Testimony of Sally Hubbard

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Before the
Senate Standing Committee on Consumer Protection
Legislature of the State of New York

On

The Twenty-First Century Antitrust Act (S.8700-A)

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Chairperson Thomas and Members of the Committee, thank you for inviting me to testify.

My name is Sally Hubbard. I'm the director of enforcement strategy at the Open Markets Institute. I previously served as an antitrust enforcer at the New York Attorney General's Office.

I believe the four dominant tech platforms – Facebook, Google, Apple, and Amazon – are each violating the federal antitrust laws, as those laws are currently written. As you know, the New York AG has the power to enforce the federal laws. But the courts have spent decades narrowly interpreting the Sherman Act and the Clayton Act – nearly gutting them – and paving the way for concentrated corporate power to take over America.

Big Tech's enduring dominance is fueled by monopolization that violates Sherman Act Section 2. I explain some of that illegal conduct in detail in the attached U.S. Senate testimony. Yet court decisions now mean that Sherman Act Section 2 cases take too long and cost too much money. Anyone seeking to claim their right to a competitive marketplace must spend huge sums of money to hire economic experts. Monopolists' victims can rarely afford to sue them, and the enormous expense also affects enforcers' calculus of whether to bring cases.

New Yorkers deserve an abuse of dominance standard that makes a clean break from Section 2 legal precedent. New Yorkers need a new tool to fight monopoly.

A monopolized economy harms all New Yorkers. Workers are harmed by highly concentrated labor markets, which limit job options and mobility. When consolidated labor markets deprive employees of bargaining power and depress their pay, causing wages to go down or stagnate, female employees and employees of color are the hardest hit, because they earn a smaller share of fewer dollars.

Concentrated corporate power also breeds rampant inequality, as monopolies use their muscle to extract the fruits of everyone else's labor and impose taxes on those who must use the essential infrastructure they control, while avoiding paying their fair share of taxes. Inequality takes a toll on us all, but our rigged economy deepens existing societal inequities even further.

American businesses of all sizes and would-be entrepreneurs are also harmed when digital platforms control the game and play it, too.

Abuse of dominance by digital platforms is fundamentally a threat to the American Dream. The American Dream, as defined by Wikipedia, is the set of ideals – democracy, rights, liberty, opportunity, and equality – in which freedom includes the opportunity for prosperity and success, as well as upward mobility for the family and children, achieved through hard work in a society *with few barriers*.

Ours is not a society with few barriers, when digital platforms pick the winners and losers of our economy – particularly when they pick *themselves* as the winners.

Antitrust law aims to stop established companies from shutting out competitors. If entrepreneurs and businesspeople bring their hard work and the best products and services forward, an open and freely competitive market rewards them with prosperity and success.

To their credit, the big tech platforms started on their paths to dominance with innovation. But they're each more than 15 years old and have dominated their arenas for more than a decade. Their enduring and expanding monopoly power has less and less to do with competition based on merit.

Google, Amazon, Apple, and Facebook have reached their controlling positions in large part through hundreds of acquisitions, many of which were illegal under the Clayton Act.

The tech giants are each following Microsoft's playbook, using what I call "platform privilege": the incentive and ability to favor their own goods and services over those of competitors that depend on their platforms. They often eliminate rivals rather than compete against them to be the best.

Google picks itself as the winner in online search, digital advertising, mobile apps, video, reviews, travel, and maps, just to name a few. It uses Android to exclude competition, just as Microsoft used Windows.

Amazon picks itself as the winner of commerce. Brands and retailers of all sizes have *little choice* but to sell on Amazon, which can peek inside their businesses, knock them out of the competition, and knock them off. The same problems plague Amazon Web Services.

Apple, too, picks the winners and losers of apps on iOS and increasingly picks itself as the winner.

Facebook and YouTube pick the winners and losers of information. They spread disinformation worldwide, and they threaten fair elections. Their business models give preferential treatment to divisive and incendiary content that gets a reaction out of their billions of users.

Finding success through ingenuity, hard work, and innovation is the American Dream. But illegally kicking competitors out of the game, stealing their innovations, and leveraging monopoly power to take over markets instead of competing — that's the American monopoly nightmare.

An abuse of dominance standard would prevent discrimination, meaning the platforms would have to offer equal access on equal terms to all. This is not a radical idea but is rather a core tenet of our democracy.

Let me be clear. I believe that each of these corporations provides useful, high-quality services to some portions of the public. But these benefits do not make monopolization legal, nor do they justify the exploitation of monopoly business models in ways that result in harm to entrepreneurs and innovators, and to independent business owners and employees. Offering some benefits does not give Google, Amazon, Facebook, and Apple a free pass for anti-competitive behavior.

Strong antitrust laws maximize innovation. If it weren't for *U.S. v. Microsoft*, Google might not exist today. Microsoft could easily have used its monopoly power to force its own browser and its own search engine onto computer-makers and consumers, excluding competition from Google just as it did to Netscape.

Monopolization kills innovation. Because of their muscle, the four tech giants are limiting what innovation looks like and deciding who gets to innovate and for whom.

Tech giants argue that they aren't monopolies, citing incorrect market share numbers based on overbroad definitions of the relevant markets. Monopoly power is defined under current antitrust law as the power to control prices or exclude competitors, and the evidence that each tech giant has monopoly power is abundant.

Our economy, businesses small and large, and consumers would all benefit from swift action by New York's legislature. Consumers benefit from the choice, innovation, and quality that robust competition brings. Consumers are also citizens who benefit from the free flow of speech. They are also workers and employees of companies that benefit when platform extraction ceases. And they are entrepreneurs who deserve a shot at the American Dream.

Thank you very much.

Attachments:

- Written testimony submitted to the U.S. Senate, Judiciary Committee, March 10, 2020, "Competition in Digital Technology Markets: Examining Self-Preferencing by Digital Platforms."

- *Eyes Everywhere: Amazon's Surveillance Infrastructure and Revitalizing Worker Power*, Daniel A. Hanley and Sally Hubbard, Open Markets Institute, September 2020.

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Table of Contents

I. Introduction

Digital platform self-preferencing threatens the American Dream. When digital platforms pick the winners and losers of our economy, we lose the American promise of upward mobility based on merit. Increasingly, the platforms exploit their middleman positions to pick *themselves* as the winners of our economy.

Antitrust law aims to stop established companies from shutting out competitors. If entrepreneurs and businesspeople bring their hard work and the best products, services, and ideas forward, an open and freely competitive market rewards them with success and prosperity.

The corporations that rule online markets for goods, services, information, and news are all more than 20 years old and have dominated their respective arenas for more than a decade.[1] Amazon, Apple and Google have each reached $1 trillion in valuation.

In part, these corporations have done so through innovation, hard work, and bringing better products to market. Unfortunately, merit alone does not explain their phenomenal rise to positions of such power and control.[2]

Much of their success is due to having acquired hundreds of other companies, in ways that have enabled them to build intricate networks of essential services. Together, Facebook and Google have bought more than 150 companies since 2013.[3] Google alone has acquired nearly 250 companies since 2006.[4] At last count, Apple has bought more than 100 companies and Amazon nearly 90.[5]

Many of these acquisitions were illegal under the Clayton Act's prohibition of mergers and acquisitions where the effect "may be substantially to lessen competition, or to tend to create a monopoly." Think Google's acquisitions of Android and YouTube, and Facebook's acquisitions of Instagram and WhatsApp. Google also bought up the digital ad market spoke by spoke, including Applied Semantics, AdMob, and DoubleClick, cementing its market power in every aspect of the ecosystem.

Illegal mergers are half the picture, and illegal monopolization is the other half. The platform monopolists of the 21st century have long followed the monopolist's classic playbook, in which

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[1] Mark A. Lemley and Andrew McCreary, "Exit Strategy," *Stanford Law and Economics Working Paper #542*, December 19, 2019, Available at SSRN: https://ssrn.com/abstract=3506919.

[2] Daisuke Wakabayashi, "Google Reaches $1 Trillion in Value, Even as It Faces New Tests," *New York Times*, January 16, 2020; https://www.nytimes.com/2020/01/16/technology/google-trillion-dollar-market-cap.html.

[3] Rani Molla, "Amazon's Ring Buy Gives It the Same Number of Acquisitions This Year as Facebook and Google," *ReCode*, March 4, 2018, https://www.vox.com/2018/3/4/17062538/amazon-ring-acquisitions-2018-apple-google-cbinsights.

[4] CB Insights, *Infographic: Google's Biggest Acquisitions*, November 1, 2019, https://www.cbinsights.com/research/google-biggest-acquisitions-infographic/.

[5] CB Insights, *Infographic: Apple's Biggest Acquisitions,* May 29, 2019, https://www.cbinsights.com/research/apple-biggest-acquisitions-infographic/; Crunchbase, Amazon Acquisitions; retrieved February 1, 2020, https://www.crunchbase.com/organization/amazon/acquisitions/acquisitions_list#section-acquisitions.

they exploit their positions as providers of multiple essential services to bankrupt, supplant, or sideline rivals in every market in which they operate. Specific to the subject of today's hearing, they first extract revenue and data from every seller and buyer on their platforms, few of whom have any real choice but to deal with them. They then combine this information with the power they possess as operators of essential platforms, to take over entire lines of business that depend on their platforms.

Because Google, Amazon, Facebook, and Apple each have monopoly power and engage in exclusionary conduct to acquire or maintain that power, I believe that each platform is illegally monopolizing in violation of Section 2 of the Sherman Act. I believe this is bad for every entrepreneur – bad for those who must rely on these services, and bad for those who create a clearly superior product or service and see that product or service stolen from them or choked off in favor of a product owned by the platforms. The number of businesses that are not at the mercy of the platform monopolists is declining every day, as the giants continue to expand into new business lines. That's why I believe that this distorted playing field strikes directly at the heart of the American Dream.

Obviously, this state of affairs also deprives consumers of the choice, innovation, quality, and pricing structures that come from real competition.

Let me be clear. I believe that each of these corporations provides useful, high-quality services to some portions of the public. But these benefits do not make monopolization OK, nor do they justify the exploitation of monopoly business models in ways that result in harm to entrepreneurs and innovators, and to independent business owners and employees. A factory that expels toxic smoke into the air can make a product that offers benefits to consumers, but that doesn't make pollution legal. Offering some benefits to consumers does not give Google, Amazon, Facebook, and Apple a free pass to break our antitrust laws.

We can begin to revive the American Dream and to help restore dynamism in our economy if we robustly enforce the antitrust laws again to prevent such self-preferencing by these providers of essential services. That's why today's hearing is so important.

II. The Platform Monopolists Are Operating Like Microsoft Did

When the Department of Justice and 20 states sued Microsoft in 1998, Microsoft's Windows operating system had a 95% share of the market for "Intel-compatible PC operating systems." Microsoft's Windows operating system was so dominant that companies that made personal computers didn't have a choice but to install Windows if they wanted to sell their computers. The DOJ and the states brought the case after Microsoft exploited this dominance to illegally squash a competitor to its Internet Explorer browser, the Netscape Navigator browser.

Rather than compete against Netscape to provide the best product, Microsoft used a variety of tactics to drive Netscape out of the market entirely. Microsoft required PC makers to pre-install

Internet Explorer in every PC that ran on Windows – in other words, on 95% of PCs. Microsoft also technically integrated Internet Explorer into Windows so that using a non-Microsoft browser would be difficult and glitchy.

