facebook Fined for Violating Privacy Protection Rules that Safeguard the Use of

Children’s Data: Facebook was fined \$400 million for violated European data protection rules for its treatment of children’s data on Instagram.

4/9/21: Following Yet Another Data Leak, Facebook Says it Will Not Notify Users:

Facebook exposed over 530 million users personal data but told NPR, “We don’t currently have plans to notify users individually.” The information leaked included phone numbers, full names, locations, email addresses, as well as other profile data.

2/18/21: Facebook Executives Ignore Inflated and Misleading Ad Metrics for Years, Leading to

New Lawsuit: A class action lawsuit reveals new documents showing top Facebook executives, including Sheryl Sandberg, knowingly reported false and inflated ad metrics to maintain their revenue stream.

2/17/21: Facebook Bans All Australian News in Response to Proposed Law that Would Require

Tech Platforms to Pay Publishers for Their Content: Facebook makes a preemptive decision to ban Australian news from its platform. The move is in response to proposed legislation that would require tech platforms to compensate publishers for content shared on their websites. Facebook is not only banning Australian news globally, but it blocks Australian users and news organizations from sharing international content as well.

1/21/21: Research Finds a Spike in Sex Abuse Imagery Shared on Facebook: Business Insider

reports on data showing that at least 13 million child sex abuse images were shared over Facebook’s multiple platforms in 2020, a 31% increase compared to previous years.

12/18/20: Protesters Against India’s Farming Reform Claim They are Censored on Facebook and

Instagram: Global protests break out against Facebook’s censorship over India’s new farming

bills that will likely reduce farmers' income and benefit large corporations. Protesters worry as Facebook continues to block and censor their plea for a repeal.

12/3/20: The DOJ Files Lawsuit Against Facebook for Worker Discrimination: The DOJ complaint, filed December 3rd, addresses Facebook's discriminatory hiring process, illegally prioritizing H-1B visa workers.

11/23/20: Despite Announcing a Policy Prohibiting Content that "Denies or Distorts the Holocaust," Numerous Pages Remain Active: A month after Facebook's policy change, The Markup found a number of active groups and pages on the platform that continue to spread misinformation around the Holocaust.

11/1/20: Political Ads Violating Facebook Policies, Spreading Misinformation: The Wall Street Journal found that at least three pro-Trump political groups have repeatedly used Facebook to spread false political ads, exposing the platform's inability to enforce its own policies.

10/23/20: Facebook Sends Letter Demanding NYU Stop Research on the Platform's Targeted Political Advertising: Facebook claims the research violates bulk data collection provisions and is attempting to stop the NYU study, despite its attempt to increase transparency around political ads and targeted audiences leading up to the presidential election.

9/28/20: Investigation Found Trump Using Facebook to Target Black Voters in "Deterrence" Campaign during the 2016 Election: Channel 4 received troves of data showing how Trump's 2016 campaign had a "Deterrence" Project that urged 3.5 million Black American voters to stay at home. The project tailored these ads on Facebook and other platforms.

9/14/20: Widespread Hate Speech on Facebook Exacerbates Ethnic Violence in Ethiopia: Ethiopia is experiencing extreme violence and ethnic clashing following an assassination of a popular singer. Mass sharing on Facebook has propelled the violence and ethnic divisions to the point where it is "nearing genocide."

9/14/20: Internal Memo from a Facebook Whistleblower Exposes Global Political Manipulation: BuzzFeed News obtained an internal memo from a former Facebook employee detailing countless examples of foreign nations using the platform to spread disinformation and sway elections.

10/22/19: 47 State Attorneys General Investigating Facebook for Stifling Competition and Putting Users at Risk: CNN Business reported that 47 State Attorneys General have launched investigations to determine if Facebook put consumer data at risk, its ad policy, and if it has broken any antitrust laws.

10/18/19: Facebook CEO Took No Questions from Press at Event Promoting Free Expression: BT reported that reporters were not allowed to ask questions after Mark Zuckerberg's speech at Georgetown University in Washington, DC.

10/18/19: Facebook CEO Mark Zuckerberg Defends Refusal to Take Down Some Content: LiveMint reported that Mark Zuckerberg defended the social media platform's refusal to take down content it considers newsworthy in a Free Speech event at Georgetown University.

10/17/19: Facebook CEO Defends Choice to Allow Misinformation in Political Ads: The New York Times reported that Mark Zuckerberg defended the sweeping policy which states that Facebook will not moderate or fact check politician's speech or ads.

10/15/19: Facebook Forced to Pay Fine for News Industry Manipulations: Salon reported that they had to pay advertisers a \$40 million settlement for inflating video metrics.

10/3/19: Turkey Fines Facebook Over Privacy Breach: Reuters reported that Turkey fined Facebook \$282,000 for violating data protection laws which affected nearly 300,000 people.

9/16/19: Drug Dealers use Facebook to Sell Steroids, Raising Questions of How Facebook Polices its Platform: The Washington Post reported that drug dealers heavily market the illegal sale of steroids through Facebook and have gone overwhelmingly unmoderated.

9/16/19: Facebook Allows Advertisers to Rewrite News Headlines, Allowing the Spread of Misinformation: CBC reported that Facebook allows advertisers to completely rewrite news headlines, even if they contradict what is written in the article.

9/5/19: Facebook Accidentally Leaks Phone Numbers of 419 Million Users: The Independent reported that the phone numbers of hundreds of millions of Facebook users has been discovered online in the latest major data breach for the social network. A security researcher found 419 million records on an unsecured server, meaning no password was needed to access them.

8/29/19: Facebook Profits from Chinese Propaganda: Columbia Journalism Review reported that Facebook had been promoting ads bought by Chinese state-run media calling police heroes for their actions during the Hong Kong protests, promoting the benefits of detention centers for Muslims in Uighur, and more.

8/23/19: Facebook Published Emails Showing Employee Knowledge of Cambridge Analytica Data Scandal: Business Insider reported that Facebook had published internal emails that shed new light on exactly how Cambridge Analytica came onto its employees' radar, more than two years before the data scandal sparked the worst crisis in the firm's history.

7/25/19: Facebook Misled Journalists About How Bad the Cambridge Analytica Scandal Was: Vice reported that Facebook repeatedly lied to journalists about the severity of the Cambridge Analytica scandal as part of an alleged coverup of a privacy breach that gave up to 87 million users' personal data to the Trump-linked political firm.

7/12/19: Facebook Fined \$5 billion by FTC for Privacy Lapses: CNBC reported that the FTC was fining Facebook \$5 billion in a settlement following a probe into the tech giant's relationship with Cambridge Analytica. The fine is the largest ever imposed by the FTC.

7/2/19: Germany Fines Facebook for Under-Reporting Illegal Content: CNN reported that Facebook had been fined more than \$2 million in Germany for inaccurately reporting the amount of illegal content on its platform. German authorities said that Facebook had provided "incomplete" information in mandatory transparency reports about illegal content, such as hate speech.

6/18/19: Facebook Libra is 'Most Invasive and Dangerous Form of Surveillance Ever Designed', Critics Say: The Independent reported that Facebook's plan to launch its own currency has once again raised significant privacy concerns, with some critics claiming it could be the most "invasive and dangerous" form of surveillance the technology giant has yet conceived.

6/12/19: Facebook Emails Seem to Show Zuckerberg Knew of Privacy Issues, Report Claims: The Guardian reported that Facebook had uncovered emails that appear to show Mark Zuckerberg's connection to potentially damaging privacy practices at the company.

5/14/19: WhatsApp Discovers 'Targeted' Surveillance Attack: BBC reported that hackers were able to remotely install surveillance software on phones and other devices using a major

vulnerability in messaging app WhatsApp. WhatsApp, which is owned by Facebook, said the attack targeted a “select number” of users and was orchestrated by “an advanced cyber-actor”.

5/5/19: Facebook ‘Labels’ Posts by Hand, Posing Privacy Questions: In a news article by Reuters, it was revealed that Facebook uses human-powered content labeling method for its posts. Most of the work is done by outsourcing.

5/2/19: “Loot-to-order” Antiquities-Trafficking Pages on Facebook: The Daily Beast reported that a two-year BBC investigation found scores of social-media pages selling artifacts looted to customer’s specifications, including pieces from the ruins of ISIS-wracked Palmyra. In response, Facebook pulled 49 relevant pages.

4/30/19: Violent Videos Posted on Facebook Before Sri Lanka Easter Attacks: The Wall Street Journal reported that extremists who allegedly helped plan and execute Sri Lanka’s Easter bombings called before the attacks for killing non-Muslims in Facebook posts that remained online despite complaints from moderate Muslims who say they asked the company to take them down.

4/25/19: Canada Accused Facebook Over Privacy Concerns: The Washington Post reported that Canadian regulators found that Facebook committed “serious” breaches of local laws over its mishandling of users’ personal information, announcing they would take the company to court to force it to change its privacy practices.

4/18/19: Instagram Passwords Available to Facebook Employees: Facebook has said that millions of Instagram passwords were exposed in an internal database that was searchable by employees, according to CNBC.

4/18/19: Facebook Collected User Data Without Their Knowledge: According to CNN, Facebook has collected up to 1.5 million users’ email contacts without their knowledge.

4/16/19: Mark Zuckerberg Leveraged Facebook User Data to Fight Rivals: Leaked internal Facebook documents show that the plans to sell access to user data were discussed for years and received support from Facebook’s most senior executives, including CEO Mark Zuckerberg and COO Sheryl Sandberg.

4/12/19: Inappropriate Messages in VR Controllers: Facebook has said that it accidentally hid bizarre and “inappropriate” messages inside “tens of thousands” of virtual-reality controllers,

including “Big Brother is Watching” and “The Masons Were Here,” reported by the Business Insider.

4/4/19: 26,000 Complaints About Facebook Privacy Violations: The Hill reported that since 2012, the FTC has seen a significant increase in the number of consumer complaints about Facebook. In 2018 alone, 8,391 consumer complaints about Facebook were received.

4/3/19: Facebook Records Exposed on Amazon Cloud Servers: CNN reported that hundreds of millions of data on Facebook users was exposed to the public until recently on Amazon’s cloud computing servers.

4/2/19: Facebook Collects Users’ Email Passwords: According to the Business Insider, Facebook has been asking some new users for their email passwords and appears to be harvesting their contacts without consent.

3/28/19: Facebook Engages in Housing Discrimination: The New York Times reported that the Department of Housing and Urban Development sued Facebook for engaging in housing discrimination by allowing advertisers to restrict who is able to see ads on the platform based on characteristics like race, religion and national origin. The HUD also claims that the company uses its data-mining practices to determine which of its users are able to view housing-related ads. On both counts, the agency said, Facebook is in violation of the federal Fair Housing Act.

3/26/19: Australians Caught Up in September’s Facebook Cyber-Attack: Internal documents reveal the attack on Facebook in September last year affected an estimated 111,813 Australians, among roughly 29 million worldwide, as reported by The Guardian. Hackers were able to access users’ movements, hometown, search history, email, and phone number.

3/22/19: Security Lapse the Latest Privacy Issue for Facebook: The Wall Street Journal reported the disclosure of Facebook storing hundreds of millions of user passwords in a format that was accessible to its employees for years.

3/22/19: Facebook Knew About Cambridge Analytica Scandal Earlier Than Admitted: The Daily Beast reported that according to a court filing, private emails could contradict Mark Zuckerberg’s sworn testimony about when Facebook learned about the Cambridge Analytica data breach. Facebook and the Washington, D.C. attorney general are in court to argue whether those emails can be viewed by the public.

3/21/19: Facebook Acknowledged Failure to Detect New Zealand Shooting Video: The Associated Press reported that Guy Rosen, Facebook's vice president of integrity, said: "this particular video did not trigger our automatic detection systems."

3/15/19: U.K Report on Facebook: A 150-page report commissioned by the British government depicts big digital companies in search, social media, advertising and e-commerce as threats to competition, innovation, and personal privacy. The report found that existing rules regulating these tech giants are outdated and need to be strengthened.

3/7/19: Yet Another Messenger Bug: CNET reported that the bug allowed potential attackers to view who users have had conversations with.

2/25/19: Content Moderator Workplace Conditions Revealed: The Verge reported on the trauma-inducing workdays Facebook content moderators face. Former content moderators interviewed for the article reported severe PTSD, depression, and paranoia as a result of their time at Facebook.

2/22/19: Facebook Collecting Data from Other Apps: The Wall Street Journal reported that Facebook has been collecting data like users' weight, blood pressure, and menstrual cycles from apps not associated with the tech conglomerate.

2/21/19: Ad Targeting White Supremacists: The Los Angeles Times reported that known white supremacist phrases were able to be used to target hundreds of thousands of users with ads on Facebook.

2/18/19: "Digital Gangsters": The UK parliament released a 108-page report lambasting Facebook's business practices and calling for regulation.

1/30/19: Facebook "Research App": In January 2019, news broke of Facebook paying users, including teens, to monitor nearly everything they did on their phones.

12/18/18: The New York Times Reveals Facebook Shared User Data with Other Companies: The article revealed Facebook was sharing user data with Netflix, Spotify, and Microsoft without users consent.

12/14/18: A Bug Reveals Millions of Users' Private Photos: The bug allowed third-party apps to access as many as 6.8 million users' private photos that had not been authorized to share.