Messages between senior executives showed Microsoft didn't think it could win against Netscape through fair competition. A senior Microsoft executive wrote: "Pitting browser against browser is hard since Netscape has 80% marketshare and we have 20%...I am convinced we have to use Windows — this is the one thing they don't have." He added that competition alone wasn't enough, saying "we need something more — Windows integration." The executive planned to offer an upgrade to Windows that "must be killer" on computer shipments "so that Netscape *never gets a chance* on these systems."[6]

In short, even if Netscape offered a browser that was superior to Internet Explorer, Netscape didn't have a shot. Sadly, the antitrust case against Microsoft came too late to save Netscape. But the government did win the case. And one result of that victory is that Microsoft was not free to use the same tactics against Google and other internet upstarts that it had used against Netscape. After taking over the internet browser market, Microsoft could have required computer makers to use its search engine, too. *U.S. v. Microsoft* made Microsoft curb its monopolistic practices, and – for a time – competition and innovation flourished.

Today, Google, Facebook, Amazon, and Apple are each following Microsoft's playbook from the 1990s, leveraging what I call "platform privilege" – the incentive and ability to favor their own goods and services over those of competitors that depend on their platforms. These platform monopolists get to both umpire the game and play in it, too.

A. Google Self-Preferencing in Android

Google is not a single monopoly, but rather a cluster of monopolies in multiple markets. Google Search accounts for 92% of internet search globally, and Google Android accounts for more than 85% of the world's smartphones.[7] Google has seven products with more than 1 billion users each: Search, Android, Chrome, YouTube, Maps, Gmail, and Google Play. In 2018, Google's ad revenue alone was $116 billion.[8]

Google has grown to the behemoth it is today both through hundreds of acquisitions and by leveraging its monopoly power to kick out rivals and take over markets.

Just as Microsoft used its monopoly in PC operating systems to exclude competition in internet browsers, Google used its monopoly power in mobile operating systems to exclude competition

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[6] U.S. District Court Findings of Fact, *U.S. v. Microsoft*, November 5, 1999, paragraph 166, https://www.justice.gov/atr/us-v-microsoft-courts-findings-fact#iva.

[7] Statcounter, "Search Engine Market Share Worldwide Feb. 2019-Feb. 2020," *Global Stats*, retrieved March 1, 2020, https://gs.statcounter.com/search-engine-market-share; IDC, "Smartphone Market Share," retrieved March 1, 2020, https://www.idc.com/promo/smartphone-market-share/os.

[8] Statista, "Advertising Revenue of Google from 2001 to 2019," retrieved March 7, 2020, https://www.statista.com/statistics/266249/advertising-revenue-of-google/.

in mobile apps. The European Commission fined Google $5 billion in July 2018 for abusing its dominance by requiring phone makers using Android, with its 80% percent market share in Europe, to pre-install Google's apps and not competitors' apps.[9] This was the same tactic used by Microsoft when it required computer makers to pre-install its Internet Explorer browser and not Netscape's Navigator browser.

The way it worked is simple. Google wouldn't give phone makers Google Play, Android's must-have app store, unless the phone makers pre-installed Google Search and Chrome, among other apps such as Gmail, YouTube, and Maps, and did not pre-install competitors' apps.[10] The same as PC makers dealing with Microsoft, phone makers didn't have the power to disobey Google's anti-competitive requirements because they lacked a viable alternative operating system. As the world embraced the smartphone, Google's anti-competitive exclusion of competition allowed Google to extend its monopoly power in Search and Chrome from the computer desktop into the smartphone. Entrepreneurs who wanted to challenge any of Google's apps didn't have a shot at getting pre-installed on any phone that relied on Google operating systems, which makes up 85 percent of the world market.

Android users could still install competing apps after they got their phones, but users tend not to do that. When people already have a map app on their phones, they tend not to seek out another map app. This is a phenomenon known as default bias. Default bias is so powerful that Google paid Apple more than $9 billion in 2018 to be the default search engine on Apple devices, according to Goldman Sachs estimates.[11]

The European Commission ordered Google to stop its anti-competitive contracts in Europe and to offer consumers the choice of which apps are installed on their phones. Many question whether this fix is too little too late, because Google's apps have benefited from years of usage by billions of customers. Google has appealed the decision.

Meanwhile, Google sees that the world is beginning to move from mobile to wearables and smart devices. It's making moves to colonize the next frontier, not merely paying to be the default search engine on the Apple Watch but also purchasing FitBit, the largest smart watch company. The FitBit acquisition violates the Clayton Act because it will allow Google to acquire troves of data to fortify its monopoly power, while ensuring that Google's apps are the default on the new frontier, too.

Google's monopolizing tactics could continue indefinitely, as each new technology rolls out and the Internet of Things surrounds us, unless lawmakers and enforcers put an end to it. Enforcers

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[9] European Commission, "Statement by Commissioner Vestager on Commission Decision to Fine Google €4.34 Billion for Illegal Practices Regarding Android Mobile Devices to Strenghten Dominance of Google's Search Engine," July 18, 2018, https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_18_4584.

[10] The Capitol Forum, "Google EC Antitrust Enforcement: Expected Android EC Remedies Likely to Make Google Vulnerable to Competitive Threats in Mobile Advertising," September 30, 2016, http://createsend.com/t/j-189AEA75109E1FA5.

[11] Kif Leswing, "Apple Quietly Makes Billions from Google Search Each Year, and It's a Bigger Business than Apple Music," February 13, 2019, https://www.businessinsider.com/aapl-share-price-google-pays-apple-9-billion-annually-tac-goldman-2018-9.

and lawmakers must get out in front of new technologies to protect entrepreneurs and innovators from being trampled. Indeed, Google's dominance is now so great that even the biggest of automakers and appliance makers sit in Google's sights.

B. Google Self-Preferencing in Search

Google's monopoly on desktop and mobile search allow Google to control vast swaths of the internet. However, the exact proportion is unclear, because thus far Google has refused to release that information – even to Congress.

At a House Judiciary Subcommittee hearing in spring 2019, Google was asked whether it was true that fewer than 50% of total U.S. mobile and desktop searches on Google Search result in clicks to non-Google websites, as research had shown. When Google's representative gave an unclear answer, the Subcommittee followed up with written questions that requested a "yes or no" answer and even provided checkboxes.[12]

Google ignored the yes-or-no instruction and responded by saying, among other things, that Google has "long sent large amounts of traffic to other sites."[13] That should come as a given, because Google's search monopoly makes it the de facto directory of the internet – the Yellow Pages of the 21st century. In the same letter, Google answered a different follow-up question with a straightforward "no," making its failure to answer the earlier question with a "no" telling. With more than 90% of the worldwide search market, such extensive self-preferencing amounts to Google colonizing the internet – and the flow of information around the globe – to serve its interests.

Google's platform privilege means that Google could crush almost any entrepreneur who depends on Google's services, if Google decides to enter the entrepreneur's market. In recent years, Google has also been accused of prioritizing its own reviews, maps, images, and travel booking services in its search results, in ways that effectively destroy competition in these "vertical search" markets.

In 2017, the European Commission fined Google $2.7 billion for this abuse of platform dominance, finding that, on average, Google buried its comparison shopping competitors on the fourth page of Google search results. In effect, Google used its search monopoly to take over the comparison shopping market without competing on merit. The commission ordered Google to

[12] Letter to Kent Walker, Chief Legal Officer of Google, from Representative David N. Cicilline, Chairman of the Subcommittee on Antitrust, Commercial and Administrative Law, Committee on the Judiciary, July 23, 2019, available at https://cicilline.house.gov/sites/cicilline.house.gov/files/7.23.2019_ACAL%20Company%20Clarification%20Requests.pdf.

[13] Letter to Chairman Cicilline from Kent Walker, Google Chief Legal Officer, July 26, 2019, available at https://judiciary.house.gov/sites/democrats.judiciary.house.gov/files/documents/07.26.19%20-%20google%20response.pdf.

treat its competitors equally as it treats itself in search results. Complainants maintain the problem still has not been fixed.[14]

Google's platform privilege doesn't just destroy the dreams of entrepreneurs, it also means consumers get worse service, less innovation, and higher prices. "The Commission is concerned that users do not necessarily see the most relevant results in response to queries – this is to the detriment of consumers, and stifles innovation," reads a European Commission press release about the Google comparison shopping case.[15] One study concluded that Google degraded its search quality results in order to prioritize its own services or content that keeps users on Google search pages.[16] And the requirement that businesses of all sizes pay Google to appear at the top of searches for their business name is effectively a form of extortion, which wouldn't be possible if Google were required to deliver the most relevant results.

Google has rejected claims that it tries to hurt competitors and has appealed the EC decision.

C. Google Self-Preferencing in Digital Advertising

Google has far-reaching monopoly power in digital advertising, because it acquired every spoke of the ecosystem while exerting platform privilege.[17] The European Commission has fined Google nearly $1.5 billion for abusing its dominance in the market for the brokering of online search advertising.[18] Google has appealed.

When Google in 2007 bought DoubleClick, a marketplace for buying and selling digital advertising, the FTC did only a cursory investigation and cleared the deal. But one FTC commissioner at the time, Pamela Jones Harbour, dissented. Her predictions about how the merger could harm competition and threaten privacy were prescient.

"I am convinced that the combination of Google and DoubleClick has the potential to profoundly alter the 21st century Internet-based economy – in ways we can imagine, and in ways we cannot," wrote Jones Harbour in her dissenting statement. She argued that the FTC should take a closer look and answer several questions, including whether any other companies will have the ability to compete meaningfully in the market after the merger. The deal has potential to "harm

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[14] Foundem, "Google's CSS Auction: Different Name, Same Illegal Conduct," November 2, 2019, http://www.searchneutrality.org/google/google-css-auction-different-name-same-illegal-conduct; Foundem, "Google's Blatantly Non-Compliant 'Remedy' Part III," April 18, 2018, http://www.foundem.co.uk/fmedia/Foundem_Apr_2018_Final_Debunking_of_Google_Auction_Remedy/.

[15] European Commission, "Antitrust: Commission Sends Statement of Objections to Google on Comparison Shopping Service; Opens Separate Formal Investigation on Android," April 15, 2015, http://europa.eu/rapid/press-release_IP-15-4780_en.htm.

[16] See Luca, Wu, Couvidat, Frank & Seltzer, "Does Google Content Degrade Google Search? Experimental Evidence," *Harvard Business School* Working Paper, No. 16-035, September 2015, (Revised August 2016); Jack Nicas, "Google Has Picked An Answer For You—Too Bad It's Often Wrong," *Wall Street Journal*, November 16, 2017, https://www.wsj.com/articles/googles-featured-answers-aim-to-distill-truthbut-often-get-it-wrong-1510847867.

[17] CB Insights, "Infographic: Google's Biggest Acquisitions," May 2019, https://www.cbinsights.com/research/google-biggest-acquisitions-infographic/.

[18] European Commission, "Antitrust: Commission fines Google €1.49 Billion for Abusive Practices in Online Advertising," March 20, 2019, https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1770.

competition, and it also threatens privacy," she wrote. "By closing its investigation without imposing any conditions or other safeguards, the Commission is asking consumers to bear too much of the risk of both types of harm."[19]

In 2019, 12 years after Jones Harbour's dissent, Texas Attorney General Ken Paxton spoke about Google's advertising dominance when he announced the investigation into Google by 51 state attorneys general. Paxton said, "They dominate the buyer side, the seller side, the auction side and the video side with YouTube."[20] If Google had not bought Doubleclick and then Admob, the leading mobile advertising company, plus a slew of other ad tech companies, things could have been different. These acquisitions violated Section 7 of the Clayton Act's prohibition of acquisitions that may substantially lessen competition or tend to create a monopoly.

D. Amazon Self-Preferencing

Amazon, too, is following the monopolist's playbook, picking and choosing which products to present on the screen of the consumer. Amazon is able to do so because it – in exactly the same way as Google – has grown so large that it is now an essential infrastructure through which manufacturers and other sellers reach customers.

Amazon does not merely control its marketplace. Amazon also acts as a retailer, buying products at wholesale and selling them on its platform (those are the products that say "sold by Amazon," also called "first-party" products), pitting itself against small, mid-sized, and large businesses that sell products on Amazon.com (known as "marketplace sellers"). Amazon also acts as a brand, selling its own private label products, both Amazon Basics products and products under more than 400 Amazon house labels.[21]

Everyone who sells on Amazon is effectively competing against Amazon and also dependent on Amazon. Many brands and small and mid-sized retailers have no choice but to sell on Amazon if they want to stay in business. No entrepreneur or businessperson wants to be dependent on their competitor, who can peek into their business, take a cut of their profits, push them out of the market, or put them out of business. That's not how the American Dream is supposed to work.

Amazon has excluded rivals from competing, which is the second element of illegal monopolization under Sherman Act Section 2. When Amazon wants to pressure a brand to let Amazon sell its products, Amazon has a practice of kicking out of the marketplace others who sell the brand's products.[22] This dynamic arises because many brands don't want their products

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[19] Dissenting Statement of Commissioner Pamela Jones Harbour In the Matter of Google/DoubleClick, December 20, 2007, https://www.ftc.gov/sites/default/files/documents/public_statements/statement-matter-google/doubleclick/071220harbour_0.pdf.

[20] Tony Romm, "50 U.S. states and territories announce broad antitrust investigation of Google," *The Washington Post*, September 9, 2019, https://www.washingtonpost.com/technology/2019/09/09/states-us-territories-announce-broad-antitrust-investigation-google/

[21] eMarketer, "Share of Amazon's Private-Label Products, by Product Category, March 2019," March 18, 2019, https://www.emarketer.com/chart/227300/share-of-amazons-private-label-products-by-product-category-march-2019-of-total-number-of-brands.

[22]The Capitol Forum, "Amazon Ousted Marketplace Sellers in Order to Be Only Seller of Certain Products; A Closer Look at Monopolization Enforcement Risk," June 14, 2018,

sold on Amazon, particularly brands with products that require customer service in physical stores. If marketplace sellers discount a brand's products online, then consumers go to the store to take advantage of the customer service, but they buy the products online. Quite logically, companies don't want to pay their employees to provide customer service on products that the company didn't sell, so stores stop carrying brands that are discounted on Amazon.

When a brand complains to Amazon that unauthorized sellers are discounting its products on Amazon's platform, Amazon typically responds that it can do nothing to help them because the marketplace is open and free. But Amazon will help the brand if it agrees to sell to Amazon directly. Amazon then kicks off the discounting sellers or signs an exclusive deal with a brand and gets rid of all other marketplace sellers, regardless of whether they offer discounts. Amazon literally ousts other sellers – its retail competitors – so that Amazon can be the only seller of a brand's products on its monopoly platform. Given that Amazon's platform now accounts for nearly $1 of every $2 spent online,[23] kicking rivals out of the game in this way amounts to illegal monopolization.

Amazon often justifies excluding competition on its platform as necessary for policing counterfeiters. But one seller told me he was kicked off the platform under the guise of counterfeiting, only for Amazon to turn to him for supply of the same supposedly counterfeit items so that Amazon could sell the goods first party. And other businesspeople have said Amazon tied policing against counterfeit products to high-dollar commitments to buy advertising on the platform,[24] which, according to most commonsense definitions, is clearly a form of extortion.[25]

When Amazon doesn't kick out competition entirely, it pulls a number of levers to distort competition in its favor. Amazon gives its own private label products and first-party products advantages over competitors in a number of ways: Amazon pushes its own products to the top of Amazon search results; Amazon gives itself premium advertising placement not available to others; Amazon pursues targeted marketing to Amazon customers based on data collected about them that only Amazon has; and Amazon possesses exclusive customer reviews that competitors

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http://thecapitolforum.cmail19.com/t/ViewEmail/j/96AD55196B0C02DE2540EF23F30FEDED/690A887987F4ABF13FEC1D8A50AFD3BD.

[23] J. Clement, "Projected Retail E-Commerce GMV Share of Amazon in the United States from 2016 to 2021," Statista, August 9, 2019, https://www.statista.com/statistics/788109/amazon-retail-market-share-usa/.

[24] Statement of David Barnett, CEO and Founder of PopSockets LLC, Online Platforms and Market Power, Part 5: Competitors in the Digital Economy, January 15, 2020, https://docs.house.gov/meetings/JU/JU05/20200117/110386/HHRG-116-JU05-Wstate-BarnettD-20200117.pdf. "It was not until December of 2017, in exchange for our commitment to spend nearly two million dollars on retail marketing programs (which our team expected to be ineffective and would otherwise not have pledged), that Amazon Retail agreed to work with Brand Registry to require sellers of alleged PopGrips to provide evidence, in the form of an invoice, of authenticity. As a result, in early 2018, our problem of counterfeits largely dissolved. (Soon thereafter Brand Registry agreed to enforce our utility patent, resulting in the disappearance of most knockoffs.)"

[25] See Testimony of Barry C. Lynn, President and Founder, The Open Markets Institute, before the Judiciary Committee of the Ohio Senate on The Nature of Threats Posed by Platform Monopolists to Democracy, Liberty, and Individual Enterprise, October 17, 2019, available at https://openmarketsinstitute.org.

can't access.[26] Sellers and brands cannot market to their Amazon.com customers because Amazon controls the relationship with customers.

Amazon also has control over the "buy box," the area to the right of the product description that contains the "Add to Cart" yellow button, which yields an estimated 90% of sales. "If you don't have the buy box, and you're the same price as Amazon, you get zero sales," one marketplace seller explained to me. Even if Amazon is not the exclusive seller, "there's no reason to be in the listing as a marketplace merchant if Amazon is selling it first-party," said the seller. "You basically have to liquidate your inventory."[27] Amazon is picking the winners and losers of commerce – and the winner is Amazon.

Such behavior can be especially problematic in particular markets. As the Open Markets Institute has argued extensively in recent years, one such market is books. Amazon today is the dominant marketplace for books, a provider of essential retailing and other services to just about every publisher in the United States. At the same time, Amazon is fast increasing its in-house publishing operations, meaning that Amazon finds itself with a daily increasing incentive to manipulate the interaction between authors and publishers – and readers – in ways that disfavor the books of other publishers and that favor books published by Amazon. Amazon has shown itself willing even to entirely shut down the sale of books by certain publishers for not acceding to Amazon demands. For more than six months, Amazon shut down sales of books published by Hachette. Clearly, Amazon has the capacity to use its power over publishers not only for its own financial benefit, but for its political benefit.[28]

Robert Pitofsky, former chair of the Federal Trade Commission, has pointed out that this type of monopolization can be especially dangerous. "Antitrust is more than economics," he told *The Washington Post* in 2000. If "somebody monopolizes the cosmetics fields, they're going to take money out of consumers' pockets, but the implications for democratic values are zero. On the other hand, if they monopolize books, you're talking about implications that go way beyond what the wholesale price of the books might be."[29]

The overall social and economic effects are also dangerous, in many ways. Whether Google puts its shopping competitor on page four of its search results or Amazon puts its brand or retailer

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[26] Julie Creswell, "How Amazon Steers Shoppers to Its Own Products," June 23, 2018, https://www.nytimes.com/2018/06/23/business/amazon-the-brand-buster.html; The Capitol Forum, "Amazon: EC Investigation to Focus on Whether Amazon Uses Data to Develop and Favor Private Label Products; Former Employees Say Data Key to Private Label Strategy," November 5, 2018, https://thecapitolforum.com/wp-content/uploads/2018/11/Amazon-2018.11.05.pdf.

[27] The Capitol Forum, "Amazon: Amazon at Risk of Antitrust Investigation for Working With Manufacturers to Control Prices, Foreclose Competing Sellers, and Ultimately Monopolize Direct Sales of their Products on its Platform," March 7, 2017, http://createsend.com/t/j-60990BCFC736F15D.

[28] David Streitfeld, "Accusing Amazon of Antitrust Violations, Authors and Booksellers Demand Inquiry," July 13, 2015, https://www.nytimes.com/2015/07/14/technology/accusing-amazon-of-antitrust-violations-authors-and-booksellers-demand-us-inquiry.html; Open Markets Institute, "Open Markets, Authors United Letter to DOJ Regarding Amazon," May 6, 2018, https://openmarketsinstitute.org/testimony_letter/open-markets-authors-united-letter-doj-regarding-amazon/.

[29] Alec Klein, "A Hard Look at Media Mergers," *The Washington Post*, November 29, 2000, https://www.washingtonpost.com/archive/business/2000/11/29/a-hard-look-at-media-mergers/d8380c2d-92ee-4b1b-8ffd-f43893ab0055/.

competitors at the bottom of its search rankings, the result is the same. The giants are taking their monopolies in one market and leveraging them to take over new markets that depend on their platforms, making competition impossible. They claim monopolies for themselves in the secondary markets, while maintaining and growing their monopoly power in their primary markets. In the process, these platforms crush entrepreneurs and businesses of all sizes. Employees of those businesses lose jobs or get paid less. And this monopoly dynamic degrades the quality of offerings to consumers, who should get the most relevant product search results, not results that prioritize Amazon's or Google's profits.

The problem is getting worse fast. As Amazon rolls out Alexa in 100 million devices, it's creating an entirely new and extreme version of platform privilege. With its "Alexa everywhere" program, Amazon aims to be the platform that pervades every aspect of our lives, from our appliances, to our cars, to every room in our houses. This provides countless opportunities for Amazon to favor its own products and services. Scott Galloway, a professor in New York University's Stern School of Business, conducted an experiment in which he asked Alexa for batteries, and the one answer Amazon provided was its own Amazon Basics brand of batteries. The problems of Amazon and Google putting themselves first in search results will intensify when voice search brings only one search result or a small number of results. Forget about being on page four of Google search or the bottom of Amazon's search ranking – if your product or business is not answer number one, two, or three in a voice search, your business might as well not exist.