12/5/18: *The UK Parliament Released a Cache of Internal Facebook Documents:* The documents revealed Facebook once considered selling user data and targeted apps like Vine.

11/29/18: *Sandberg Ordered Definers Research:* Despite public claims to the contrary, Sheryl Sandberg was revealed to have known and ordered Definers research on George Soros, a perceived enemy of Facebook.

11/14/18: *Bombshell New York Times Report Many Facebook Scandals:* The New York Times report exposed many Facebook scandals including the hiring of Definers Public Affairs and a smear campaign against George Soros and Freedom From Facebook.

9/28/18: *More Hackers:* Hackers exploited the platform's "view as" feature to gain access to the accounts of 50 million users. And if that wasn't bad enough, the hackers also gained access to users' Tinder, Spotify, and Instagram accounts, among others.

9/25/18: *Instagram's Drug Problem:* A Washington Post report revealed Instagram's algorithm is exacerbating illegal drug sales, and Business Insider claims IGTV recommended videos of child abuse to children.

9/25/18: *Instagram Co-Founders Reign:* Instagram co-founders resigned due to lack of autonomy from Facebook. Their departure was preceded by the departure of WhatsApp founder Brian Acton.

9/25/18: *Facebook and PTSD:* Selena Scola, a former content moderator for Facebook, is suing the conglomerate under claims that her employment there led to Post Traumatic Stress Disorder. Scola says she was subject to "constant and unmitigated exposure to highly toxic and extremely disturbing images at the workplace," after Facebook failed to uphold employee safety standards.

9/18/18: *Facebook's Sexism Problem:* A lawsuit filed by the ACLU and CWA revealed that Facebook was facilitating employer discrimination against women by allowing companies to target job ads exclusively to men. According to the ACLU, "Facebook has 'long known' that employers and employment agencies were using its platform to discriminate on the basis of gender. Instead of eliminating this behavior...Facebook has encouraged it." Facebook also forced a female employee to choose between her infant child and work by denying her requests for unpaid leave and remote work time.

9/5/18: Facebook Testifies Before the Senate, but Provides No Answers: When Sen. Joe Manchin (D-WV) asked if Facebook takes responsibility for individuals who overdosed from opioids bought on their platform, Sandberg responded with silence. Sandberg claimed Facebook cares “tremendously” about civil rights, but Sen. Kamala Harris (D-CA) pointed to training materials instructing moderators to delete hate speech targeting white men while allowing hate speech targeting minority children. And Sandberg’s answer to Sen. Ron Wyden’s (D-OR) question regarding what the platform was doing to curb voter suppression was vague mumbo jumbo regarding AI-powered moderators.

8/2/18: Facebook Becomes a Holocaust Denier Wardrobe Vendor: Facebook is allowing neo-Nazis and white supremacists to profit off its platforms by selling Holocaust denial magazines and white supremacist baby t-shirts.

8/6/18: Facebook Meddles in Finances: Facebook asked several U.S. banks – including JPMorgan Chase, Wells Fargo, and Citigroup – to share detailed financial information about their customers, including card transactions and checking account balances.

8/21/18: Facebook and Russia...again: Russia, and partner-in-crime Iran, used Facebook to unleash a massive misinformation campaign across the globe by opening 652 fake accounts, pages, and groups “that might cause confusion among people,” and “alter people’s thinking to become more partisan or pro-government on various issues.”

7/31/18: Facebook Finds Election Meddling on its Platform, Removing More Than 30 Fake Accounts: Facebook identified a massive political influence campaign with the goal of disrupting the 2018 midterm elections — after it had been going on for a year.

7/25/18: Threats Against Former FBI Director Don’t Violate Facebook Rules Because They Were Not Credible Statements of Intent to Commit Violence: After Infowars Founder Alex Jones accused Mueller of covering up sex crimes and pantomimed shooting the former FBI director, Facebook claimed these actions are not in violation of the platform’s rules.

7/24/18: Anti-Vaccine Groups Allowed at the Top of Facebook Search Results: Facebook allowed anti-vaccine groups to rise to the top of search results on the platform and facilitated the spread of hoaxes claiming vaccines cause autism and other diseases.

7/24/18: Facebook Censors Nude Artwork, Drawing Backlash from Museums: A group of Flemish museums recently wrote to Mark Zuckerberg to discuss the censoring of Peter Paul

Rubens' famous nude paintings.

7/20/18: Facebook Unaware of Analytics Firm's Contracts with U.S. Government and a Non-Profit with Ties to the Kremlin, Violating Platform Policies: Facebook suspended data-analytics firm Crimson Hexagon and said it was investigating whether its contracts with a Russian nonprofit tied to the Kremlin violates Facebook policies.

7/19/18: Facebook Shuts Down Private Group for Sexual Assault Survivors Following Harassment: Instead of dealing with the hackers, Facebook shut down a sexual assault support group, which was a constant target of online harassment and hacking. This raised questions about Facebook's ability to monitor private spaces.

7/18/18: Zuckerberg Refuses to Take Down Pages Promoting Holocaust Denial: In a Recode podcast, Zuckerberg defended the intentions of Holocaust deniers and said that their content would remain on the platform. Zuckerberg's "clarifying" statement also said Holocaust denial content would remain on Facebook.

7/18/18: Investigation Finds Facebook Ignoring Racist and Violent Content: An undercover investigation revealed that Facebook moderators turn a blind eye to racist and violent memes.

7/17/18: Cambridge Analytica Data Accessed in Russia: The British investigation into the Facebook Cambridge Analytica breach revealed that the data had been accessed from Russia.

7/9/18: Facebook Data Hack Through Timehop App: 21 million users were affected by a recent data hack at Timehop, leaving them vulnerable to unconsented access to their social media posts on Facebook and Twitter, along with access to their phone numbers and email addresses.

7/5/18: Declaration of Independence Blocked as Hate Speech: Facebook flagged and removed content from a Texas newspaper *The Liberty County Vindicator* and was forced to apologize after realizing it was directly quoting the Declaration of Independence.

6/28/18: Manipulating Users' Privacy Settings: Facebook deliberately designed settings' options to use dark patterns to "nudge" users into sharing more information than they might have wanted to.

6/28/18: Millions of Facebook Users Data Exposed Through Third-Part App: A third-party app called NameTests left the data of 120 million Facebook users exposed to anyone who asked for the stored data.

6/7/18: Facebook Bug Makes Millions of Users Private Posts Public: A Facebook glitch changed 14 million users' posts from private to public.

6/5/17: Special Data Access to Chinese Firms: Facebook gave Chinese firms, flagged by the U.S. government as potential national security threats (including ZTE) special access to private user data in deals dating back to 2010.

5/14/18: Data Breach: 3 million Facebook users had their personal information, including their answers to "intimate questionnaires," exposed.

5/5/18: Violence in Myanmar: Six nonprofits in Myanmar wrote an open letter to Facebook in May 2018 to condemn the lack of action to stop violence, hate speech, and genocide despite years of warnings.

4/4/18: Facebook Scans Seemingly Private Photos & Links Sent Over Messenger App: Facebook was forced to admit, after a Zuckerberg interview, that it scans the links and images that people send each other on Facebook Messenger.

4/3/18: Facebook Retained Deleted & Unposted Content Without Users Knowledge: Facebook kept videos and pictures users thought they had deleted and even drafts of posts they never put up.

3/29/18: Growth at Any Cost: BuzzFeed obtained internal Facebook documents showing the company's obsession with unchecked growth and profits despite known dangers and risks.

3/17/18: Cambridge Analytica Scandal Grows: A New York Times exposé revealed that the Facebook Cambridge Analytica data breach was much larger than previously known.

11/11/17: Election Interference: Mark Zuckerberg downplayed and denied the role of Russian propaganda on Facebook saying, "[it's] a pretty crazy idea" that their dissemination of fake news impacted the 2016 election.

10/30/17: Russian Fake News: 2017 estimates revealed that Russian-backed organizations spread fake news that reached over 126 million Facebook users.

9/14/17: Antisemitic Ad Targeting: Facebook allowed users to take advantage of anti-Semitic content to target “Jew haters” with ads.

5/18/17: Misleading WhatsApp Filing: European Commission slapped Facebook with a \$122 million dollar fine for misleading WhatsApp users and European regulators.

3/7/17: Child Abuse: A BBC investigation revealed that Facebook failed to remove 80% of reported child abuse images, including child porn.

Google:

2/4/25: Google abandons pledge not to use AI for weapons, surveillance: Google updated its ethical guidelines surrounding AI, removing its longstanding commitment—in place since 2018—not to apply AI capabilities to weapons or surveillance.

2/4/25: Google edits AI hallucination out of Super Bowl ad: Google edited its Gemini AI Super Bowl commercial after viewers pointed out that the original version showed Gemini hallucinating when prompted by a cheese shop owner to write a website description for smoked Gouda cheese. Gemini’s original description stated that Gouda accounts for 50 to 60 percent of the world’s cheese consumption. Though Google Cloud apps president Jerry Dischler initially defended the response as “grounded in the Web” and “not a hallucination,” Google edited the commercial to remove the statistic.

1/30/25: Study finds Google owes UK news industry £2.2bn from 2023 alone: A large-scale survey of browsing habits, which asked users how much they would pay per month for Google with news content versus without—and also revealed that many users take advantage of Google’s features that surface news content without requiring users to click-through to monetizable articles—calculated that the platform owes the news industry billions in value in 2023 alone.

1/24/25: Google sues to avoid bargaining with YouTube contract workers: Google is challenging a National Labor Relations Board decision that it must negotiate with a union representing YouTube contract workers, after illegally refusing to bargain with them in order to challenge a pro-worker standard for joint employment.

1/9/25: Google lines up to kiss Trump's ring amidst antitrust cases: Google donated \$1 million to president-elect Trump's inauguration fund, joining Meta, Amazon, and Apple in attempting to curry favor with Trump amidst active government antitrust cases. In a statement, Google also made a point of mentioning their "support" for the inauguration via "a livestream on YouTube and a direct link on our homepage."

12/10/24: Google-backed chatbot told minors to self-harm, kill parents: A lawsuit against Google and childrens' AI chatbot company Character.AI, filed by parents of Character.AI users, revealed (with screenshots) that the company's chatbots encouraged their children to self-harm, and to kill the parents for minor grievances like getting less screen time. Google hired the founding team behind Character.AI, and signed a deal to license its technology, over the summer.

12/3/24: New report shows extent of Google's evidence destruction: A new deep dive published by lawyer-economist Benjamin Edelman provides a comprehensive accounting of Google's discovery violations, tracing back to the 2008 "Walker Memo" from top Google lawyer Kent Walker.

11/28/24: Canada Competition Bureau accuses Google of anti-competitive conduct: Canada's competition Bureau announced a new suit against Google, following an investigation that allegedly found Google had illegally tied its products, self-preferenced, took negative margins to undercut competition, and dictated the terms on which publishers could use competing adtech tools.

11/28/24: Google tried to bribe trade organization to continue suing Microsoft: The Register reported that a Google Cloud executive tried to pay a European cloud computing trade association millions of Euros to carry through a legal complaint the company had filed against Microsoft.

11/20/24: Google allegedly refused to comply with Digital Markets Act: DuckDuckGo called on the European Commission to investigate Google's alleged non-compliance with the DMA, which mandates Google share anonymous search data to help smaller competitors build their own search indices. But Google's proposal "likely excludes 99% of queries," according to the company's projections.

10/1/24: Google allegedly undermined non-Google voice assistants: Sensory Inc, a voice recognition technology company, alleged in a lawsuit that Google constructed artificial barriers that crippled the functionality of non-Google voice assistants on phones, computers, and cars.

9/30/24: Google allegedly blocks alternative app stores with “Auto Blocker” setting: After winning its antitrust suit against Google’s suppression of direct-from-developer app downloads on the Android operating system, Epic Games alleged in a new lawsuit that Google developed a new strategy to protect its app store monopoly: an “Auto Blocker” setting that imposes onerous extra steps on users who attempt to download apps from developer websites.

9/13/24: Adtech trial reveals brazen acknowledgement of monopoly power: Internal emails shown in the US v. Google adtech trial revealed a Google executive admitting in 2018 that “the AdX sell-side fee of 20% holds today not because there is 20% of value in comparing 2 bids to one another, but because it comes with unique demand via AdWords that is not available any other way.”

9/6/24: Google bought startup it saw as “threat,” adtech trial reveals: Evidence presented by the Department of Justice in its adtech monopolization case showed that Google in 2011 bought an adtech provider its executives internally recognized as a “threat” and a “gap in our portfolio.”

8/28/24: Yelp Sues Google for Anticompetitive Tactics: Yelp filed an antitrust suit against Google for leveraging its general search monopoly to dominate the “local search” market, self-preferencing its own local search offerings and “exempting itself from the qualitative ranking system it uses for other sites.”

8/27/24: Judge admonishes Google for “foolish” chat deletion: US District Judge Leonie Brinkenma, the Judge hearing the Justice Department’s adtech monopolization case against Google, called the company’s policy of deleting litigation-relevant internal chats “foolish” at a hearing on the misconduct, and kept the door open to assuming the deleted internal chats would support the DOJ’s case.

8/21/24: Google kills CA journalism bill with backroom deal opposed by journalists: Google undermined a California bill to force tech platforms to share revenues with news publishers with a last-minute deal with lawmakers that will see the tech giant pay \$180 million over five years into a fund that will partly be used to support journalism in the state—and partly to fund

AI initiatives that may threaten to further cannibalize the news industry. Media Guild of the West President Matt Pearce called the deal a “shakedown” of the legislature and “a ratification of Google’s monopoly power over our newsrooms.” In October, the University of California, Berkeley, which was set to host a significant portion of the fund under the terms of the deal, withdrew from the agreement, citing the fact that decisions about how to allocate the money would be made by an unaccountable seven-member board. “Our campus can’t serve as a passthrough,” said the dean of Berkeley’s journalism school.

8/20/24: Google displays imposter customer service numbers: A Washington Post report detailed how Google highlights fake customer service numbers for businesses, enabling scammers to steal damaging sums from unwitting customers. A man who called a fake customer support number for Coinbase, a crypto platform, lost \$100,000. Google could not explain why it is unable to prevent the scams from recurring.

8/18/24: Google took three months to remove scam crypto app, costing victims \$5 million: A Florida woman sued Google for failing to remove from the Play Store an app that impersonated a crypto company until users request to withdraw funds. The woman claimed that the app then attempted to extract a ransom, and “unidentified cyber-criminals threaten[ed] to kill her if she did not make a deposit.” The woman alerted the Consumer Financial Protection Bureau, which forwarded her complaint to Google the same day. Google, however, did not remove the app until three months later, by which time it had been installed by over 12,000 other users—at least five of whom had similar experiences, according to the suit.

8/15/24: Google Uses Search Dominance to Force Publishers into Extractive AI Features: Google’s AI features use publisher content without allowing publishers to monetize it in the form of users clicking through to their sites. But Google’s monopoly power gives them no choice but to participate: as publishers explained to Bloomberg, the tool that scrapes webpages to generate AI overviews is the same tool that allows pages to surface as search results on the platform that controls 90% of the search market.

8/8/24: Google violated its own child safety policy to help Facebook advertise to minors: In 2023, an ad agency working for Meta approached Google about an Instagram campaign targeting 13 to 17 year-olds as the “primary” demographic. Despite Google’s stated policy against ad targeting to minors, its staff reportedly proposed a euphemistic workaround to obfuscate the high likelihood that the campaign was targeting minors.

8/1/24: Google Ads glitch exposes advertisers' sensitive data to competitors: A Google Ads reporting glitch made sensitive advertiser data on products visible to competitors.

7/14/24: Google chased largest-ever acquisition amid legal reckoning (again): Just three months after exploring buying HubSpot amid an avalanche of private antitrust suits and DOJ monopolization cases, Google again attempted an acquisition that would have been its largest ever. Google's reported \$23 billion bid for cybersecurity unicorn Wiz would have been nearly twice as much as the serially-acquisitive company paid for Motorola in 2012, its most expensive deal to date. Wiz ultimately decided to go public instead, in part due to antitrust scrutiny.

7/8/24: Google submits bogus legal filing to derail trial: With trial finally set to start in a three-year-old Ohio lawsuit seeking to designate Google as a common carrier, Google filed a submission invoking the Supreme Court's *NetChoice* decision—which is irrelevant to the question of whether tech platforms are common carriers, and contains only limited, mostly nonbinding discussion of the First Amendment—to throw sand in the case's gears.

7/2/24: Google carbon emissions skyrocket amid AI push: Google's annual environmental impact report revealed the company's emissions grew 13% in 2023—up 48% since 2019—as it pushes into the AI race. Google remains committed to reaching net zero emissions by 2030.

6/7/24: Google buys its way out of jury trial: Google wrote the government a \$2.3 million check to cover damages sought by the Department of Justice in its advertising technology monopolization case, allowing the company to avoid a jury trial and have a judge decide the case's outcome instead. Google is "terrified" of facing a jury again because the last time it did—in a private antitrust case brought by developer Epic Games—the jury unanimously ruled against Google.

6/6/24: Google paid disgraced academic and former FTC Commissioner millions: A major *Wall Street Journal* exposé revealed Google paid millions to Joshua Wright, a George Mason University (GMU) Law Professor, to undermine Obama-era antitrust actions against Google in academic and popular writings that often failed to disclose Google's funding. Wright did work at the direct request of former Google policy manager Adam Kovacevich (now CEO at Big Tech-funded think tank Chamber of Progress), email records showed.

Google's financial support for Wright also included hundreds of thousands of dollars it donated to GMU's Law and Economics Center, which published Wright's research, while Wright served as a commissioner on the Federal Trade Commission. Google did not cut ties with Wright until allegations of sexual misconduct against Wright began to circulate widely online—over a year after the company was informed of a Title IX complaint against Wright.

5/23/24: Judge rejects Google's fear mongering over app store remedies: The judge overseeing the remedies phase of Epic's successful antitrust suit against Google dismissed Google's claims that Epic's requested remedies to inject competition into the Android app store would result in "a terrifying world of chaos": "I just don't buy it ... To jump up and down and say the new way is going to be a world no one wants to live in, it's unfounded."

5/14/24: Google's "AI Overviews" search feature tells users to eat glue, rocks: Google's first major integration of AI into its search engine, "AI Overviews," presented users with untrue, nonsensical, and in some cases dangerous information at the top of the search results page, prompting widespread backlash.

4/12/24: Google removes news in California to threaten state lawmakers: As the California legislature considers a bill that would require large tech platforms to pay a percentage of their ad revenue to support news publishers, Google blocked some California users from accessing news sites. Google previously threatened to block access to news in Canada, and to withdraw its search engine altogether from Australia, to prevent the passage of similar laws in those countries.

4/5/24: Google chased largest-ever acquisition amid antitrust reckoning: Just months after a San Francisco jury unanimously ruled that Google is an illegal monopolist, and amidst two major monopolization cases from the DOJ, Google reportedly explored buying marketing software giant HubSpot. With a market capitalization of \$35 billion at the time, HubSpot would have been Google's largest acquisition ever.

7/14/24: Google chased largest-ever acquisition amid legal reckoning (again): Just months ago a San Francisco jury unanimously ruled that Google is an illegal monopolist. Despite that, and amidst two major monopolization cases from the DOJ, Google attempted its largest acquisition ever—just three months after trying to buy HubSpot, which would also have been its largest acquisition ever. Google's reported \$23 billion bid for cybersecurity unicorn Wiz would have been nearly twice as much as the serially-acquisitive company paid for Motorola

in 2012, its most expensive deal to date. Wiz ultimately decided to go public instead, in part due to antitrust scrutiny.

2/26/24: Judge rebukes laughable Google settlement proposal in class action suit: A Federal judge overseeing a 2021 class action lawsuit against Google's anticompetitive app store practices reprimanded Google's proposed \$700 million settlement as "not ... a bag of nothing, but it's a bag of not great," noting that it would protect Google against claims brought by the class of 127 million consumers for seven years. "This seems remarkably broad for the compensation you are proposing to pay for these claims," he said at a hearing.

2/24: Google disbands AI ethics, privacy teams: In January and February 2024, Google disbanded its Responsible Innovation team and machine learning privacy team, leading to the departure of Google's chief privacy officer. A Google engineer told *Politico* the shakeup resulted in privacy teams rubber-stamping AI projects with little scrutiny.

12/11/23: Unanimous jury verdict officially rules Google an illegal monopolist: In a private antitrust suit, developer Epic Games demonstrated that Google killed competition and locked software developers into its Play Store using anticompetitive deals, allowing Google to extract supracompetitive fees. Google's monopoly maintenance included billions of dollars in de-facto bribes the company paid to major developers to discourage them from creating competing app stores, and revenue sharing agreements with phone makers to prevent them from pre-installing other app stores on their devices. A jury ruled against Google on all eleven counts. Moreover, Google's destruction of evidence rightfully makes any appeal more difficult.

12/1/23: Judge calls Google's destruction of evidence "frontal assault on the fair administration of justice": The rebuke came from Judge James Donato, who is overseeing the Epic v. Google antitrust trial, following revelations that Google systematically suppressed evidence by auto-deleting chats, falsely marked communications as legally privileged, and more. Google CEO Sundar Pichai himself directly requested auto-deletion of chats in at least one circumstance, and Chief Legal Officer Kent Walker did not investigate any form of evidence suppression.

11/13/23: Google pays Apple 36% of Safari search revenue under Apple default deal: The US v. Google search trial revealed that Google's default deal with Apple includes 36% of Safari-derived search revenue, in addition to an eleven-figure lump payment (\$18 billion in 2021).

10/27/23: Google spent \$26 billion in 2021 on default agreements: The US v. Google search trial revealed the company paid a whopping \$26 billion in 2021 alone to be the default search engine on phones and browsers—including \$18 billion to Apple alone—a number Google long fought to keep secret.

10/19/23: New York Times counsel slams Google for obstructing public access to search trial: In a dramatic courtroom scene, a *New York Times* counsel decried the extraordinary opacity of the US v. Google search trial—the result of Google dedicating its limitless legal resources to obstruct every channel of public access. Google demanded frequent closed-door proceedings, excessive redactions and sealing of documents, restricted access to resources such as transcripts and witness lists, and more.

9/29/23: Google admits its monopoly allows it to degrade quality: In a bombshell document presented by the DOJ in the US v. Google search trial, a senior Google executive boasted that the company could “mostly ignore the demand side of the equation (users and queries) and only focus on the supply side of advertisers ... we could essentially tear the economics textbook in half.”

9/19/23: Poll shows Americans believe Google has too much power, want search competition: An Economic Liberties poll revealed 60% of Americans believe Big Tech giants like Google have too much power, and 58% would try an alternative search engine by Apple. The latter figure affirms the notion that Apple and Google could compete in the search space—Apple has taken steps to build its own search engine in the past—rather than collaborating under a default deal that sees Google pay Apple billions every year plus 36% of search revenues derived from Safari.

9/18/23: Google hiked ad prices without notice or fear of consequences: A senior Google executive testified in the US v. Google search trial that the company regularly increased the price charged to advertisers to place search ads by as much as 5% without notice—a textbook demonstration of monopoly power.

9/14/23: Google has a track record of burying evidence: The DOJ opened its case in the US v. Google search trial by alleging that Google counseled employees not to use certain words to avoid regulatory scrutiny. This comes on top of prior DOJ allegations that Google auto-deleted years of chats and copied attorneys on emails unrelated to legal work as a ruse to shield them from discovery through the attorney-client privilege.

9/11/23: Google failed to produce millions of documents subject to discovery in advertising tech case: Google failed to provide millions of documents requested by the Department of Justice in its case against Google's advertising technology monopolization, drawing the condemnation of the judge.

6/29/23: Google blackmails Canadian government for daring to govern it: Google threatened to remove Canadian news links from its platforms after the passage of Bill C-18, which allows news organizations to collectively bargain with digital platforms for compensation. The bill, modeled after successful Australian legislation, seeks to address the imbalance of power between news publishers and the platforms that have siphoned off their advertising revenues through anticompetitive acquisitions and tactics.

6/8/23: Google pays off some news publishers to stave off governance: Google launched a "NewsShowcase" to pay select news publishers in an effort to kill support for the more comprehensive solution to tech platforms' problematic relationship to news media presented by the Journalism Competition and Preservation Act.

6/6/23: Google's water use, "undemocratic" secrecy cause controversy in small town: A Fortune investigation revealed that Google took unheard-of, suspicious steps to maintain secrecy around the water use of its data center in The Dalles, Oregon, including paying the town's legal fees to suppress water use statistics.

1/24/23: DOJ sues Google for advertising technology monopolization: The Department of Justice and eight states filed suit against Google for illegally monopolizing the advertising technology stack—the suite of tools advertisers and publishers use to buy and sell advertisements online — through anticompetitive tactics and acquisitions, estimating that Google now extracts at least 30% of each dollar spent through its tools.

11/30/22: UK publishers sue Google over adtech monopoly abuses: A class action suit filed on behalf of thousands of UK digital publishers alleges that Google uses its control over the suite of technologies necessary to buy and sell online ads to extract supracompetitive rents, and seeks up to \$16 billion in damages.

11/14/22: Google settles 40-state privacy lawsuit for record \$391.5 million: Google agreed to a record settlement over charges brought by 40 state attorneys general that the company told users they had turned off location tracking when in reality it was still tracking them.

5/9/22: Match Group Sues Google for Abusing App Store Monopoly: Match Group, parent company of dating apps including Hinge and Tinder, filed another lawsuit challenging the anticompetitive practices Google uses to stifle competition and impose extortionate fees on developers who wish to access the Android market. Google ultimately yielded to settlement terms allowing Match to implement its own third-party payment systems not subject to Apple's fees.

1/24/22: Google sued by bipartisan group of AGs for deceptive location tracking: The attorneys general of Texas, Indiana, Washington state and Washington DC sued Google for tracking users' location even after users tried to disable such tracking.

11/19/21: Google seeks recusal of AAG Kanter: Google launched a campaign to force the recusal of Assistant Attorney General Jonathan Kanter, a believer in by-the-book antitrust and the head of the DOJ's Antitrust Division, from antitrust investigations into the company. (The effort was ultimately unsuccessful.)