Like Google, Amazon can also take other people's businesses and ideas almost at will. Amazon can see that a product is selling well because Amazon has all the data on product sales and customers, so Amazon can easily cut innovators out of the equation and make the product itself. Amazon can put its product at the top of the search results. Its product can quickly amass positive reviews because Amazon controls the ratings program. Amazon can give its knock-off product premium advertising space not available to the original innovator, and it can precisely target potential buyers of the product based on the innovator's customer data, the data of other companies that sell on its platform, and the data Amazon has collected on Amazon Prime members.[30] For example, an innovative laptop stand company one day discovered that its sales had plummeted, after Amazon began to rank its own imitation stand above the company's product in Amazon search results.[31]

When Amazon launches a house-brand product, the effect is different from the long-standing practice of stores making their own generic versions of other products. In the case of a retailer that is not dominant, such as a store with many competitors, the act of introducing house-brand products does not violate the antitrust laws, because the store does not have the ability to leverage monopoly power to sell that product. The products that are put into competition with the house-brand product are not harmed in the overall marketplace, because there are many other stores available to sell those products. In other words, the types of conduct that are exclusionary

[30] Karen Weise, "Prime Power: How Amazon Squeezes the Businesses Behind Its Store," *The New York Times*, December 19, 2019, https://www.nytimes.com/2019/12/19/technology/amazon-sellers.html.
[31] Spencer Soper, "Got a Hot Seller on Amazon? Prepare for E-Tailer to Make One Too," *Bloomberg*, April 20, 2016, https://www.bloomberg.com/news/articles/2016-04-20/got-a-hot-seller-on-amazon-prepare-for-e-tailer-to-make-one-too.

and illegal when a firm has monopoly power are not illegal when a firm does not have monopoly power.

Not only does Amazon have monopoly power over the platform, but Amazon also controls the data about its competitors' businesses and customers. A former Amazon employee told me that, in his view, the most valuable data Amazon collects is who has searched for a particular product in the past. This "consideration data" allows Amazon to "target their private label products with perfect precision," he said.

In addition to Amazon's ability to see how many units of each product sell at a particular price point and to whom, the former employee told me that its "discount provided by Amazon" practice allows it to "conduct a controlled experiment" on third-party sellers' products. In November 2018, *The Wall Street Journal* reported that Amazon was discounting prices for products offered by third-party sellers without their knowledge or consent. Amazon would subsidize the discount and pay a refund to the seller, who had no ability to opt out of the discounting program.[32]

The discounting practice allowed Amazon to get price sensitivity data on products that Amazon does not itself sell, the past employee explained. Amazon could learn, for instance, that "if we raise the price a dollar, we get this demand, and here's the demand at a lower price point," to precisely identify the optimal price point to launch Amazon's own version of the product, the former employee explained. Entrepreneurs and businesses of all sizes don't have access to comparable data and cannot fairly compete against Amazon. And because these entrepreneurs cannot survive without putting their products on Amazon's platform, these entrepreneurs are forced to hand over their proprietary business information to their competitor.

Importantly, the tactics that Amazon employs to harm competition on its e-commerce platform are really only one part of the problem. Amazon pulls similar strings in its cloud computing arm, Amazon Web Services (AWS), to co-opt innovations of others, reports *The New York Times*. "It has given an edge to its own services by making them more convenient to use, burying rival offerings and bundling discounts to make its products less expensive," *The Times* reported. Some in the software community call what Amazon does "strip-mining." Yet, the same as Amazon's e-commerce marketplace, rivals don't feel that they have a choice to walk away from AWS because of its market power.[33]

E. Apple Self-Preferencing

Apple has monopoly power in its App Store because there's no real substitute for the App Store for owners of iPhones, iPads, and Apple Watches. As Apple grows into additional lines of business, it exerts platform privilege. Apple has been accused of discriminating against Spotify

[32] Laura Stevens, "Amazon Snips Prices on Other Sellers' Items Ahead of Holiday Onslaught," November 5, 2017, https://www.wsj.com/articles/amazon-snips-prices-on-other-sellers-items-ahead-of-holiday-onslaught-1509883201.
[33] Daisuke Wakabayashi, "Prime Leverage: How Amazon Wields Power in the Technology World," *The New York Times*, https://www.nytimes.com/2019/12/15/technology/amazon-aws-cloud-competition.html.

and giving favorable treatment to Apple Music.[34] Spotify recently sued Apple in Europe, arguing that Apple has leveraged its platform dominance to distort competition with unfair app store terms.[35]

The general counsel of Tile, a software and hardware company that helps people find misplaced items, made similar claims when testifying before the House Judiciary Committee in January 2019.[36] Apple launched an app called FindMy that competes directly with Tile. Apple pre-installs this app and makes it impossible to delete, giving Apple the benefit of default bias. Apple pulls other anticompetitive levers to disadvantage Tile, according to the testimony. This includes kicking Tile's products out of Apple's physical stores, making Tile harder to find on the iPhone, and making it difficult for consumers to enable their Tile devices. As Apple plans to enter more and more markets, including streaming TV, credit cards, and online gaming, Apple's practice of simultaneously umpiring the game and playing in the game can only increase.[37]

Every time Apple introduces a new version of its iPhone operating system iOS or its Mac operating system OS X, it incorporates the features of the most popular apps that other innovators built.[38] Apple has been doing this for so long that developers have named the phenomenon getting "Sherlocked."[39] That term dates all the way back to the early 2000s, when Karelia Software developed a competitor to Apple's Sherlock search tool and named it Watson. Apple simply added Watson's functionality into the next version of Sherlock, killing its rival Watson.[40]

Apple's App Store accounts for 65% of global app revenue.[41] Much like Amazon does for product innovators, Apple represents an essential platform that controls access to the sales necessary for an entrepreneurs' businesses to survive.

In the recent case *Apple v. Pepper*, the U.S. Supreme Court ruled that consumers have the right to sue Apple for charging them a 30% commission on every app sale.[42] The plaintiffs are consumers who argued that Apple used its monopoly power to charge them more for their iPhone apps than they would have paid in a competitive market. They argued that, when app

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[34] Daniel Ek, "Consumers and Innovators Win on a Level Playing Field," March 13, 2019, https://newsroom.spotify.com/2019-03-13/consumers-and-innovators-win-on-a-level-playing-field/.
[35] Id.
[36] Testimony of Kirsten Daru, Chief Privacy Officer and General Counself for Tile, Inc, On Online Platforms and Market Power Part 5: Competitors in the Digital Economy, Before the House Committee on the Judiciary, Subcommittee on Antitrust, Commercial and Administrative Law, January 17, 2020, https://docs.house.gov/meetings/JU/JU05/20200117/110386/HHRG-116-JU05-Wstate-DaruK-20200117.pdf.
[37] Id.
[38] Buster Hein, "8 Apps Apple Killed Today at WWDC," *Cult of Mac*, June 10, 2013, https://www.cultofmac.com/231121/seven-apps-apple-killed/.
[39] Mikey Campbell, "F.lux Says It is 'Original Innovator' of Nighttime Display Colortech, asks Apple to Open Night Shift API," *Apple Insider*, January 14, 2016, https://appleinsider.com/articles/16/01/14/flux-says-it-is-original-innovator-of-nighttime-display-color-tech-asks-apple-to-open-night-shift-api.
[40] William Gallagher, "Developers Talk About Being 'Sherlocked' as Apple Uses Them 'for Market Research,'" June 6, 2019, https://appleinsider.com/articles/19/06/06/developers-talk-about-being-sherlocked-as-apple-uses-them-for-market-research.
[41] Craig Chapple, "Global App Revenue Grew 23% Year-Over-Year Last Quarter to $21.9 Billion," *Sensor Tower*, October 23, 2019, https://sensortower.com/blog/app-revenue-and-downloads-q3-2019.
[42] *Apple, Inc. v. Pepper*, 587 U.S. __ (2019), https://www.supremecourt.gov/opinions/18pdf/17-204_bq7d.pdf.

prices go up, iPhone users are unlikely to switch to an Android phone, so the Android app store doesn't meaningfully constrain the commission that Apple can charge.[43] Like other tech giants, Apple extracts revenue on its own terms because it lacks competition. In 2018, this 30% tax – the so-called Apple tax – brought in nearly $14 billion of revenue for Apple.[44]

Because users and developers of iPhone apps must go through Apple's bottleneck, Apple dictates the terms under which iPhone owners purchase apps and under which iPhone app developers sell their apps. Apple can remove iPhone apps from the App Store and thereby the market as it wishes.[45] Open Markets argued in its amicus brief that, under long-standing Supreme Court precedent, iPhone users have the right to bring suit against Apple for harms caused by this retail monopoly.[46] The court decision, in agreement with our amicus brief, states that purchasers and sellers injured by a monopolist have the right to seek damages: *"A retailer who is both a monopolist and a monopsonist may be liable to different classes of plaintiffs… when the retailer's unlawful conduct affects both the downstream and upstream markets."*[47]

The Court noted the possibility that "app developers will also sue Apple on a monopsony theory."[48] Monopsony is a huge problem in an economy where tech giants serve as gatekeepers that set the terms and conditions for suppliers and creators to do business. App developers can't negotiate the 30% Apple Tax that is charged to buyers of apps, nor do they have the power to stop Sherlocking.

F. Facebook Self-Preferencing

Facebook picks the winners and losers of internet content. It favors content that most serves its $1-billion-per-week targeted advertising business model, to the detriment of a freely competitive marketplace of ideas and democracy.

Facebook's behavior causes many economic and political problems.

One of the most egregious is that Facebook manipulates information and news flows in ways that have been proven to actually *boost* disinformation and hateful content. The source of the problem is simple: In order to keep users on the platform longer, the corporation's algorithms prioritize "engagement" (i.e. clicks, likes, comments, and shares). Content that provokes fear and

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[43] European Commission, "Antitrust: Commission fines Google €4.34 Billion for Illegal Practices Regarding Android Mobile Devices to Strengthen Dominance of Google's Search Engine," July 18, 2018, https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4581.
[44] Craig Chapple, "Global App Revenue Grew 23% Year-Over-Year Last Quarter to $21.9 Billion," *Sensor Tower*, October 23, 2019, https://sensortower.com/blog/app-revenue-and-downloads-q3-2019
[45] Andrew Liptak, "Apple Explains Why It's Cracking Down on Third-Party Screen Time and Parental Control Apps – Following the Debut of Its Own Screen Time App," *The Verge*, April 28, 2019, https://www.theverge.com/2019/4/27/18519888/apple-screen-time-app-tracking-parental-controls-report.
[46] Brief of *Amicus Curiae* Open Markets Institute in Support of Respondents, *Apple, Inc. v. Pepper*, U.S. Supreme Court, filed October 1, 2018, available at https://openmarketsinstitute.org/amicus_briefs/open-markets-institute-files-amicus-brief-supreme-court-support-iphone-owners-challenging-apples-retail-monopoly-iphone-apps-2/.
[47] *Apple, Inc. v. Pepper*, 587 U.S. __ (2019), https://www.supremecourt.gov/opinions/18pdf/17-204_bq7d.pdf.
[48] *Id.*

anger – the most incendiary content – "engages" humans the most.[49] Much the same set of problems occur on Google's YouTube video platform.

As people spend more time on Facebook and YouTube's platforms, the platforms collect more data, they show more ads, and they make more money. Giving incendiary content top priority best serves Facebook and YouTube's business models because "engagement" makes them the most money. Their amplification of hateful content is not an inevitability of the internet or human nature. It's just a business decision, to prefer content that generates the most profits under a chosen business model.

One reason Facebook and YouTube can get away with this is because they lack competitive constraint. If competition existed among algorithms and the way content is prioritized and delivered, then users could choose platforms that don't worsen anxiety and polarization. An even more fundamental reason is that these monopolies are not constrained by the sorts of common carriage rules that U.S. citizens have applied to all previous providers of essential commercial and communications services. This leaves platform monopolists with a de facto license to manipulate sellers and buyers by providing individuals with different pricing and terms for the same services, or with different service for the same price.