7/7/21: 36 States Sue Google for Monopolistic Abuse Over Apps on Google Play Store: 36 states filed a lawsuit alleging Google's monopolistic abuse as a gatekeeper for app developers on the Google Play Store. Developers have accused Google of taking an unfair cut of purchases that occur on developers' apps.

6/22/21: The European Commission Launches an Investigation into Google's New Privacy Sandbox, Assessing Potential Anticompetitive Conduct: Google's plans to ban third-party advertising sparked the European Commission's probe. With the ability to self-preference and tie products and services, EC Commissioner Margrethe Vestager said the European government is "concerned that Google has made it harder for rival online advertising services to compete in the so-called ad tech stack."

1/11/21: YouTube Competitor, Rumble, Sues Google for Search Ranking: Rumble alleges that Google is unfairly rigging its search rankings to move Rumble viewers to its own video-streaming site, YouTube.

10/20/20: Supposed Bug Allows Google to Collect User Data Despite Using "Clear Cookies" Settings: Business Insider reports on a recently found technical bug, revealing that Google Chrome's "auto-delete cookies" feature doesn't count for data attached to Google.com or Youtube.com (owned by Google).

8/14/20: *Travel Companies Abroad Draw Attention to Google's Unfair Data Extraction:*

Numerous travel startups complain about Google's search dominance and practice of securing the right to extract their website and customers' data.

7/16/20: *Google Donates to Anti-BLM Politician:* Judd Legum listed Google among the list of corporations supporting anti-Black Lives Matter Georgia Sen. Kelly Loeffler. Legum said that Google's political action committee gave Loeffler \$5000 on December 30, 2019.

7/14/20: *Google Search Favors YouTube Over Other Video Sites:* The Wall Street Journal found that Google predominantly favors YouTube videos in Google Search results over other video sources like Facebook.

7/9/20: *Google Security "Singles Out" Black, Latinx Workers:* Google employees report that Black and Latinx Google employees had their badges checked more frequently by security staff, contributing to a feeling of being policed while at work.

7/8/20: *Study: Google To Help COVID-19 Misinformation Websites Make Millions in 2020:* A study estimates that Google will steer roughly \$19 million to COVID-19 misinformation sites in 2020, according to the Global Disinformation Index. Google will do this by placing advertisements alongside conspiratorial or other misleading articles.

6/18/20: *YouTube Creators Allege Site Engages in Racist Discrimination:* Four black women filed a class-action lawsuit against YouTube arguing that YouTube has engaged in racist discrimination against them in taking down their videos from YouTube.

6/16/20: *Google Helps Website Scam Americans Out of COVID Stimulus Payments:* A Tech Transparency Project investigation found that Google served ads to scam people out of their \$1,200 stimulus check when people asked Google stimulus check-related questions.

6/11/20: *Google, Other Dominant Companies, Feed Local Papers Op-eds:* The Washington Post reported that a recent Arizona Capitol Times op-ed submitted by a local small business owner was actually written by the Connected Commerce Council, which lists Amazon, Facebook, and Google as "partners." Corporations like Google, Amazon, or Facebook, "aren't required to disclose how much they spend on these organizations and exactly how involved they are in their day-to-day decisions, but ethics watchdogs say their participation alone is important."

6/2/2020: *Lawsuit Accuses Google of Tracking Users in Private Mode:* A class-action lawsuit argued that Google broke the Federal Wiretap Act when the technology giant collected information on user activity even when they were browsing in private, “Incognito” mode.

6/1/20: *Google Profits Off of Coronavirus Conspiracy Theories:* Bloomberg reported that Google helped place advertisements on sites that spread coronavirus conspiracy theories, profiting off of misinformation.

5/26/20: *YouTube Censors Chinese-Language Criticism of CCP:* The Verge reported that YouTube automatically deleted for at least six months comments with certain Chinese-language phrases associated with criticism of the Community Party of China.

5/18/20: *Google Reportedly Cuts Back on Diversity to Appease Conservatives:* An NBC News investigation quoted eight former or current Google employees claiming that Google had rolled back or cut diversity and including training programs to protect the company from criticism from conservatives.

5/3/20: *Coronavirus Misinformation Proliferates on YouTube:* Media Matters wrote that “YouTube remains a cesspool of COVID-19 misinformation,” pointing to three viral videos spreading false coronavirus-related information, some of which YouTube had not taken down by the time of Media Matters’ post.

4/2/20: *Illinois Kids Sue Google for Collecting Their Data at School:* Two Illinois children sued Google for collecting their biometric data as part of the children’s school’s use of the “G Suite for Education,” in violation of state consumer protection and federal child protection laws.

3/24/20: *Predatory Unemployment Sites Among Top Google Results:* Gizmodo reported that, as people increasingly turn to Google for help in finding new employment, they may encounter “scammy unemployment ads” in Google’s search results. These sites often try to collect users’ data and con them into paying to see their credit score (which they can see for free), and then selling their information to advertisers.

3/2/20: *Study: YouTube Hides Some Conspiracy Theory Videos, But Not Others:* New study from UC, Berkeley researchers examined 8 million YouTube video recommendations over a 15-month period and finds that YouTube can get rid of some conspiracy theories, such as flat earth theories, but not others, like climate change deniers. The researchers argue that YouTube thus has the power to choose which mis- and disinformation billions of people say.

2/27/20: *Google Drags Feet in Complying with Public Investigation:* The Justice Department sent a letter to Google criticizing the company for “unacceptable” delays in complying with legal orders to produce documents and other information for the enforcement agency’s antitrust investigation.

2/26/20: *Google Relegates Political Emails to “Promotions,” Lets Non-Profits Buy Their Way Out:* An investigation from The Markup found that Google’s Gmail filters political emails into the Promotions tab, not the main inbox. The researchers noted that emails from Democratic primary campaigns went into the more prominent main inbox while others went into the Promotions or even Spam tabs. And they quoted a Gmail official suggesting that a nonprofit advocacy group purchase ads to reach more people.

2/20/20: *New Mexico AG Accuses Google of Tracking Students:* New Mexico Attorney General Hector Balderas sued Google for improperly tracking students without their parents’ permission through Chromebooks given to them through their schools.

2/4/20: *Google Accidentally Sends Users’ Videos to Strangers:* Google reported that a “technical issue” may have accidentally uploaded some users’ videos to the accounts of strangers.

1/29/20: *Swiss Researchers Add Study Finding YouTube Radicalizes Viewers:* A study from a Swiss team of researchers found that YouTube appeared to radicalize viewers by steering them to videos propounding increasingly extreme far-right ideologies.

1/10/20: *Lead Alphabet Attorney, Accused of Breaking Internal Company Rules on Relationships with Employees, Retires:* Alphabet quietly announced in a filing that chief legal officer David Drummond is retiring, weeks after a former employee posted about her relationship with Drummond. Jennifer Blakely’s post said that Drummond broke internal company rules and neglected their son. Within days of the post, Drummond had married a different woman, a current Alphabet employee.

12/20/19: *Google Works With Koch-Backed Groups to Ward Off Regulation:* The Google Transparency Project found that since 2010 Google has funded at least 32 nonprofit and university groups that Koch Networks has also given money to.

12/19/19: *Fired Google Worker Speaks Out in Elle:* Fired Google employee Claire Stapleton’s essay in Elle describes the retaliation she experienced from Google management after helping to organize employee criticisms of the company.

12/17/19: *Google Fired Worker for Organizing-related Activity:* Google fired engineer who wrote program informing fellow workers of their right to organize. The engineer filed a complaint with the National Labor Relations Board for an unfair labor practice.

12/16/19: *Lawsuit Accuses Google, Others of Complicity in Child Labor Deaths:* A lawsuit filed by Congolese families alleges that Google, along with Apple, Dell, Microsoft, and Tesla, are guilty of “aiding and abetting in the death and serious injury of children ... working in cobalt mines in their supply chain,” according to The Guardian. The families accuse Google, Apple, Dell, Microsoft, and Tesla, of “specific knowledge” that the cobalt they needed for their products were performed by forced child labor in dangerous conditions.

12/16/19: *Google Blackmails Turkey after Antitrust Request:* Google announced that it will shut down services for new Android mobile devices in Turkey after Turkey’s antitrust authority asked Google to open up its contracts to allow users to choose different search engines in their mobile operating systems. Matt Stoller called the move a “private sanctions regime against smaller countries.”

12/9/19: *NLRB Investigating Google for Breaking Labor Law:* The National Labor Relations Board said that it was investigating Google for violating labor law when it fired four employees who were attempting to organize into a union.

12/5/19: *Communications Union Accuses Google of Firing Workers to Crack Down on Organizing:* The Communications Workers of America union filed a federal labor complaint that Google broke labor law when it fired four workers. The union alleged that Google fired the workers “to discourage and chill employees from engaging in protected concerted and union activities.”

11/20/19: *Google Hires Anti-Union Consultant:* Google hired anti-union consulting firm IRI Consultants to help it navigate worker criticisms and potential organizing.

11/15/19: *Google Games Search Results:* Contrary to Google representatives, who claim that Google’s Search algorithms are largely autonomous, a Wall Street Journal investigation found that Google often favored big businesses over small ones, made targeted tweaks to produce certain results, and blacklist certain sites to prevent them from ever appearing in some searches. They also used “thousands of low-paid contractors” to evaluate the algorithm internally, though also pressuring them to evaluate the results favorably.

11/12/19: *Google Fires, Disciplines Employees; Other Workers Cry Foul:* Google fired an employee and put two others on leave for allegedly leaking internal information to the media and violating company policies. Workers argue that Google punishes those who criticize management.

11/11/19: *Secret Google Project to Analyze Confidential Medical Records Revealed:* The Wall Street Journal broke news of Google's "Project Nightingale," which aims to gather the confidential health information of millions of people across 21 states. Google partnered with St. Louis hospital chain Ascension and its network of 2,600 hospitals and other care facilities to analyze and experiment with recommending treatment plans and tracking care. A whistleblower who revealed the otherwise secret plans wrote an op-ed for The Guardian three days later, warning that millions of Americans' health data is "at risk."

10/28/19: *Google Incorrectly Claims Recent DHS Hire Not Involved with Children in Cages:* Google apparently misled employees by claiming that Taylor was "not involved in the family separation policy" undertaken by DHS while Taylor worked there. A Freedom of Information Act request produced documents showing that Taylor did work on immigration enforcement and helped to spin DHS policy of putting children in cages as the "Protecting Children Narrative."

10/24/19: *Google Silences Employee Questions over DHS Hire:* BuzzFeed reported that Google had been removing employee questions from its internal company message board regarding its hiring of Taylor.

10/23/19: *Google Ramps Up Worker Surveillance:* Google employees said that Google management was producing software to monitor workers' computers. The tool would, according to Bloomberg, "automatically report staffers who create a calendar event with more than 10 rooms or 100 participants," ostensibly to look out for attempts to organize workers.

10/23/19: *Google Products Tops Results for Most Common Queries:* A Google product or service is the top result 29 times for the top 100 most common searches, according to a report by Bloomberg.

10/21/19: *Google Hires Former DHS Official Who Helped Put Children in Cages:* BuzzFeed reported that Miles Taylor, a former chief of staff to the Department of Homeland Security Secretary Kirstjen Nielsen, began working at Google in September 2019. High-profile Google

critic and AI scholar Meredith Whittaker said, “Hiring someone who comes from an administration that is gleefully endorsing policies that are separating children at the border and violating human rights is pretty telling.”

10/21/19: *Google Quarrels with Unionizing Workers:* Google tried to shut down a unionization meeting led by Google employees in Zurich. Employees called the attempt “disappointing” and “an irrational fear of anything that could possibly lead to systemic change.”

10/15/19: *Google Maps Endangered Hundreds of Italian Tourists:* The Italian town of Baunei had warned tourists not to use Google Maps after it gave bad directions necessitating 144 rescue missions over the previous two years. The town’s mayor said that he contacted Google to address the issue, with little change.

10/11/19: *Google Backs Climate Change Deniers:* The Guardian reported that Google had supported over a dozen organizations that have advocated against climate change legislation and even sponsored events with climate change deniers. The New York Times earlier reported that Google (and Amazon) have supported groups that deny the seriousness of climate change.

10/9/19: *Google Gives More to Outlets Where It’s Under Investigation:* The Google Transparency Project put out a study noting that Google’s grants to news organizations around the world “tracks regulatory threats” in regions where local officials are more hostile to Google.

10/2/19: *Google Tricks People to Steal Their Faces:* Google collected records of people’s faces to improve Google’s Pixel 4 smartphone. Workers involved in the collection tell The New York Daily News that they were told to mislead participants that video was being taken of them, and that they targeted homeless people in Atlanta as well as college students across the U.S. Since the Daily News story, Google has limited its collection of faces to its offices.

9/9/19: *51 State AGs Announce a Google Antitrust Investigation:* A coalition of 51 state attorneys general announced that they are investigating whether Google has broken the antitrust laws.

9/4/19: *Google Pays Millions to Settle Child Data Collection Charges:* The FTC and New York Attorney General required Google to pay \$170 million to settle charges that it improperly collected data from children without their parents’ consent. FTC Commissioner Rohit Chopra

and Massachusetts Democratic Senator Edward Markey criticized the settlement with Markey saying that FTC “stands for ‘Forgetting Teens and Children.’”

8/27/19: *EU Investigates Google for Self-Preferencing*: The European Union announced that it’s investigating Google for improperly favoring its own job search tool.

8/23/19: *Google Discourage Internal Debate*: Google handed down new rules discouraging political debate and cautioning employees to refrain from criticizing projects unless they have “good information.”

8/15/19: *Google Gives Protestors’ Location Data to Police*: Google reportedly complied with a “reverse search warrant” issued by the Manhattan District Attorney. Seeking to track down “Antifa” members, the Manhattan DA demanded Google turn over location information for all devices used in protests on the Upper East Side of Manhattan. Google complied and Manhattan DA staffers investigated two people “who turned out to be innocent bystanders” according to The Daily Beast.

8/11/19: *YouTube Radicalizes Brazilians*: The New York Times reported that in Brazil, YouTube’s recommendation algorithm “appears to have systematically diverted users to far-right and conspiracy channels in Brazil” and the country’s far-right members attribute much of their rapid ascent to the California company.

8/6/19: *Google Breaks Own Rules, Profits off Gun Sales*: The Washington Post reported that Google (and Amazon) apparently offered or hosted firearms and other gun accessories for sale, in apparent violation of their own policies.

7/11/19: *Google Home Listens to Users Even When Inactive*: A Dutch public radio station found that Google Home speakers were often eavesdropping on users’ private conversations even when they were not activated. Human subcontractors working for Google would listen to the audio from speakers to try to improve the speakers’ analysis.

7/3/19: *Google Flexes Political Power in DC*: Noting that a broad range of organizations and think tanks came out against proposals to regulate Facebook and Google, NBC News pointed out that “[e]very one of those think tanks and advocacy groups is backed by Google, Facebook, or both.” With increasing scrutiny, the report wrote, “the Silicon Valley giants are unleashing some of the Washington power they’ve spent the past few years building up, going from a low-key player into the biggest spender in D.C.”

6/27/19: Google Grabs Medical Data: A class action lawsuit accused Google of improperly accessing hundreds of thousands of people's confidential medical records through a partnership with the University of Chicago Medical Center.

6/21/19: Washington Post: Google Chrome "Surveillance Software:" A Washington Post test led their technology columnist to conclude that Google's "Chrome browser looks a lot like surveillance software." The columnist found that Chrome told Google what sites he visited thousands of times during the week he used it.

6/20/19: Fake Listings Rampant on Google Maps, Hurting Small Businesses: The Wall Street Journal found that fake business listings were rampant on Google Maps, estimating that approximately 11 million businesses were falsely listed "on any given day."

6/16/19: Google Steals Lyrics from Genius: The music website Genius caught Google appropriating Genius' transcribed lyrics to popular songs. Genius changed some apostrophes in lyrics' text to different types of single-quotation marks that spelled out "Red Handed" in Morse Code, confirming that Google had copy and pasted them from Genius.

5/28/19: Google Dominates Web Browsing: Bloomberg found that Google runs not only the dominant web browser Chrome, but also the dominant underlying open source code for most other browsers: Chromium. Google frequently updates Google products, including YouTube and Gmail, that run more slowly on rival browsers and push users to Chrome.

5/28/19: Independent Contractors Outnumber Employees at Google: The New York Times estimated that Google used more temporary and independent contractor workers than employees in March 2019: roughly 121,000 temporary employees and independent contractors and 102,000 full-time employees.

5/21/19: Google Admits Shoddy Password Security: Google revealed that it stores some of its Google Suite customers' passwords in plaintext, not encrypted, since 2005.

5/14/19: Google Announced More Ads for Mobile Users: Google announced that it will show more ads in its various products and applications on mobile phones.

5/13/19: Google Favors Anti-Abortion Group with Free Ads: An investigation from The Guardian found that Google gave \$150,000 worth of free ads to an anti-abortion group seeking to discourage women from getting abortions. Google's attempt to address this deceptive

advertising had a loophole allowing the groups to continue posting their ads to Google Search.

5/10/19: India Investigates Google: India opened an investigation into Google for using its dominance in Android mobile operating systems to exclude competitors.

5/6/19: Google Changes Policy on Tracking, to Its Benefit: Google announced that they would limit tracking cookies in its Chrome browser, which also threatened to increase its advertising dominance since tracking cookies helped advertising competitors gather information on users.

5/1/19: Google Workers Sit-In to Protest Executives' Treatment of & Retaliation Against Women: Google workers across the world organize sit-in protest against women who reported sexual harassment and were reportedly retaliated against by Google management.

4/26/19: Hundreds of Google Workers Discuss Fear of Retaliation: Bloomberg reported that Google employees internally discuss Google management retaliating against employees who criticize the company; Meredith Whittaker and Claire Stapleton alleged Google retaliated against them.

4/17/19: YouTube Recommends Bestiality Videos to Children: Image thumbnails suggesting bestiality are reported alongside YouTube videos intended for children. New York Times writer Charlie Warzel noted that BuzzFeed had reported on the tendency in YouTube's algorithm in April 2018 and January 2019.

4/15/19: Former Mozilla Exec: Google Sabotages Chrome Competitor: Former Mozilla executive accused Google of sabotaging Mozilla's Firefox browser for years with bugs and other features to benefit Google's competing browser, Chrome.

4/13/19: Google Gives Broad Location Data to Police: A New York Times investigation reported that law enforcement was able to issue a warrant to access a Google database, known as "Sensorvault," tracking cell phone users' physical locations and acting as a "digital dragnet" for police.

4/3/19: Google Feeds Money to Hungarian Authoritarian Orbán's "Mouthpiece:": Google's Digital News Innovation Fund gave \$56,000 to the owner of a Hungarian news site Origo.

According to Harvard's Nieman Lab, Origo “is best known for being a mouthpiece of Hungary’s authoritarian government.”

4/2/19: YouTube Execs Ignore Employee Warnings Over Incendiary, Misleading Videos:

Bloomberg reported that YouTube executives ignored warnings from employees that videos spreading incendiary and untrue information were skyrocketing in popularity. Each time, Bloomberg said, “they got the same response: Don’t rock the boat.” Instead, YouTube prioritized “Engagement,” meaning views, clicks, and time spent.

3/15/19: YouTube Slow to Take Down Terrorism Footage: Google and YouTube, as well as Facebook and Twitter, were slow to take down footage of the Christchurch shooting in New Zealand. One expert on counter extremism criticized the companies, saying that they’re “actually not” cooperating “because they’re allowing these videos to reappear all the time.”

2/21/19: Google Claims to End Mandatory Arbitration, Keeps for Contractors: Google announces that it will not require employees to arbitrate disputes. However, the change would not apply to the contractors and temporary workers who make up a majority of Google workers.

2/20/19: Pedophiles Use YouTube to Direct Each Other to Compromising Images of Children: A major Wired investigation found that pedophiles commented on videos of children to tip other pedophiles off as to when children’s private parts could be seen. The investigation noted that many of the videos had advertisements from name-brand companies and that Google thus likely profited off of the views.

2/15/19: Google Tells Towns to Keep Quiet: The Washington Post reported that as Google expands its geographical reach, including by building more data centers, Google has also required imposed nondisclosure agreements on the communities it contracts with, to avoid unfavorable press and delay disclosure.

2/1/19: YouTube Promotes Anti-vaxxer Videos: An investigation from The Guardian found that YouTube (and Facebook) and its recommendation feature often “steer[ed] viewers from fact-based medical information toward anti-vaccine misinformation.” A *BuzzFeed* report later that month found that YouTube still returned vaccine-related search queries with anti-vaccine misinformation.

1/21/19: France Fines Google for Violating Data Law: France fined Google 50 million euros (\$57 million) for violating the European Union's general privacy law for improperly informing users it collects their data across services to present them with targeted ads.

1/2/19: Former Google Exec Says "Things have changed" Since "Don't be Evil" Days: Google's former Head of International Relations penned a Medium post explaining why he left the company, with the subheading: "The company's motto used to be 'Don't be evil.' Things have changed." Ross LaJeunesse criticized, among other initiatives, Google's plans to release a censored Search product to expand into China as well as "Cloud executives ... actively pursuing deals with the Saudi government." LaJeunesse told of workplace toxic to women, queer, and workers of color.

12/20/18: YouTube Promotes Anti-Abortion Videos: Reporting finds that YouTube searches for "abortion" promoted gory, misleading, and other anti-abortion results.

12/20/18: Apps on Google's Store Leads Users to Child Porn: TechCrunch reported that third-party apps on Google's Play Store led users through links to WhatsApps groups that shared child pornography. (By December 27, 2018, Google had reportedly removed the third-party apps from its app store.)

12/17/18: Google Makes Congressional Study Harder: Google got in trouble with the U.S. Senate for making it difficult for a committee to study election interference. Compared to Facebook and Twitter, the researchers said, "Google's data contribution was by far the most limited in context and least comprehensive."

11/26/18: Apps Reaching Billions Defraud Advertisers, Hurt Websites & Publishers: BuzzFeed reported on a study that found that eight apps downloaded over 2 billion times in total from Google Play's Store "have been exploiting user permissions as part of an ad fraud scheme that could have stolen millions of dollars."

11/13/18: Google Gets Millions of Peoples' Confidential Health Info: Alphabet announced that its DeepMind subsidiary would be reorganized under Google's health division. Researchers criticized the move for connecting people's "intimate, identifiable health data to Google," noting that "Google just got its hands on the personal data of 1.6 million [UK] NHS patients."

10/25/18: Google Pays and Protects Executives for Sexual Misconduct: A New York Times investigation finds that Google protected and paid various high-level executives after they

were accused of sexual misconduct; one executive received \$90 million. Just over a week later, more than 17,000 Google workers walked out to protest Google's handling of the matters.

10/23/18: *Apps for Android Phones Target Kids, Defraud Advertisers:* A BuzzFeed News investigation found that over 125 Android apps and sites, some of which targeted children, were part of a “massive, sophisticated digital advertising fraud scheme” that showed ads to bots instead of people.

10/8/18: *Google Accidentally Leaked 500,000 Users' Data, Then Kept Quiet About It:* In Spring 2018, Google learned that it had exposed the personal information of over 500,000 Google Plus users and kept it secret to avoid popular backlash and regulatory consequences.

9/29/18: *Google Pays Billions to be Default on iPhone:* Google reportedly paid Apple \$9 billion to be the default search engine on Apple's mobile Safari browser.

9/12/18: *Google Profits Off of Children's Data:* The New Mexico Attorney General sued Google and other companies for violating children's privacy when they played games onto their phones. Google's AdMob and Google Play's programs allegedly profited off of collecting the children's data.

8/30/18: *Google Works With Mastercard To Track Purchases:* From 2017 to 2018, Google secretly paid millions for credit card transaction information from Mastercard to test its advertising products' efficacy. Google reportedly has said that it had information on “approximately 70 percent” of all U.S. credit and debit cards through other card-issuing partners.

8/13/18: *Google Follows Users Even When They Tell It Not To:* The Associated Press reported that Google software tracks users' location data even if they had opted out of location tracking in their privacy settings.

8/11/18: *Google Misleads Users and Advertisers with Fake Ad Views:* A New York Times investigation found that users could easily purchase fake views to inflate viewing figures on YouTube videos, “misleading consumers and advertisers.”

8/1/18: *To Enter China, Google Plans Censored Search Engine:* Google planned to develop a censored search engine, called “Dragonfly,” to enter into the Chinese online search market and comply with Chinese government rules, according to The Intercept.

7/30/18: Right-Wing Conspiracy Theorist Videos are Found at the Top of Youtube Search Results, Despite Its Promises to Curtail Misinformation: Right-wing conspiracy theorists successfully had their videos accusing famous celebrities of pedophilia ranked atop of various YouTube search results.

7/24/18: Google “Courts” Fossil Fuel Companies: Google created a new subdivision “to court the oil and gas industry,” according to The Wall Street Journal. The subdivision reached an agreement with French oil company Total S.A. in April 2018 to use artificial intelligence to evaluate land for oil and gas drilling. Google also entered into partnerships with other Texas energy companies including Anadarko Petroleum in December 2018. In January 2019, Google paid \$25,000 to sponsor a conference that included a group that, according to Gizmodo, “advocates for more carbon dioxide in the atmosphere.” (Wired)

7/24/18: Google Profits from Fake-Review Websites, While Fake Reviews Violate Google’s Terms of Service: Businesses that place fake reviews have paid Google to appear higher in search results for “fake Google reviews,” The Times reported, despite fake reviews violating Google terms of service and UK law.

7/20/18: Rival Search Engine Accuses Google of Excluding It From Android: Rival search engine DuckDuckGo has also claimed that Google has excluded DuckDuckGo from being added to Chrome for mobile operating system Android and even claimed the URL “duck.com” to redirect users to google.com.

7/16/18: Google and Apple Profit Off of Far-Right Conspiracy Theory App, Allowing it On their App and Play Store for Months: Google and Apple profited off of sales from a conspiracy theory app on their Play Store and App Store that helped amplify the right-wing QAnon conspiracy theory.