Facebook also uses its control of infrastructure to spy on competitors. In 2013, Facebook bought an app called Onavo that allowed it to detect early competitive threats, so Facebook could buy them or build its own versions.[50] After reviewing internal Facebook documents it had seized from a plaintiff in a private lawsuit against Facebook, the U.K. Parliament concluded: "Facebook used Onavo to conduct global surveys of the usage of mobile apps by customers, and apparently without their knowledge. They used this data to assess not just how many people had downloaded apps, but how often they used them. This knowledge helped them to decide which companies to acquire, and which to treat as a threat."[51]

In the documents, one executive was explicitly worried about mobile messaging apps as a competitive threat, and the executive used Onavo data to identify WhatsApp as Facebook's biggest competitor. Onavo data revealed that WhatsApp was sending more than twice as many messages per day as Messenger.[52]

As with the other tech giants, entrepreneurs trying to compete against Facebook don't get to compete on merits in open markets. Facebook has a history of taking entrepreneurs' ideas when

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[49] Tobias Rose-Stockwell, "This is How Your Fear and Outrage are Being Sold for Profit," *Quartz*, July 28, 2017, https://qz.com/1039910/how-facebooks-news-feed-algorithm-sells-our-fear-and-outrage-for-profit/; Marcia Stepanek, "The Algorithms of Fear," *Stanford Social Innovation Review*, June 14, 2016, https://ssir.org/articles/entry/the_algorithms_of_fear.

[50] Elizabeth Dwoskin, "Facebook's Willingness to Copy Rivals' Apps Seen As Hurting Innovation," *The Washington Post*, August 10, 2017, https://www.washingtonpost.com/business/economy/facebooks-willingness-to-copy-rivals-apps-seen-as-hurting-innovation/2017/08/10/ea7188ea-7df6-11e7-a669-b400c5c7e1cc_story.html.

[51] Damian Collins MP, Chair of the UK Parliament Digital, Culture, Media and Sport Committee, "Summary of Key Issues from Six4Three Files," December 2018, www.parliament.uk/documents/commons-committees/culture-media-and-sport/Note-by-Chair-and-selected-documents-ordered-from-Six4Three.pdf.

[52] Charlie Warzel and Ryan Mac, "These Confidential Charts Show Why Facebook Bought WhatsApp," *BuzzFeed News*, December 5, 2018, https://www.buzzfeednews.com/article/charliewarzel/why-facebook-bought-whatsapp.

they refuse to sell their companies to Facebook. *The Wall Street Journal* reported that Facebook CEO Mark Zuckerberg met with the founders of Snapchat and Foursquare and gave them two options: "either they accept the price he was offering for their companies, or face Facebook's efforts to copy their products and make operating more difficult." Small businesses and newspapers, too, can find their fortunes changed by the flip of a switch, when Facebook makes algorithmic changes that harm their ability to reach their customers and that keep users within Facebook's digital walls.

III. Solutions

Some say tech markets are "winner take all" or monopolistic by nature, and they point to a principle called "network effects." Network effects arise when a user's value from a product increases based on the number of other people who also use it. People want to be where their friends are, for example. A social network without a user's friends isn't much use.

But the same was true for the AT&T monopoly. A phone network would serve no purpose if people couldn't call their friends. Instead of just writing off the phone market as "winner take all," the government applied common carrier rules to AT&T, as it had to the telegraph companies earlier. The government, early in the last century, also required AT&T to connect to other networks, much in the same way that it required large railways to connect to short lines. These requirements are known as interoperability requirements. Much later in AT&T's life, in 1982, the government also broke up the monopoly.

By allowing illegal acquisitions and illegal monopolization, and by abandoning rules and regulations designed to neutralize and/or decentralize communications networks, the government cleared the way for private corporations such as Google and Amazon to monopolize many markets. This was not inevitable; these were policy choices. Congress can now make the opposite choice and start reviving the American Dream.

The goals of reinvigorated antitrust enforcement should be to open the gates of competition to new innovators, to decrease market concentration, to restore dynamism by halting illegal monopolization that kicks competitors out of the game, and to ensure the basic rule of law for all sellers and buyers. Antitrust enforcement should reduce chokepoints so that maximum innovation can occur. Entrepreneurs with new and better business models are waiting in the wings. Antitrust enforcement should aim to enable these new startups to compete and to bring their innovations to users.

Congress and law enforcers can take a number of actions that will help achieve these goals. These include:

A. Stronger Enforcement and Standards Against Exclusionary Conduct

Enforcers need to bring more monopolization cases, such as *United States v. Microsoft*, against anticompetitive conduct. Congress should strengthen rules against exclusionary conduct, as Sen. Amy Klobuchar proposes in her new bill. Legislation should also overrule the procedural

obstacles that courts have erected to limit who can sue under the antitrust laws and under which circumstances they can sue.

Legislators should aim to remove complexity and make antitrust cases easier, faster and cheaper. Anyone seeking to claim their right to a competitive marketplace has to spend millions of dollars to hire economic experts. Monopolists' victims can rarely afford to sue them, and this enormous expense also affects enforcers' calculus of whether or not to bring cases.

B. Structural Separation

I support a solution that has been advanced by Sen. Elizabeth Warren and antitrust scholar Lina Khan: structurally eliminate the platforms' conflicts of interest and remove their incentive and ability to self-preference.[53] Otherwise, enforcers will lose at a game of whack-a-mole, unable to monitor and enforce against almost limitless opportunities for self-preferencing. Such a structural solution is not a novel concept. As Lina Khan writes in *Separations of Platforms and Commerce*, the U.S. has used structural separation as a standard regulatory tool in industries such as railroads, banking, telecommunications, and TV. Separation could be the remedy in monopolization cases, but a quicker and clearer route would be for Congress to require separation through legislation.

C. Nondiscrimination and Neutrality

Congress should also require the platforms to offer equal access on equal terms to all, just as has been done with railroads, buses, airlines, pipelines, electricity, and hotels, to name a few. Otherwise, the platforms will still control the competitive playing field and extract tolls from companies that must use their infrastructure.

Tech platforms that provide essential communications and information services should be subject to rules that prohibit discrimination in price or terms, which we have repeatedly applied to network monopolies in our history. From the post office to the telegraph to cable TV, American government has required nondiscrimination policies to protect the free press and democracy.

Non-discrimination and neutrality will be increasingly important as platform monopolists continue to roll out algorithms that can discriminate on price and terms by virtue of their personalization. The separation of platforms from commerce will reduce the incentives to discriminate but not eliminate them, so neutrality principles would still be required in the event of such separation or a monopoly breakup of any kind. Nondiscrimination can be executed through legislation, and it can also be a remedy in monopolization cases, with the latter approach being more piecemeal.

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[53] Elizabeth Warren, "It's Time to Break Up Amazon, Google, and Facebook," *Medium*, March 8, 2019, https://medium.com/@teamwarren/heres-how-we-can-break-up-big-tech-9ad9e0da324c; Lina Khan, "The Separation of Platforms and Commerce," 119 *Columbia Law Review* 973, May 28, 2019. Available at SSRN: https://ssrn.com/abstract=3180174.

D. Merger Enforcement

Antitrust enforcers need to be more aggressive about suing to block mergers of all kinds, but particularly acquisitions of competitive threats. Tech platforms, for instance, are acquiring companies that pose competitive threats to them, often while still in their infancy, sometimes using their control of infrastructure to identify such threatening upstarts when they are new and small. The deals barely even register on the radar of antitrust enforcers.

Enforcers also need to evaluate every merger involving the acquisition of data and machine learning, which may tend to lessen competition or fortify monopoly power.

The Open Markets Institute has called for temporary bans on acquisitions by the biggest platform monopolists. In November 2017, for example, OMI wrote to the FTC requesting that the FTC: conduct a thorough review of Facebook's dominance in social networking and online advertising; assess the hazards that this dominance poses to commerce and competition, basic democratic institutions, and national security; and issue recommendations on how to address these threats. OMI asked the FTC to adopt a presumptive ban on all acquisitions by Facebook until it completed the requested review.

Enforcers should also unwind illegal mergers that they didn't catch.

Enforcers, for example, should undo Facebook's acquisitions of WhatsApp and Instagram as violating the Clayton Act's prohibition of acquisitions where the effect "may be substantially to lessen competition, or to tend to create a monopoly." The European Commission has already fined Facebook for saying during the merger review that it would not merge WhatsApp's data with Facebook's data, and then doing it anyway. Since then, WhatsApp co-founder Brian Acton admitted to being coached to tell European regulators that merging data would be difficult.[54] It's highly likely that bad faith representations were similarly made to the FTC.

Antitrust enforcers should also sue to block more vertical mergers. The Open Markets Institute recently filed comments on the FTC's proposed vertical merger guidelines. The comments argued the proposed guidelines have fundamental deficiencies, and the comments set forth recommendations for more and stronger bright-line standards.

Congress could also shift the burden of proof to the merging companies: Instead of the government having to prove a merger is anti-competitive, the companies should have to prove that a merger is good for competition. Our economy is so concentrated that mergers are more likely than not to be anti-competitive, and a major course correction is needed.

E. Privacy

[54] Parmy Olson, "Exclusive: WhatsApp Cofounder Brian acton Gives the Inside Story on #DeleteFacebook and Why He Left $850 Million Behind," *Forbes*, September 26, 2018, https://www.forbes.com/sites/parmyolson/2018/09/26/exclusive-whatsapp-cofounder-brian-acton-gives-the-inside-story-on-deletefacebook-and-why-he-left-850-million-behind/#2165dc6d3f20.

Strong privacy rules – not crafted by lobbyists for the platform monopolists – would not only protect Americans from ubiquitous surveillance, but would also level the competitive playing field, because data are a main source of dominance.

America's privacy crisis derives largely from a failure to regulate digital platforms as the networked middlemen monopolists that they are.[55] This has left these corporations free to use their immense power as monopolists, along with the vast caches of private information that they collect from their customers, in ways that no previous networked middleman monopolist was allowed to do. The result has been disastrous not only for the privacy of all Americans, but for our freedom of speech, freedom of the press, freedom of commerce, and system of free elections.

There is nothing new about technologically advanced network middleman monopolies. Americans have been dealing with the power of complex communications, transportation, and financial networks for two centuries. In every instance, a major component of the power of these networks was their access to secret information about the lives and businesses of their customers. Time and again, the masters of these corporations – in their efforts to concentrate wealth, power, and control – attempted to use private information gathered from their customers to exploit, manipulate, and even supplant their customers.

That's why, throughout American history, citizens have repeatedly applied the same simple common carriage rules to network monopolists. By prohibiting networked middlemen monopolists from discriminating among customers, and by requiring that these corporations sell the same service at the same price to every customer, such common carriage rules entirely eliminated any opportunity to exploit their positions as providers of essential services. By doing so, such rules eliminated the incentive to gather extensive private information in the first place.

Such common carriage rules were hugely successful – economically, socially, and politically. They ensured that even the most powerful communications, transportation, and financial intermediaries were incentivized to serve the public, rather than to attempt to use private information to manipulate and fleece citizens and businesses. They prevented the masters of these corporations from using their power to concentrate dangerous amounts of wealth and power.

In the case of Big Tech, however, Americans have never applied these basic rules to their operations. But the simple result is that these networked middlemen monopolies have been left entirely unrestrained by any of the regulations that have bound all other such corporations in America since its founding. Absent the restraints of common carriage rules, these corporations adopted business models based on the capture and purchase of vast caches of data about individuals and corporations, and on the use of this data to manipulate users into making certain decisions about how and where to spend their money.

There is a fundamental relationship between market power and both the ability and incentive of corporations to spy on citizens. In many instances, competition policy tools and regulatory

[55] Open Markets Institute letter to Chair Jan Schakowsky and Ranking Member Cathy McMorris Rodgers, U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Consumer Protection and Commerce, March 6, 2019, available at http://openmarketsinstitute.org.

models developed to address the power of previous networked middleman monopolists may prove to be the best method to achieve the end of protecting the privacy of American citizens and businesses. The privacy of the citizen as a producer and a seller (be it of ideas, news, art, products, services, crops, or whatever) must be protected at least as carefully as the privacy of the citizen as a buyer. The privacy of every business, no matter how small or large, must be protected in its interactions with networked middlemen monopolists.

The tried and true, traditional American method for ensuring the neutrality of networked middleman monopolists is through various forms of common carrier regulation, and the imposition of simple bright-line prohibitions against certain corporate structures and behaviors. Such regulations have proven fundamental to the protection of the privacy of citizens in their capacities both as sellers and buyers.

Antitrust enforcement against exclusionary conduct would help protect privacy, too. Pro-privacy, pro-democracy innovators just need the opportunity to break through the monopolists' gates, without being crushed by anticompetitive tactics.

F. Interoperability

Interoperability is an anti-monopoly tool that has been used successfully many times to promote innovation by reducing barriers to entering markets. Regulators and antitrust enforcers have imposed interoperability requirements against AT&T and Microsoft, opening up competition in long-distance calling, telephones, and Internet browsers.

For the platform monopolists, interoperability would allow users to authorize networks to securely communicate with one another, much like how consumers with different email providers can send emails to one another. It would help overcome the network effects barrier to entry. For example, interoperability would allow new social media platforms to communicate with Facebook's platform.

Mark Zuckerberg offered up his own set of solutions, and one of his proposals was data portability. This means that you could take your Facebook data to another platform. But data portability doesn't overcome the network effects barrier for new companies to compete with Facebook, because it would have little value to move your data to a platform that doesn't allow you to communicate with your friends.

IV. Conclusion

Our economy, businesses small and large, and consumers would all benefit from immediate action to halt platform self-preferencing. Consumers benefit from the choice, innovation, and quality that robust competition brings. Consumers are also citizens who benefit from the free flow of speech. They are the employees of companies that benefit when platform extraction ceases. And they are entrepreneurs who deserve a shot at the American Dream.

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Eyes Everywhere: Amazon's Surveillance Infrastructure and Revitalizing Worker Power

Daniel A. Hanley & Sally Hubbard

OPEN MARKETS

Contents

Executive Summary

In the age of Big Data, our lives are under constant surveillance. Tech giants, termed "surveillance capitalists" by author and Harvard Business School professor Shoshana Zuboff,[1] track our every move: our physical locations, which websites we visit, what we purchase, our social connections, what we read, our health stats—the list is endless. We are tracked as consumers, as companies use surveillance to hypertarget us with ads; we are tracked as businesspeople, as dominant companies use their control of infrastructure to peek inside businesses and gather competitively advantageous data; and we are tracked as citizens, as police departments and government agencies monitor Americans under the guise of protection. But a form of surveillance that has received less attention—and that remains deeply opaque—is the way we are tracked as workers, as employers leverage new technologies to increase their power and control over their employees.

Employer surveillance of workers is nothing new. Even requiring workers to punch a timecard is a form of surveillance. But employers are increasingly finding new ways to watch over their workers, aided by developments in technology. And the methods that corporations are using are growing more and more invasive, often denying the basic humanity of employees. COVID-19 has accelerated the surveillance of workers, as it caused a shift to remote working for a large number of employees and a desire to track workers wherever they may be. But when the pandemic finally passes, the technologies that surveil workers will likely be here to stay.

Today, workers of all kinds endure the adverse effects of pervasive and constant employer surveillance that monitors and controls their working day. Employees often must accept how their employer chooses to surveil them and typically do not have any input to limit how their employer uses these technologies.[2]

Significant advances in technology have greatly expanded the capability, severity, methodology, frequency, and precision of employer surveillance.[3] Employers have even become interested in the most mundane behaviors of their workers, such as the length of their smoking and food breaks, to evaluate their overall productivity.[4]

Sophisticated surveillance technologies have only exacerbated the power gap between employer and employee. In conjunction with the steep decline in

unionization in the United States since the 1950s,[5] employees have even less bargaining power to protect their interests. Workers lack bargaining power to sufficiently fight invasive forms of surveillance, and surveillance is even being used to deter and prevent unionization.

Leading the troubling trend of worker surveillance is one of the world's most powerful companies: Amazon. Amazon is the dominant online retailer in the United States, accounting for almost one out of every two dollars spent online.[6] Beyond e-commerce, Amazon also maintains a commanding presence in many other markets spanning voice assistants, digital books, smart doorbells, and cloud computing.[7]

But make no mistake about it—Amazon is first and foremost a surveillance company. Data collection is the core of its business model, no matter what the business line. Amazon surveils consumers, competitors, citizens, and immigrants, and it invasively and ubiquitously surveils its employees.

Amazon employed approximately 840,000 people as of April 2020,[8] so its practices have widespread impact. And the tech platform's surveillance operations now serve as a model for other corporations, which seek to adopt similar technologies to try to stave off Amazon or to emulate its continual expansion of market shares.

Reports indicate that Amazon's relationship with many of its employees consists of control, humiliation, and unabating anxiety.[9] Employees have described Amazon as creating a "'Lord Of The Flies'-esque environment where the perceived weakest links are culled every year."[10] Other employees have described that Amazon treats its workers like "zombies" and "robots," ordered to work at a relentless pace and in the specific manner that Amazon requires its tasks to be completed.[11]

In this paper, we discuss the various methods and tactics that Amazon implements to surveil its workers and how these surveillance operations harm them. We also detail how surveillance is tied to employer power over workers and how surveillance exacerbates the inherently unequal dynamics among corporations and their employees. Furthermore, we propose several solutions to reduce surveillance practices and their consequences, as well as reduce the market power that facilitates surveillance and limits employees' job opportunities and bargaining power.

Worker surveillance is almost wholly unregulated and opaque, and thus requires further study to refine the potential solution set. But regulating surveillance,

increasing worker power, and reducing overall corporate power is a starting point. We propose:

- Invasive forms of worker surveillance should be prohibited outright, with employers bearing the burden of obtaining approval from state and federal agencies for noninvasive tracking measures that do not harm worker welfare.

- The NLRB should promulgate a rule prohibiting forms of surveillance that presumptively interfere with unionization efforts.

- Congress should permit independent contractors to unionize.

- Congress should legalize secondary boycotts and other solidarity actions.

- The FTC and DOJ should amend the merger guidelines to enact bright-line enforcement rules.

- The FTC should ban noncompete agreements and class action waivers.

I. Introduction

This report examines Amazon's surveillance operations as a troubling example of the broader conduct taking place in the American economy, conduct that is the byproduct of years of consolidation of corporate power and the simultaneous decline of worker power. Gaps in our laws have allowed employers to implement a vast range of surveillance technologies with few legal repercussions. Shoshana Zuboff has stated that the workplace is "where invasive technologies are normalized among captive populations of employees."[12] Studying and understanding the degree of power exerted over workers has direct implications for how these technologies can be used by corporations or even the government over the population at large.[13]

To be sure, employers may have legitimate purposes for keeping track of their employees, such as measuring performance to reward with bonuses or raises those who excel.[14] But surveillance significantly affects how employees engage with their work and behave in the workplace; the phenomenon is so well documented that it has a name: the Hawthorne Effect.[15] Among the psychological effects is the distrust often created between workers and employers because of the implied condition that employers are surveilling employees because employers suspect that employees might be engaged in nefarious behavior.[16] Workers may not be able or even desire to build relationships with each other, out of fear that they are not performing in the most efficient and productive way.[17] Due to increased stress and anxiety, surveillance can also reduce worker productivity and increase their probability of injuring themselves, as workers will skip needed breaks when they know their employer is monitoring them.[18]

Beyond the psychological effects, this growing trend among American corporations causes several other severe harms to workers, their safety, and their ability to advocate for better working conditions. Such invasive techniques risk being used by employers to limit worker freedom, ensure full compliance with employer-demanded standards, squeeze every ounce of efficiency out of a worker, as well as deter, interfere with, and ultimately chill collective worker action.[19]

Henry Ford hired Harry Bennett to run the Ford Service Department to deter and mitigate—in many cases with physical force—any efforts to unionize.[20] However, now that the modern workplace substantially relies on email, computers, internet access, and the use of other electronic devices,

the ability of employers to surveil their employees has never been easier, more imperceptible, or more invasive. And workers endure the adverse effects of surveillance, with little recourse.[21]

Critics note that opting out of surveillance today is as difficult as opting out of "electricity, or cooked foods,"[22] and the workplace has turned into a digital panopticon.[23] Between 2015 and 2018, 50% of 239 companies surveyed used some form of employee surveillance, according to a 2019 survey by Gartner.[24] This number was expected to increase to 80% in 2020.[25] Corporate practices have gotten so invasive that one of America's leading security experts, Bruce Schneier, stated that employers are "the most dangerous power that has us under surveillance."[26]

No employee is immune to expanding corporate surveillance. A range of software products captures an employee's screen and keystrokes, which are used by employers to determine the worker's overall "intensity score."[27] Sales for this type of software have surged since the onset of the COVID-19 pandemic.[28] Two prominent software companies saw their surveillance software sales spike 500% and 600% between March and June of this year.[29]

Although most employees understand that their employers are tracking them, they often lack insight into how invasive these applications are and how their employers use the collected information. Surveillance company CEOs are clear about which aspects of an employee's day are monitored by their software. Sam Naficy, the CEO of Prodoscore, which produces surveillance software installed on employees' computers, simply stated, "All of it is recorded."[30] Other surveillance programs can be used by employers to judge a worker's performance. For example, software by Microsoft allows employers to know how much time an employee spends emailing or in meetings.[31] All calls can be digitally recorded and reviewed to judge for a worker's quality, tone, and engagement.[32]

The employer-employee relationship inherently favors the employer.[33] Employees are typically dependent on their labor to produce their income. Employers, on the other hand, can leverage their customer base as well as the financial size and geographic scale of their operations to mitigate the risk that any one employee can pose to the company and its operations. Furthermore, employers can impose, as a condition of employment, other restrictive practices that impede labor mobility, increase employer control, and weaken an employee's workplace rights. For example, noncompete agreements and mandatory arbitration clauses restrict employees' ability to seek other, potentially better employment, and prevent employees from using a public judicial forum to redress their grievances.[34]

A troubling trend has emerged during the past decade, as employers have extended their surveillance beyond what any employer could reasonably justify—and Amazon is the quintessential offender.[35] Amazon has adopted worker surveillance technologies in nearly every aspect of its operations, creating exceptionally oppressive conditions for its workers.