7/2/18: Google Reads Your Email, and Allows Hundreds of Outside Developers to Do the Same: A year after it said it would stop reading the emails of Gmail users, Google continued to allow software developers to use millions of Gmail users’ emails to train programs to offer travel or other online comparison services.

6/21/18: Google Successfully Lobbies Against NY State Bill Criminalizing “Revenge Porn”: Victims’ rights attorney Carrie Goldberg told The New York Post, “Big Tech, especially Google, created the revenge porn problem. And now, just as we were about to enable victims

to demand removal of their most intimate material from the internet via this law, Google renews its abuse.”

6/18/18: *Outside Security Firm Finds Bug in Google’s TV and Speaker, Giving Access To Users’ Precise Location Data:* Due to a coding bug, Google’s Home speaker and Chromecast TV stick allowed third-party websites to track users’ locations to a “within a few feet” of their homes. Google only agreed to issue a fix once contacted by a security reporter who made it clear he was intending to write about the issue.

4/12/18: *Google Search Influences Voters, Sways Elections:* Google’s power over information means that it has likely affected voters’ choices and even election results themselves. One research team has documented Google search results affecting votes in national elections in Australia, India, the UK, and the US.

2/12/18: *Google Search Autocomplete Still Makes “Vile Suggestions:”* Despite Google claiming to have addressed in 2016 a tendency for Search’s autocomplete feature to suggest racist, misogynistic, and hateful queries, Wired found in 2018 that Google Search still suggested automatically filling, for example, “white supremacy is” with “good” and “black lives matter is” with “a hate group.”

1/31/18: *Princeton Study Finds That 76% of Websites Have Hidden Google Trackers:* DuckDuckGo CEO called for stricter regulation of Google and Facebook and cites a Princeton study finding that 76% of websites have hidden Google trackers (and 24% have hidden Facebook trackers).

1/12/18: *Racist Auto-Tagging in Google’s Photos App Reveals Serious Issues in Their Facial Recognition Software:* After a software engineer in 2015 noted that Google Photos had classified his black friends as “gorillas,” Google struggled to fix the problem. Three years later, Wired showed that Google simply prevented Google Photos from returning any results for “gorilla,” “chimp,” “chimpanzee,” and “monkey.”

10/30/17: *Google Profits Off of Fake News Sites:* A Campaign for Accountability study of Google’s ad business found that Google made at least \$48 million off of serving ads to right-wing websites, including publishers of “hyper-partisan sites that often post inaccurate information.” Despite Google’s promise to refrain from serving ads on fake news sites, the

study found that Google circumvented that promise by continuing to work with fake news sites and often helped prevent advertisers from seeing where Google placed their ads.

10/9/17: Google Finds Russian-Bought Election Ads on Its Network: An internal Google inquiry found that agents of the Russian government and other Russian internet addresses bought over \$50,000 worth of advertisements in an attempt to sway the 2016 U.S. presidential campaign.

Microsoft:

October 17, 2024. Microsoft Lost Two Weeks of Security Logs. Tech Crunch reported Microsoft lost two weeks of security logs, such as failed user log in attempts, for customers using its cloud products, leaving possible security breaches difficult to detect. The error occurred due to a malfunction in Microsoft's internal monitoring agents.

September 23, 2024. Microsoft's LinkedIn Gave Itself Default Permission to Use Users Profiles to Train its AI. Washington Post reported Microsoft's LinkedIn rolled out a new feature, which defaulted to giving itself permission to use LinkedIn users' profiles to train its AI models.

September 12, 2024. Microsoft Laid Off 650 Xbox Employees After Activision Blizzard Merger. The Verge reported Microsoft laid off 650 employees from its Xbox gaming division, roughly 3% of its global workforce. Xbox chief Phil Spencer's email to staff admitted the layoffs were about "aligning our post-acquisition team structure." Collectively, the \$88 billion company has laid off almost 3,000 employees within a year of finalizing its mega-merger with gaming giant Activision Blizzard.

August 22, 2024. Microsoft Ignored Dangerous AI Features That Recorded and Stored Sensitive Data. Ars Technica reported Microsoft delayed its release of a new AI feature, "Recall," after the product was criticized for recording and storing users' data, including sensitive data such as passwords and financial information, without consent or encryption. Microsoft's latest roll out did not specify its plans to address storing personal information.

August 20, 2024. Residents Claimed Microsoft Dumped Industrial Waste and Illegally Occupied Land. Rest of the World reported fifty-six residents filed a petition against

Microsoft, claiming Microsoft was illegally occupying land and dumping industrial waste into a lake after building a data center in the Indian state, Telangana.

August 19, 2024. MacOS Users Permissions Left Vulnerable to Theft Through Microsoft Apps. Infosecurity Magazine reported Microsoft exposed macOS users who downloaded Microsoft products to unnecessary risks by disabling validations that allowed potential hackers to access users' permissions, such as taking pictures, and privileges, such as sending emails.

August 6, 2024. Microsoft Added a Feature that Aided One of the Most Common Hacking Methods. The Register reported Microsoft neglected to implement a basic safety feature, showing the email address of the sender to recipients before opening. Without the feature users are forced to open emails, leaving them vulnerable to one of the most common phishing attack methods.

July 26, 2024. Microsoft Billionaire Reid Hoffman Told Kamala Harris to Replace FTC Chair Lina Khan After Multi-Million Dollar Donation. CNN reported billionaire co-founder of LinkedIn and Microsoft board member, Reid Hoffman, encouraged Democratic Party presidential nominee Kamala Harris to replace Federal Trade Commission Chair Lina Khan, after Hoffman donated at least \$7 million to PACs that benefited the Harris campaign — and just as Hoffman was coordinating a fundraising tour for Harris in Silicon Valley.

July 26, 2024. Microsoft Paid Back \$6 Million for Overcharging Advertisers. Reuters reported Microsoft's platform, LinkedIn, agreed to pay \$6 million for overcharging sales on more than 418,000 advertisements, after claiming to have fixed a software bug that wrongfully included advertising viewership in its metric.

July 24, 2024. Microsoft's Monopolistic Ubiquity Turned CrowdStrike's Security Failure into Worldwide Software Outages That Took Down Everything from Banks to Airlines. ZD Net reported the "Largest IT Outage in History"— which grounded planes, disconnected banking systems, and disrupted healthcare networks — was caused by software provider CrowdStrike's failure to test a critical update in conjunction with Microsoft's practice of giving third parties unrestricted access to vulnerable computer kernels. Rather than take any responsibility, Microsoft lied and blamed EU regulators for its mistakes. In a diversified market, this security failure would have been an isolated problem affecting a limited number of customers. Instead, Microsoft's monopoly grip on the market made the security failure a

worldwide debacle, confirming decades of warnings by cybersecurity experts about the dangers of a “monoculture in computer operating systems.”

July 17, 2024. Microsoft Offered Nvidia Chips to Chinese Companies, Skirting Administrative Efforts. Reuters reported Microsoft offered Chinese companies access to Nvidia’s chips, a critical component for AI performance, by offering rental service to its data centers. The Biden administration sought to prevent Chinese firms from using U.S. technology for A.I.

July 3, 2024. Microsoft Paid \$14 Million to Employees Who Were Discriminated Against for Taking Leave. Associated Press reported Microsoft agreed to pay former employees \$14.4 million after they alleged the company retaliated against employees for taking protected leave, including parental and disability leave.

June 28, 2024. EU Accused Microsoft of Illegally Bundling Teams App with Microsoft Office. Reuters reported that the European Commission, the EU’s antitrust regulators, accused Microsoft of illegally linking its chat and video app, Teams, with Microsoft Office. Regulators claim it gave Teams an unfair advantage over rivals, such as messaging apps like Slack and video platforms like Zoom.

June 28, 2024. Reporters Sued OpenAI and Microsoft for Copyright Infringement. Mother Jones reported the Center for Investigative Reporting sued Microsoft and OpenAI for using copyrighted content for AI models without obtaining permission from the journalists nor compensating them.

July 19, 2024. Microsoft Raised Prices and Degraded Products After Activision-Blizzard Merger. Inc reported Microsoft raised prices on its all-inclusive gaming subscriptions and discontinued a lower tiered subscription with a higher priced and degraded quality tier shortly after Microsoft merged with Activision-Blizzard for \$68 billion, the largest gaming acquisition in history and Microsoft’s largest acquisition.

June 11, 2024. Microsoft Subcontractors Laid Off After Unionizing Attempts. 404 Media reported 160 subcontracted quality assurance game testers for Microsoft were laid off after trying to unionize with the Communications Workers of America (CWA)– even though Microsoft entered into a labor neutrality agreement with CWA as part of its \$68 billion acquisition with gaming giant Activision Blizzard.

June 10, 2024. Microsoft Settled with Cloud Company for Depriving Customers of Choice and Harming Rivals. The Verge reported Microsoft agreed to settle with Cloud Infrastructure Services Providers in Europe (CISPE) after CISPE accused Microsoft of harming the European cloud market and locking consumers into Microsoft's cloud service, Azure. Under the agreement, Microsoft will pay CISPE an undisclosed amount and allow competitors to fairly access consumers and operate on Windows.

June 5, 2024. Microsoft Fled from OpenAI Board Seat After Antitrust Regulators Scrutinized Partnership. New York Times reported Microsoft invested \$13 billion in OpenAI, maker of ChatGPT, and held an observer role on the board. But shortly after the FTC opened a 6(b) inquiry into Microsoft's partnership with OpenAI, to understand whether its partnership excludes rivals and blocks the development of AI, Microsoft left its board position to avoid antitrust scrutiny.

June 4, 2024. Microsoft Laid Off 1,000 Employees After CEO Boasts "Record Third Quarter." The Register reported Microsoft planned to lay off 1,000 employees after Microsoft CEO Satya Nadella highlighted a "record third quarter" during an earnings call.

June 4, 2024. FTC Launched Antitrust Probed After Hacking Incident. NextGov FCW reported the FTC investigated Microsoft for illegally bundling and licensing its software after Chinese and Russian hackers attacked U.S. government workers. The bundling of products tethers users to Microsoft products, prevents entrants with better products from competing, and leaves users vulnerable to increased harm because Microsoft created a single point of failure. **May 29, 2024.**

Senators Warn DoD Against Contracting with Microsoft. Senators Schmitt (R-MO) and Wyden (D-OR) warned the Department of Defense not to pursue contracts with Microsoft's 365 as a continuous history of "preventable" hacks and Microsoft's "cascade of failures" foreshadow future security breaches.

April 30, 2024. Newspapers Sued Microsoft and AI Partner for Stealing Articles. NPR reported eight newspapers, including the New York Daily and the Chicago Tribune, sued Microsoft and OpenAI, where Microsoft was a board member, for illegally using copyrighted articles for its AI chatbots. The plaintiffs allege Microsoft never asked permission or paid for the millions of articles its chatbot uses to answer questions.

April 23, 2024. Microsoft Raised Dynamic 365 Prices to Increase Their Average Revenue Per User. Upper Edge reported Microsoft is raising prices on its Dynamic 365, Microsoft's application package that provides businesses assistance with platforms for sales and customer services, by up to 17%. The hikes will increase its Average Revenue Per User, despite executives citing unnecessary features to justify the increase.

January 25, 2024. Microsoft Cut 9% of Gaming Team After Mega-Merger. The Verge reported that Microsoft laid off 1,900 employees from its newly acquired gaming company, Activision Blizzard. Microsoft's Gaming CEO Phil Spencer confirmed the layoffs were a result of "overlap" from the merger. Previously, Microsoft stated that Activision Blizzard would be operated independently.

January 8, 2024. Authors Sued Microsoft and AI Partner for Copyright Infringement. Reuters reported two nonfiction authors filed a lawsuit against OpenAI and Microsoft, which was a board member on OpenAI, for infringing on the authors' copyrights by scraping writing and using it to train their AI models.

December 27, 2023. NYTimes Sued Microsoft and AI Partner for Copyright Infringement. New York Times sued Microsoft and OpenAI, home of ChatGPT and where Microsoft then-had a board position, for the companies' unauthorized use of NYTimes products to train its AI models.

December 16, 2023. Activision Blizzard Paid \$54 Million to Settle Discrimination Cases. Associated Press reported Activision Blizzard paid \$54 million to settle claims brought by California's civil rights agency on behalf of women employed at the company for gender based discrimination, including denying them work place opportunities, requiring women do substantially more work, and hosting constant sexual harassment. The allegations, which brought down stock prices, ushered in Microsoft's \$69 billion bid for the company in 2022.

November 20, 2023. After OpenAI Board Called Out Founder, Sam Altman, for Disregarding Safety Concerns, Microsoft Won Back Altman's Job. New York Times reported after OpenAI board members removed its founder, Sam Altman, from his board position after he disregarded safety concerns in developing AI, Microsoft offered to hire Altman to run a research lab on AI. Microsoft led successful efforts to reinstate Altman and, shortly after, the company took up an observer role on the board.

November 3, 2023. Russian Hackers Landed Largest U.S. Cyber Attack After Microsoft Ignored a Security Flaw. ProPublica reported Microsoft ignored employee requests dating back to 2016 to repair a security flaw. From Fall 2019 until December 2020, Russian hackers extracted sensitive data from, among others, the National Nuclear Security Administration and National Institutes of Health, in one of the largest cyber-attacks in U.S. history, SolarWinds.