Giving homage to Brad Stone's famed description of Amazon as "The Everything Store,"[36] OneZero journalist William Oremus has said that, thanks to its relentless surveillance, Amazon should be called "The Everywhere Store."[37] Amazon's recent surveillance efforts indicate that the corporation is eager to live up to this title. In June 2019, Amazon patented its "surveillance as a service" system, which will use its fleet of delivery drones to monitor the homes of its users to check for break-ins and package theft.[38]

"It makes me afraid, mentally and physically exhausted," Hibaq Mohamed, who works as a stower at an Amazon warehouse in Minneapolis,[39] told us of the constant monitoring on the job. Mohamed, who is a worker-leader with the Awood Center, shared with us her experiences with the Amazon surveillance tactics detailed in this report.

In this paper, we discuss the methods and tactics that Amazon uses to surveil its workers, and how these surveillance operations harm them. We also explain how surveillance exacerbates the inherently unequal dynamic among employers and workers. Among many adverse effects, surveillance enhances corporate power by endangering worker health and well-being, intensifies precarity, provides corporations with the ability to block unionization, and is at risk of even more widespread adoption and normalization. Finally, we propose measures to begin to rebalance power away from dominant employers and back to employees, with the goal of ultimately reducing surveillance practices and their consequences.

II. Amazon's Worker Surveillance Infrastructure

Employer surveillance is not a new phenomenon,[40] but, due to the increasing sophistication of technology, the desire for increased control over workers, and declining costs, worker surveillance has begun to intensify. Among other things, surveillance can be used by employers to standardize tasks, automate jobs, and make rigid an employee's work.[41] Although not all worker surveillance adversely affects workers or degrades their working conditions,[42] employers have consistently incorporated ever more invasive means to track their employees, to obtain unprecedented insight into employee behavior.

Amazon uses its surveillance infrastructure to control and monitor the output and behavior of its employees. Upon entering the warehouse, Amazon requires workers to dispose of all of their personal belongings except a water bottle and a clear plastic bag of cash.[43] During the workday, Amazon surveils warehouse employees with an extensive network of security cameras that tracks and monitors a worker's every move.

Amazon installs numerous surveillance cameras in its warehouses in part to prevent and deter theft. However, Amazon uses the recorded footage to display—on large television sets visible to many employees in the warehouse—former employees who were caught stealing and whom Amazon subsequently terminated or arrested.[44] Veterans of the security industry are even astonished by the extent of Amazon's practices. One retail security veteran stated he had "never heard of anything" quite like Amazon's practices.[45]

Amazon has also recently integrated its security cameras with sophisticated artificial intelligence to monitor and track employee movements. These cameras, called Distance Assistants, are to ensure that employees are complying with social distancing requirements during the COVID-19 pandemic.[46]

At the end of their workday, warehouse employees are thoroughly screened to ensure that they did not steal any items from Amazon's warehouses. For many workers, the time spent in these mandatory screenings is not compensated and requires waiting times that can range from 25 minutes to an hour.[47]

Amazon has also set up vast surveillance operations to ensure that every aspect of a worker's tasks is optimized, so the corporation can extract as much labor from workers as possible.

Using item scanners,[48] Amazon sends out orders to its workers to complete a task, such as retrieving an item to be packaged and sent to a customer. However, Amazon's item scanners also count the number of seconds between each task assigned to the worker. When employees fall behind Amazon's chosen productivity rate (e.g., packages processed per hour), software in the scanners reprimands the employees who spend too much "time off task" (TOT)—including issuing warnings and even terminating the employee.

Amazon's surveillance of its workers extends outside its warehouses, as well. Navigation software, called the Rabbit or Dora,[49] is used to recommend and monitor routes for delivery drivers (even though in many cases they are independent contractors).[50] The software tracks a worker's location, to ensure that the driver always takes the route chosen by Amazon. Amazon programs the software to minimize worker freedom and individual decision-making. For example, the software only factors in 30 minutes for lunch and two separate 15-minute breaks during the day.[51] Amazon further demands that employees deliver 999 out of every 1,000 packages on time or face termination.[52] Amazon's surveillance thus drives not only which tasks are completed by workers, but the manner and rate in which they are completed.

Amazon has vast ambitions to expand its surveillance and control over its workers. Amazon patented a wristband that "can precisely track where warehouse employees are placing their hands and use vibrations to nudge them in a different direction."[53] The patent states that "ultrasonic tracking of a worker's hands may be used to monitor performance of assigned tasks."[54]

III. How Surveillance Harms and Controls Workers

Amazon's surveillance infrastructure has a wide range of adverse effects on its workers. Amazon's surveillance practices endanger workers' mental and physical health, increase precarity, deter unionization efforts—and yet might well be normalized and adopted widely.

A. ENDANGERING WORKERS' MENTAL AND PHYSICAL HEALTH

Amazon's relationship with its employees consists of control, humiliation, and unabating anxiety, according to reports.[55] Employees have described Amazon as creating a "'Lord Of The Flies'-esque environment where the perceived weakest links are culled every year."[56]

Amazon's workers are under constant stress to make their quotas for collecting and organizing hundreds of packages per hour.[57] Amazon monitors an employee's time off task, or TOT (i.e., the time spent not completing the task assigned by the worker's item scanner), and will automatically terminate the employee for making merely a few missteps.

For employees, the TOT scanners create the psychological effect of a constant "low-grade panic" to work.[58] In this sense, workers are dehumanizingly treated by Amazon as if they are robots—persistently asked to accomplish task after task at an unforgiving rate.[59] Put another way, workers say that this degree of control turns them into "zombies" when they enter the Amazon facility and start their shifts.[60]

Mohamed explained to us that she and her colleagues are routinely evaluated for performance on the basis of hitting their "rate" of packing, stowing, or picking, based on their particular role. But, she said, "We don't know what the rate is—they change it behind the scenes. You'll know when you get a warning. They don't tell you what rate you have to hit at the beginning."

The resulting pressure and anxiety do not cease when the workday ends. Hibaq explained: "I feel—and a lot of workers, they feel, even when they're sleeping—that they're docking to try and hit their rate. Because they're worried about next week what's going to happen; you don't know what's going to happen. I don't

know what I finished this week. Next week if I hit the rate, if the rate will change. And managers are watching you and coming to you all the time. You feel like someone is watching you while you are sleeping."

Amazon employees feel forced to work through the pain and injuries they incur on the job, as Amazon routinely fires employees who fall behind their quotas, without taking such injuries into account.[61] An investigation of Amazon's workplace injuries by the Center for Investigative Reporting found that Amazon's rate of severe injuries in its warehouses is, in some cases, more than five times the industry average.[62] Amazon's surveillance capabilities allow the corporation to extract every ounce of productivity from their workers, increasing the probability of worker injuries. A former safety manager, who works at a third-party service to deliver medical services at Amazon's warehouses, said that "If [workers] had an injury … there was no leniency; you were expected to keep that rate."[63]

One employee remarked that she "wasn't prepared for how exhausting working at Amazon would be."[64] In describing the pain she experienced trying to meet Amazon's demanding work pace, the employee said, "It took my body two weeks to adjust to the agony of walking 15 miles a day and doing hundreds of squats. But as the physical stress got more manageable, the mental stress of being held to the productivity standards of a robot became an even bigger problem."[65]

Mental health problems are pervasive among workers. Among 46 warehouses in 17 states, 189 calls for emergency services were made between 2013 and 2018 for a variety of mental health incidents, including suicide attempts, suicidal thoughts, and other mental health episodes.[66]

The rate of workplace injuries is so egregious in Amazon's warehouses that the National Council for Occupational Safety and Health in 2018 listed Amazon as one of the "dirty dozen" on its list of the most dangerous places to work in the United States.[67]

Amazon's technological surveillance enables and reinforces the relentless physical surveillance by managers. "Managers are always hovering around," said Hibaq. "They feel comfortable physically harassing people; that's a regular thing … The workers who speak up, they feel threatened physically and mentally."

Physical monitoring by managers can infantilize workers. Recounting her communications with managers, Hibaq said, "I was telling them, 'I'm not a baby, you're not babysitting me,' many times. 'Why are you surrounding me? Why are you surrounding me? I'm a grown person, I know what to do.' And the managers don't even introduce themselves, they just keep watching and surrounding."

Amazon's surveillance is also used to enforce the corporation's rigorous employee performance standards outside the physical premises of its warehouses. Delivery drivers often speed to meet Amazon's rigorous delivery demands, harming both drivers and bystanders.[68] Investigations conducted by ProPublica and BuzzFeed discovered that Amazon delivery drivers had been involved in more than 60 crashes that led to serious injuries, including at least 13 deaths, between 2015 and 2019.[69]

B. INTENSIFYING WORKER PRECARITY

Amazon routinely uses its surveillance infrastructure to determine whether employees are falling below its rigorous work demands. Often employee terminations are delivered electronically, dehumanizing the process.[70] Amazon's electronic system analyzes an employee's electronic record and, after falling below productivity measures, "automatically generates any warnings or terminations regarding quality or productivity without input from supervisors."[71]

Amazon's practices exacerbate the inequality between employees and management by keeping employees in a constant state of precariousness, with the threat of being fired for even the slightest deviation, which ensures full compliance with employer-demanded standards and limits worker freedom.

C. INTERFERING WITH WORKER ORGANIZING

Amazon's surveillance infrastructure also plays a vital role in the corporation's union-busting activities to prevent workers from collective organization to advocate for safer working conditions, as well as for increased pay and benefits.

Amazon has a long history of union busting,[72] and its surveillance infrastructure has enhanced its ability to prevent worker organizing. For example, Amazon analyzes more than two dozen internal and external variables from data collected from a variety of sources, including the percentage of families below the poverty line, a "diversity index," and team member sentiment, to determine which Whole Foods stores are at a higher risk of unionizing. Amazon used its collected data to create a heat map, indicating to management the stores that were at a higher risk of unionizing.[73] Amazon has fiercely fought against unions and has provided an anti-union training video to members of its management team.[74]

Surveillance also provides Amazon a means to proactively prevent workers from organizing, because the corporation is always tracking where its workers are located. Mohamed told us: "When they want to know something, the management, they use that camera. When we're organizing, when there was

a slowdown of work before the pandemic in my area or my department, then we [workers] would come together and talk. But [the camera] is how they can come so quickly and spread workers out."

Mohamed said that the corporation uses its surveillance infrastructure to move around employees whom management suspect of collectively organizing. "They spread the workers out," said Mohamed, adding that "you cannot talk to your colleagues … The managers come to you and say they'll send you to a different station."

COVID-19 has given Amazon another means to suppress labor organizing: social distancing, Mohamed said. "They created a new policy of keeping six feet apart, and you get a warning if you don't do it. But managers, they are not getting it, they are not doing it. The only people that they're giving warnings to are organizing leaders … They are taking this as an opportunity to fire workers." She added, "They punish workers for not social distancing, [but] the managers are coming close all the time."

"There's retaliation for only the organizers," said Mohamed.

D. INCREASING RISK OF THE SPREAD AND NORMALIZATION OF SURVEILLANCE

Amazon's practices have been widely adopted, particularly by Walmart, the corporation's primary—and only significant—rival.