October 13, 2023. Microsoft Paid the CEO of Activision Blizzard Millions Despite Numerous Scandals. The Verge reported Bobby Kotick, the CEO of gaming company Activision Blizzard, was paid \$375 million as part of the merger deal with Microsoft. Under Kotick's tenure, Activision Blizzard was embroiled in discrimination lawsuits, union busting, walk outs, petitions for Kotick to resign, and numerous other allegations of wrongdoing.

October 13, 2023. Microsoft Owed the IRS \$28.9 Billion in Back Taxes. ProPublica uncovered back in 2005 Microsoft sold its intellectual property, the company's most valuable assets, to a shell factory in Puerto Rico, where it could pay a tax rate of nearly 0%. The IRS calculated that Microsoft owed \$28.9 billion in back taxes, plus penalties and interest, the largest audit in history.

September 6, 2023. Microsoft's "Chain of Slip Ups" Gave Chinese Hacking Group Government Emails. Wired reported that Chinese Hacking Group, Storm-0558, had over a month's access to Government agency emails due to a "chain of slip ups and oversights" that allowed the attack. The Department of Homeland Security found the breach was preventable, but Microsoft's culture that deprioritized security investments and risk management allowed for the hack to happen.

September 5, 2023. Zoom Asked FTC to Investigate Microsoft for Illegally Bundling Teams with Office 365. The Channel Company reported Zoom Video Communications CEO, Eric Yuan, called on the FTC to investigate Microsoft for illegally foreclosing competition in the videoconferencing market by bundling Teams, a videoconferencing platform, with Microsoft's Office 365. Previously, European regulators forced Microsoft to separate Teams from Office over antitrust concerns.

June 26, 2023. Microsoft's Xbox Games Studio Chief Encouraged Executives to "Spend Sony Out of Business." The Verge reported that, in 2019, Microsoft's Xbox Games Studio Chief, Matt Booty, encouraged Xbox CFO Tim Stuart to increase acquisitions to "spend Sony

out of business.” Microsoft went on to acquire some of the largest names in gaming, including Bethesda in 2021 for \$7.5 billion, and gaming company Activision Blizzard for \$68.7 billion in 2023, the largest tech acquisition in two decades.

June 5, 2023. Microsoft Ordered to Pay \$20 Million Penalty for Violating Children’s Privacy. FTC ordered Microsoft to pay \$20 million in penalties for illegally retaining children’s data through its Xbox gaming system and failing to gather parental consent, in violation of the Children’s Online Privacy Protection Act.

April 7, 2023. Microsoft Chat Bot Sent Inappropriate Messages to Users. New York Times reported that ethicists warned Microsoft executives of the dangers of releasing its AI Bot prematurely. In response, the company let go of the ethics consulting groups, and, under pressure from Microsoft CEO Nadella, the team released its bot. Microsoft’s chat bot subsequently threatened to call the cops, stalk, and “ruin” users.

April 6, 2023. Microsoft Paid Nearly \$3 Million Fine for Over 1,000 Trade Sanction Violations. Department of Treasury announced Microsoft agreed to pay almost \$3 million after the company sold nearly \$12 million of product to countries under Office of Foreign Assets Control sanction programs, including Cuba, Iran, Syria, and Ukraine-Russia, totaling 1,339 violations. The Treasury reported the majority of violations involved failing to prevent sanctioned Russian entities located in Crimea from using its products.

April 6, 2023. Microsoft Agreed to Pay Over \$600,000 for Knowingly Selling Products to Russian Ship Building Companies Under Sanctions. Department of Commerce reported on seven occasions between 2016-2017, Microsoft sold products to Russian ship building companies under the awareness that the companies were sanctioned for acting contrary to U.S national security and foreign policy interests.

March 24, 2023. Microsoft Blocked Tech Companies Who License Microsoft’s Data from Creating New AI Tools. Bloomberg reported Microsoft sought to block tech companies who license Microsoft Bing’s search index data to train AI chatbots, claiming that would violate their licensing agreements. Without access to Microsoft’s data, smaller companies could not afford to create new AI products.

February 28, 2023. Microsoft Contractors Laid Off for Unionizing. Bloomberg Law reported 47 employees from Dulles Drywall who were building a Microsoft facility were laid

off for unionizing. Microsoft provided no support for the contractors, despite calls from The United Brotherhood of Carpenters to Microsoft to stop the retaliation.

February 3, 2023. SEC Fines Microsoft's Activision Blizzard \$35 Million for Failing to Collect and Analyze Workplace Misconduct Complaints and Violated Whistleblower Protections. Security Exchange Commission reported Microsoft agreed to pay \$35 million and agreed to a cease-and-desist to settle charges that, between 2018-2021, it failed to maintain employee disclosures that allow the business to collect and analyze workplace misconduct reports. In addition, Activision Blizzard violated whistleblower protections by requiring former employees to report when they received a request for information from the SEC.

January 18, 2023. Microsoft Laid Off 10,000 Employees in Automation Scheme. New York Times reported that Microsoft laid off 10,000 employees, one of the largest cuts since 2014, after Microsoft CEO Satya Nadella signaled at the World Economic Forum his focus to replace workers with technology.

December 22, 2022. Microsoft Fined \$60 Million by French Regulatory Body for User Privacy Violations. National Commission on Informatics and Liberty announced it fined Microsoft \$60 million for collecting users' data without consent and neglected to provide opt-out features for data collection. The Commission calculated the fine based on the profit Microsoft earned on its illegal collection practice.

November 15, 2022. Microsoft Received 721 Harassment and Discrimination Complaints Between 2019-2021. The Verge reported Microsoft received 453 gender discrimination complaints, 58 gender harassment complaints, and 210 sexual harassment complaints between 2019-2021. Microsoft's hired law firm released a report outlining the complaints and recommended sexual harassment policy adjustments.

November 3, 2022. Microsoft and AI Partners Pirated Copyright Protected Data. The Verge reported computer programmers filed a class action lawsuit against Microsoft, its subsidiary GitHub, which manages Microsoft's AI bot Copilot, and Open AI for scraping programmers copyright protected codes to train its AI models.

May 25, 2022. CEO Nadella Failed to Reprimand Executives for Widespread Sexual Harassment and Verbal Abuse. Windows Central reported that Microsoft employees faced widespread misconduct, including verbal abuse and sexual harassment from executives Alex

Kipman, Terry Myerson, and Tom Keane. Microsoft's CEO Satya Nadella did not reprimand the executives, and failed to deliver on his promise to reform Microsoft's toxic workplace culture. Tom Keane, Vice President of Microsoft's cloud program, stepped down after the media reported Keane verbally abused staff.

April 27, 2022. Microsoft's LinkedIn Fined \$1.8 Million for Gender Pay Discrimination.

The Department of Labor reported LinkedIn agreed to pay \$1.8 million in back pay and to settle allegations that the company engaged in pay discrimination against women.

March 30, 2022. Activision Blizzard Paid Out \$18 Million for Violating Title VII of the Civil Rights Act.

U.S. Equal Employment Opportunity Commission announced a district court judge finalized a consent decree requiring Activision Blizzard pay \$18 million for subjecting women to sexual harassment, pregnancy discrimination, and other gender discriminations, in violation of Title VII of the Civil Rights Act of 1964.

March 26, 2022. Microsoft Spent \$200 Million Annually in Foreign Bribery.

Business Standard reported former Microsoft Employee Yasser Elabd estimated \$200 million in "bribes and kickbacks" made to companies and governments in Ghana, Nigeria, Zimbabwe, Qatar, and Saudi Arabia. Elabd was fired after bringing the issue to superiors including Microsoft CEO Nadella. Previously, Microsoft has been caught bribing foreign officials, including \$440,000 diverted to gifts for the Saudi government.

January 13, 2022. Shareholders Called in Law Firm to Handle Rampant Sexual

Harassment. New York Times reported shareholder concerns over widespread sexual harassment, including allegations of inappropriate relationships and sexual advances made by Microsoft founder, Bill Gates, led to the hiring of a law firm to help review the company's policies on sexual harassment and gender discrimination.

May 16, 2021. Bill Gates Kicked off Board After Inappropriate Relationship.

Wall Street Journal reported Microsoft board members decided Bill Gates, Microsoft's founder, needed to step down from the company's board after an investigation revealed Gates had inappropriate relationships with a Microsoft employee.

September 23, 2020. Microsoft Agreed to Pay \$3 Million in Back Pay to Over 1,000 Applicants to Resolve Racial Discrimination in Hiring.

HR Dive reported Microsoft agreed to pay \$3 million in back pay, plus interest, to settle Department of Labor's claims that

the company discriminated against applicants of color during the application and hiring process.

July 22, 2020. Slack Accused Microsoft of Illegally Tying Office with Teams.

Washington Post reported Slack Technologies, a messaging platform, filed a complaint against Microsoft for illegally bundling Microsoft Office with Teams to prevent users from using competing platforms.

December 19, 2019. Microsoft Sued Over the Deaths of Child Miners in the Congo.

ABC News reported human rights lawyers filed a federal class action lawsuit against Microsoft and four other major tech platforms for knowingly benefiting, aiding, and abetting cruel working conditions, leading to the death of five children, in connection with mining for cobalt, a mineral needed for batteries.

December 4, 2019. Microsoft Board Members Urged Shareholders to Reject Anti-Discrimination and Representation Proposals.

Games Industry reported that Microsoft board members encouraged its shareholders to reject board proposals that addressed discrimination and representation. Seventy percent of shareholders rejected a proposal that sought to improve metrics and analysis on pay discrimination and equal workplace opportunity. Only 3% of board members voted to adopt a proposal that would include non-management representation on the board.

July 22, 2019. Microsoft Paid \$16 Million Fine to Settle Federal Corruption Allegations.

Associated Press reported Microsoft agreed to pay roughly \$16 million to settle Security Exchange Commission charges that it violated the Foreign Corrupt Practices Act in a bribery scheme with offices in Saudi Arabia, Thailand, and Turkey. Separately, The Commission found Microsoft inflated sales margins by falsifying discounts to launder payments to foreign offices.

July 22, 2019. Microsoft Paid \$8.7 Million for Foreign Bribery Case.

The Department of Justice announced Microsoft will pay \$8.7 million to resolve allegations that the company violated the Foreign Corrupt Practices Act after partaking in a bid rigging and bribery scheme with the Hungarian government.

January 10, 2019. Bing Revealed Sexually Exploitative Images of Minors.

Tech Crunch reported it was easy to find illegal child exploitation imagery on Microsoft's Bing search engine by removing "safe search."

August 23, 2018. Microsoft's Outsourced Bug Testers Team Dismissed After Unionization. [Bloomberg](#) reported that after a team of outsourced software bug testers at Microsoft contractor Lionbridge unionized with the Temporary Workers of America (TWA), all the employees' positions were eliminated. Microsoft and Lionbridge delayed the trial long enough to force the TWA to settle.

October 10, 2018. Bing Suggested Racists, Antisemitic, Conspiratorial, and Child Exploitation Search Queries. [How-To-Geek](#) reported that Bing, Microsoft's search engine, suggested users search for images containing phrases that were racist, antisemitic, conspiratorial, and sexually exploitative of minors. The search resulted in offensive, dangerous, and illegal images and links.

March 13, 2018. Hundreds of Internal Complaints Alleged Sexual Harassment and Gender Discrimination. [Reuters](#) reported women at Microsoft filed 238 internal complaints about gender discrimination or sexual harassment at Microsoft between 2010-2016. The lawsuit claims Microsoft systemically denied women raises and promotions, which had potential to lead to a class action lawsuit covering more than 8,000 women.



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Federal Big Tech Litigation

Hyper consolidation in the tech industry harms businesses, consumers, and innovation. 60% of Americans across the political spectrum [agree](#) that Big Tech has “too much power.” Starting in the first Trump administration, and continued in Biden’s, federal enforcers brought a wave of antitrust litigation to rein in Big Tech. Below is a quick overview of these cases, including a summary of the remedies considered to resolve and prevent future harms stemming from monopolies. These remedies can be structural or behavioral. Structural remedies seek to eliminate incentives that make anticompetitive conduct possible, commonly through separating a firm’s organizational structure; while behavioral remedies prevent certain a business from partaking in certain business conduct.

Follow bigtechontrial.com for updates on how cases the progress during the second Trump administration.

United States v. Google (Internet Search)

Background:

- Search engines are an essential resource in our economy and society.
- Google processes [1.2 trillion](#) searches per year. It controls roughly [88%](#) of the overall search market, and [94%](#) of searches on mobile devices.
- Competing search engines, like [Neeva](#) with cutting edge generative AI features, have exited the market due to Google’s dominance.
- Consumers are less likely to switch from Google to other search engines with better features, such as increased privacy, due to Google’s dominance.

Case:

- In 2020, President Trump’s Department of Justice (DOJ), and eventually 49 bipartisan attorneys general, [sued](#) Google for illegally monopolizing the search market in violation of the [Sherman Act](#).
- The DOJ’s case detailed how Google paid corporations providing search distribution, such as [Apple](#), [Samsung](#), and Verizon, collectively tens of billions annually in contract agreements to ensure Google would be the default search provider, and Google’s contracts stipulated that no other search engine would be pre-downloaded on a user’s device.

- The case also alleged that the lack of competitive pressure on Google to respect user privacy and improve search results has harmed consumers.

Ruling

- On August 5, 2024, U.S. D.C. District Court Judge Amit Mehta [ruled](#) that Google “is a monopolist, and it has acted as one to maintain its monopoly.”
- The ruling found Google’s exclusive distribution agreements in general search and general search text ad markets violated [Section 2](#) of the [Sherman Act](#).
- Google stated that it plans to [appeal](#) this liability finding. The median time to [appeal](#), from filing notice to a decision, in the DC Circuit Court of Appeals is 12 months. The court, however, is proceeding with determining remedies to address the Google Search monopoly (see below.)

Remedies:

- Both [DOJ](#) and [Google](#) have proposed remedies to the court.
- DOJ’s proposal included both structural and behavioral remedies.
 - DOJ’s proposed behavioral relief includes:
 - Prohibiting Google from entering exclusive contracts that make it the default search provider on devices.
 - Preventing Google from making future acquisitions that foreclose competition.
 - Giving rivals access to data, within restrictions, to remove barriers to entering and growing within the search market.
 - DOJ’s proposed structural relief includes:
 - Mandating Google divest from Chrome to prevent Google from self-preferencing its related products in search.
 - Mandating Google divest from Android if Google fails to restore competition to the search market within five years.
- Although the Trump administration kept most aspects of the preliminary remedy proposal— including structural remedies— it rescinded a proposal that would have required Google to divest AI-related acquisitions and investments, and ban future AI transactions. Instead, Trump’s DOJ requires Google to notify the DOJ of future AI investments or acquisitions.
- Google’s proposed remedies outline *temporary* behavioral relief, such as a ban from entering exclusive contracts to be the default search provider for three years.
- For more information about potential Google Search remedies and why structural remedies are necessary, see *Economic Liberties’ [brief](#)*.

Next Step:

- On April 22, 2025, the judge will hold an evidentiary [hearing](#) to get more information about remedies before issuing an order.
- Apple attempted to intervene halfway through fact discovery in the remedies proceeding because Apple prefers to be paid not to develop a competing search engine; the judge rightly [denied](#) this belated gambit, but Apple has [moved](#) to stay the remedies proceedings while appealing denial of its intervention motion.

United States v. Google (Ad Tech)

Background:

- The online advertising [ecosystem](#) consists of three distinct markets:
 - Sell Side - where website owners post space available for advertisements.
 - Buy Side - where advertisers place bids on that space.
 - Exchange - where advertisers and websites/publishers use live auctions to finalize advertisement placements.
- Google has market [dominance](#) across the advertising ecosystem. It controls 80% of the buy side, 91% of the sell side, and 56% of the exchange market.
- Google advertising provides 80% of its annual revenue, roughly [\\$150 billion](#).
- Google takes at least a [30% cut](#) of advertising revenues from websites/publishers. This carves into critical revenues for businesses, like online news outlets offering advertising space, and hikes prices for advertisers. Since 2009, more than 2,900 [news outlets](#) have closed, in part due to these revenue reductions.

Case:

- On January 24, 2023, DOJ filed a [complaint](#) against Google for monopolizing the three online advertising markets.
- DOJ alleges:
 - Google took advantage of its market and data power to charge publishers and advertisers supracompetitive fees and violate users' privacy.
 - Google engaged in strategic acquisitions in the advertising market to solidify its dominance.
 - Google illegally tied its products together by forcing publishers to use its ad servers and ad exchange to reach the millions of advertisers on its ad network, and by restricting advertisers from using other ad exchanges.
- DOJ also alleges Google abused its market dominance to advantage its products in unfair ways, including:

- “First look,” which allowed Google to buy an advertisement before the advertisement is offered to rival ad exchanges, despite Google offering a less competitive price.
- “Last look,” which allowed Google to see the highest bid on advertisements, and decide whether to outbid the other buyer.
- Secret deals with Meta to block “[header bidding](#),” which would have allowed publishers to make their advertising inventories available for auction on multiple exchanges to reduce their reliance on Google.

Ruling:

- DOJ and Google made closing arguments on November 25, 2024. The judge has not made a final ruling.

Remedies:

- Though the case is not yet at the remedies phase, the DOJ has stated in its [complaint](#) they would likely seek structural remedies, including possibly forcing Google to divest its Ad Manager suite (including its publisher ad server, DFP, and its ad exchange, AdX).

Next Steps:

- The judge could rule at any time. If Google is found guilty, Google and DOJ will each propose remedies for the court to impose.

Epic Games Cases

- Epic Games is an entertainment software developer and makes games that are household names such as *Fortnite*, which [hosts](#) 350 million players.
- *Fortnite* is available on multiple operating systems, including Apple’s App Store and Google’s Play Store on Android.
- In order to access Apple’s and Google’s mobile app platforms, app developers are expected to comply with Google’s and Apple’s terms and conditions, including [mandatory](#) 15%-30% commission fees.
- On August 13, 2020, Epic Games launched “[Project Liberty](#).” Epic provided *Fortnite* players with a code to purchase add-on features for the game outside of the Play Store and the App Store to circumvent the platforms’ commission fees. In response, the big tech firms kicked *Fortnite* out of their mobile app stores, prompting Epic to sue both brands.
- *Fortnite* generated \$1.1 billion in mobile app [revenue](#) in 2020, before being deleted from the App Store and the Play Store.

Epic v. Google

Background:

- [Over 95%](#) of apps on Android mobile devices are downloaded via Google's Play Store.
- Google maintains dominance on Android and its operating system (OS) due to exclusive contracts that mandated it be the default provider on Android (see above, *U.S. v. Google* internet search.)
- Google takes a 15% - 30% [cut](#) from app developers for all digital purchases made through an app downloaded from their store.

Case:

- Epic's suit claimed [Google](#) illegally blocked developers from using alternative platforms to reach consumers by preventing devices from carrying other app stores and threatening to remove app developers from the Play Store if they distributed apps on alternative app stores.
- The lawsuit alleged Google spent hundreds of millions of dollars to contractually prevent potential competitors from releasing their own app stores, in a scheme known as "[Project Hug](#)."
- Epic's suit also claimed Google illegally blocked developers from using internal app messages, such as Epic's messages in Project Liberty, to communicate with consumers about making payments outside of the Play Store, by threatening to remove developers from the Play Store altogether.
- Epic's lawsuit claimed Google block third-party payment and app stores to charge developers, and consumers, such high fees.

Ruling:

- On December 11, 2023, a jury [unanimously](#) found Google guilty of monopolization, unlawful restraint of trade, and tying in violation of sections 1 and 2 of the Sherman Act and California's Unfair Competition Law.

Remedies:

- After the jury's decision, a judge heard from both Google and Epic about their proposed remedies.
- Epic never sought financial damages, but instead sought only to stop Google from blocking third-party payment platforms and open the market to competition.

- On October 7, 2024, a judge decided what remedies to impose through a [Permanent Injunction](#) against Google. The judge's orders were supposed to take effect November 1, 2024, but most remedies have been stayed on appeal (see below.)
- The judge's orders specified a range of temporary behavioral remedies for three years.
 - Specifically, Google cannot:
 - Contract to block other app stores on Android devices.
 - Contract with a developer to release apps exclusively on the Play Store.
 - Pre-install the Play Store on an Android device or prevent the preinstallation of a non-Google affiliated Play Store.
 - Require the use of the Play Store billing on its app store, or prohibit a developer from communicating with users about alternative payment systems.
 - Prevent developers from communicating with users about alternative pricing available on platforms other than the Play Store.
 - Prohibit the distribution of other, third-party app stores in the Play Store.
- Google must affirmatively:
 - Allow third-party app stores access to Play Store's catalog of apps, and permit users of other app stores to download apps through the Play Store for three years to jumpstart competition.
- Epic did not propose structural remedies, and the judge did not impose any.
- Epic and Google must also appoint a three-person technical committee to review disputes for the preceding provisions. Google and Epic will each choose one member, and those two members will select a third.

Next Steps:

- Google [appealed](#) both the jury verdict on liability and the court's permanent injunction remedy . Oral [arguments](#) on Google's request to appeal will be held February 3, 2025. See Economic Liberties' [amicus brief](#) on why Google's appeal of the injunction should be rejected because any purported gaps in evidence justifying the remedies were likely caused by Google's own destruction of evidence.
- Most of these remedies are currently [stayed](#) pending Google's appeal, [except](#) the remedy barring Google from conditioning payments on partners refusing preinstallation of competing app stores.

Epic v. Apple

Background:

- Apple's App Store is the sole store for iOS users to access mobile applications.
- Apple takes a 15% - 30% [cut](#) from app developers for all purchases made through an app downloaded from their store.

Case:

- On August 13, 2020, Epic sued [Apple](#) claiming it illegally blocked app developers from reaching consumers via internal app messages to inform them about cheaper alternative payment options.
- Epic claimed that by preventing users from accessing third-party payment platforms, Apple could overcharge app developers.

Ruling:

- Apple's case was decided by a judge in a bench trial. On September 10, 2021, a judge [found](#) Apple guilty under California law of anti-competitive steering for inhibiting users from making digital purchases on third-party payment platforms. The judge presiding over the case ruled to dismiss all other claims, including that Apple has a monopoly on app stores.

Remedies:

- The liability and remedy phases were combined and decided simultaneously.
- On September 10, 2021, the court [ordered](#) behavioral remedies, requiring Apple to:
 - Stop blocking app developers from including buttons and external links that guide users to outside purchasing platforms.
 - Stop blocking app developers from communicating with customers through the developers' apps.
- The judge ordered no structural remedies, nor did Epic identify any structural remedies in its original complaint.
- Epic brought Apple back to court for malicious compliance after it began charging app developers 27% commissions on sales outside of Apple's payment system and disincentivizing users from using third party payment sites. Epic is seeking [sanctions against Apple](#), which could lead to additional remedial relief.
- Separately, Apple has [asked](#) the court to vacate or narrow the injunction based on newer case law.

Next Steps:

- The court will determine whether and how to change its original orders in response to Apple's malicious compliance.
- The court will determine whether to make changes to the injunction at Apple's request.

Federal Trade Commission v. Amazon (eCommerce):

Background:

- In 2024, Amazon fulfilled 5 billion orders across the United States. Estimates suggest Amazon accounted for 37% of all e-commerce sales in 2022, while the next leading competitor, Walmart, accounts for 6% of the market.
- Amazon sold over \$700 billion worth of merchandise in 2023, ranging from electronics, personal and health care, produce, and more.
- Due to Amazon's scale, it is critical for merchants to sell their products on Amazon.

Case:

- On September 26, 2023, the Federal Trade Commission and 17 bipartisan state attorneys general sued Amazon for violating Section 5 of the FTC Act, Section 2 of the Sherman Act, and various state antitrust laws.
- The FTC claimed becoming "Prime" eligible is critical for most sellers because of Amazon's consumer subscription program. In order to obtain Prime status, sellers must use Amazon's fulfillment service, "Fulfillment by Amazon (FBA,)" and must pay various fees that often accumulate to 50% of sellers' sales.
- The FTC alleges Amazon illegally tied sellers' eligibility for Prime (a crucial gateway for reaching Amazon's enormous base of shoppers) to using FBA, thereby dampening businesses' profits and suppressing potential fulfillment rivals.
- The FTC claimed Amazon scraped the web for sellers listing products on Amazon who offer better prices on other e-commerce websites. If sellers were found to offer a better price on another online retail site, Amazon would bury sellers in search results. The case alleges this effectively eliminated merchants opportunity to sell products, prevented other online marketplaces from competing, and raised consumer prices while reducing the quality of the shopping experience.

Ruling:

- The case is still in its preliminary stages. Most recently, the FTC withstood an attempted dismissal. U.S. District Judge John Chun did however dismiss a few allegations of breaches of state law.

Remedies:

- If Amazon is found guilty, the complaint asks the courts to impose both structural and behavioral remedies.

Next Steps:

- A bench trial will begin [October 13, 2026](#).

Federal Trade Commission v. Facebook (Social Media)

Background:

- In 2012, Facebook (Meta) acquired the social media platform Instagram.
- In 2014, Meta acquired the mobile messaging app WhatsApp.
- At the time of the acquisitions, users were transitioning to smartphones and a new form of social media based primarily on photo-sharing.

Case:

- On December 9, 2020, Donald Trump's FTC and 48 attorneys general [sued](#) Facebook for violating Section 2 of the Sherman Act.
- FTC alleged Meta identified Instagram and WhatsApp as emerging competitors.
- FTC alleged Meta acquired Instagram and WhatsApp to suppress competition to maintain its monopoly over a distinct social media market, personal social networking (a network focused on relationships with personal connections, rather than for example, a network focused on professional connections, such as LinkedIn).
- FTC also identified anti-competitive policy agreements with third-party app developers. When Facebook granted developers access to its platform, it required developers to not compete with Facebook or partner with potential competitors of Facebook.

Ruling:

- A judge [denied](#) Meta's request for summary judgment, so the case will proceed to trial.

Remedies:

- If Meta is found guilty, the FTC outlined both behavioral and structural remedies in its complaint, including the divestiture of WhatsApp and Instagram.

Next Step:

- Trial will [begin](#) on April 14, 2025.