Walmart has purchased facial recognition software to identify workers and customers in its stores and monitor their productivity, location, and purchases.[75] Like Amazon, Walmart has also sought to patent new surveillance technology: a microphone system to eavesdrop on its workers and shoppers, for example.[76] While not yet implemented to our knowledge, the patent application states, "A need exists for ways to capture the sounds resulting from people in the shopping facility and determine performance of employees based on those sounds."[77] The system would be embedded near the cashier, to listen to every beep, noise, and conversation to extract and analyze various performance measures from the employee and the customer.[78] Walmart has also started offering one-day free shipping on many of its products, to compete with Amazon.[79] Such practices will almost certainly lead to the same harmful effects that plague Amazon workers.

IV. Solutions

We propose a series of solutions that can begin to give workers the power to help determine their working conditions and ensure their unfettered right to privacy and the right to organize. We also believe these solutions can establish a fair marketplace in which no firm or small set of firms are dominant.

A. PROHIBIT DANGEROUS, INVASIVE, AND OPPRESSIVE FORMS OF WORKER SURVEILLANCE

i. Employers' Invasive Surveillance Practices Should Be Prohibited

As we show in our report, dominant employers such as Amazon continue to implement ever more invasive means to surveil their employees. Employers should face a heavy regulatory burden to implement worker surveillance. Unless substantial evidence proves otherwise, the presumption should be that surveillance interferes with a worker's right to privacy, right to mental and physical health, and right to organize.

Congress and state legislatures should enact legislation that requires employers to disclose, in plain and ordinary language, the surveillance practices they either use or intend to use to surveil their employees. The legislation should also require corporations to disclose and justify each of their surveillance practices to state and federal agencies. State and federal agencies should then be required to approve the surveillance practices that an employer seeks to implement.

An employer's disclosures should include: which information is being collected by the corporation's surveillance practices; how long the employer retains the information; the reasons for each surveillance practice; any adverse mental and physical health effects the surveillance practice has on workers; how the information collected is used by the employer or potential third parties; whether the employer shares the information with any third parties; and, if the employer is sharing the information, which third parties have access to the collected information.[80]

Requiring employers to disclose their surveillance practices to state and federal agencies provides several key benefits. First, disclosures to state and federal agencies inhibit employers from unilaterally subjecting their employees to

invasive surveillance practices without public oversight. Second, disclosures provide workers with notice about the surveillance practices they will be subjected to. Disclosures thus allow individuals to determine whether they want to be subject to the types of surveillance that a potential employer uses. Third, public disclosure requirements can deter employers from implementing certain surveillance practices. Fourth, disclosure requirements of surveillance practices can provide information for state and federal agencies to study the practice and determine whether it should be prohibited. For example, the Occupational Safety and Health Act requires all employers to provide employees a workplace that is "free from recognized hazards that are causing or likely to cause death or serious physical harm."[81] Mandatory disclosures to agencies can aid the Occupational Safety and Health Administration to launch investigations into the adverse health effects of particular workplace surveillance practices, which could lead the agency to limit the practices.[82] Lastly, disclosures ensure that, despite employer efforts to use ever more imaginative means to surveil workers, the public and governmental agencies are aware of these practices and will properly regulate or prohibit the practices as quickly as possible.

Mandatory disclosures can thus help resolve the current disconnect among what the general public and state and federal agencies know about the employers' surveillance practices, how much these practices deter worker organization efforts, and how much physical and psychological harm these practices cause.

Currently, only Connecticut and Delaware require employers to disclose their surveillance practices to their employees.[83] However, these statutes lack any provision about how the employer uses the information collected by the surveillance. Additionally, these statutes lack any process for employers to disclose their surveillance practices to state or federal agencies.

ii. The NLRB Should Determine That Specific Employer Surveillance Practices Should Be Prohibited or Presumptively Interfere With Unionization Efforts

The National Labor Relations Board (NLRB) should use its broad, substantive rule-making authority and adjudicative capabilities to prohibit intrusive surveillance practices in the workplace that have an appreciable risk of interfering or deterring collective worker action.[84] The NLRB should use its rule-making capabilities to prohibit any practices that have been shown to deter worker unionization.

After insufficiently protecting workers' right to strike and collectively organize,[85] Congress passed the Wagner Act and established the NLRB in 1935.[86] The

Wagner Act was enacted by Congress to provide affirmative organizing and collective bargaining rights to workers.[87] The act specifically states that employees "shall have the right to self-organization, to form, join, or assist labor organizations, to bargain collectively through representatives of their own choosing, and to engage in other concerted activities for the purposes of collective bargaining or other mutual aid or protection."[88] Importantly, the Wagner Act prohibited employer practices that "interfere with, restrain, or coerce employees" in their efforts to organize and act collectively.[89]

As we describe, surveillance not only deters workers from organizing, but dominant employers such as Amazon have used their surveillance infrastructure precisely to interfere with and deter collective worker action.[90] The NLRB has broad, substantive rule-making authority regarding unfair labor practices that deter unionization.[91] While the NLRB has typically depended on adjudication to implement specific policies,[92] the Supreme Court has repeatedly affirmed that the NLRB has the rule-making authority to rebalance worker power.[93]

The agency also has adjudicative authority in the sense that labor relations issues are litigated through the agency's administrative law judges and, if appealed, by the NLRB. The NLRB has primarily chosen to enact its policy agenda through adjudication.

One example of the NLRB using its litigation authority to limit worker surveillance was in *Purple Communications*.[94] *Purple Communications* concerned an employer's communications practices that prohibited the use of email relating to "activities on behalf of organizations or persons with no professional or business affiliation with the company."[95] The complaint alleged that the employer's practice unlawfully interfered with and restricted employees' rights to unionize.[96]

Although the decision was a narrow one,[97] the NLRB in its 2014 *Purple Communications* decision did acknowledge the growing need for unionization efforts to use workplace technology such as email to organize and discuss workplace grievances.[98] The NLRB stated that the previous legal analysis of balancing employers' interests in monitoring communications over the needs and desires of workers to collectively organize was too imbalanced in favor of employers.[99] The NLRB then established a presumption that required employers to show a "special circumstance" such that monitoring of email communications was necessary to "maintain production or discipline."[100]

The NLRB in 2019 overturned its *Purple Communications* decision.[101] Because the Supreme Court has repeatedly affirmed the ability of agencies to interpret

and reinterpret the meaning of agency regulations and holdings, a future NLRB could reinstate a stronger *Purple Communications* standard.[102]

A new presidential administration could appoint NLRB members that are more favorable to labor organizing. The new board members could institute strong rules that protect workers from invasive employer surveillance practices. Additionally, new NLRB members can rule, as the board did in *Purple Communications*, that employer surveillance practices, such as email surveillance or pervasive camera surveillance, presumptively interfere with an employee's right to organize and outweigh an employer's need to surveil its employees.[103]

B. REVITALIZE AMERICAN UNIONIZATION

The employee-employer work paradigm involves employers being able to terminate employees at will for almost any reason. As long as employers can fire workers for practically any reason—or no reason at all—the power disparity between labor and employers will always favor employers. Fostering unionization is critical to rebalancing power toward workers and to ensuring that workers receive essential benefits such as fair wages, a safe work environment, and equal decision-making over operations and strategy.

Unions also provide a broad range of benefits to workers, including protections against at-will employment. Substantial research has shown that unions reduce income inequality, increase wages, provide better benefits to workers, and rebalance power away from dominant employers to workers.[104] The proliferation of other restrictive practices such as class action waivers, noncompete agreements, and mandatory arbitration agreements would have likely not occurred if a more substantial union presence existed in the United States.[105]

Scholars and lawmakers have known and recognized the benefits of unions for almost a century. Chief Justice William Howard Taft remarked in 1921 that unions were "essential" to give laborers an opportunity to deal on equal terms with their employers.[106]

Unions can prohibit practices that are detrimental to a worker's safety and interfere with a worker's right to privacy. In some cases, unions have been able to obtain restrictions on employer surveillance practices.[107]

To rebalance power toward workers, we propose four solutions that can revitalize unionization in the United States and ultimately restrict and prohibit worker surveillance.

i. Congress Should Permit Independent Contractors to Unionize

Under current law, independent contractors (such as Amazon Flex delivery drivers or warehouse workers) cannot unionize.[108] The rise of the "gig economy" has increased in tandem with the usage of independent contractors by dominant firms, the latter increasing by 20% on average in the United States between 2001 and 2016, as compared to less than 10% for the increase in all employees.[109] Dominant firms such as Amazon now routinely depend on independent contractors.

By enacting the Taft-Hartley Act in 1947, Congress limited the National Labor Relations Act's protections only to employees. As a result of this decision, Congress pushed corporations to relegate workers to independent contractor status, avoiding the protections that unions provide to employees.[110] Employers who decide to use independent contractors instead of traditional workers effectively sidestep federal labor law.

Allowing independent contractors to unionize would prohibit firms from circumventing labor protections and would give a significant percentage of workers the benefits and protections offered by unions.

ii. Congress Should Legalize Secondary Boycotts and Other Solidarity Actions

One of the signature weaknesses in American labor law is the prohibition against secondary boycotts and other solidarity labor actions.[111] Secondary boycotts allow unions to engage in a strike or other labor action that supports workers in a separate organization. Without secondary boycotts and other solidarity actions, labor protections are limited to only the relationship between an employer and its employees.

While the Wagner Act was a statute meant to pursue "utopian aspirations for a radical restructuring of the workplace,"[112] the Taft-Hartley Act specifically sought to restrict labor practices to narrow how unions can advocate for their workers and how workers can organize or put pressure on their employers to demand better working conditions. The Taft-Hartley Act specifically prohibited secondary and solidarity boycotts. As a result of the act, American unionization rates plummeted.[113]

Prohibiting secondary and solidarity boycotts limits which actions a union can take to pressure employers to treat workers fairly, even across entire economic sectors. Legalizing secondary boycotts and other solidarity actions would allow workers across the economy to organize collectively to win fair treatment, adequate wages, a safe working environment—and protections from excessive surveillance.

C. REIN IN CORPORATE POWER

Sheer power explains much of why dominant firms such as Amazon have been able to implement intrusive surveillance practices. Market power allows firms not only to control markets, but also to exploit their workers, with surveillance just one method to exert dominance.

A substantial body of evidence shows that U.S. markets are significantly more concentrated than in the past.[114] Researchers have found that 75% of all U.S. industries have increased in concentration since the 1990s, with an average increase in concentration of 90%.[115] Moreover, researchers have found that many U.S. markets now suffer from exceedingly high levels of concentration.[116]

Recent scholarly literature has shown a clear connection between market concentration and harm to workers. For example, José Azar, Ioana Marinescu, and Marshall Steinbaum examined more than 8,000 local labor markets and concluded that the average labor market in the U.S. is "highly concentrated." The researchers said that highly concentrated markets resulted in workers frequently earning less income: In a market that goes from the 25th percentile to the 75th percentile in concentration, wages decline by 17%.[117] Similar studies have found that as market concentration increases in a supply chain, workers' wages in upstream markets stagnate.[118]

Decreasing the market power of dominant firms is critical to strengthening unions and ensuring their long-term stability. Additionally, more vigorous antitrust enforcement would increase competition for workers, enhancing their overall mobility and demand for their labor.[119] Increased enforcement would also substantially lessen the market power and monopsony power of dominant firms and decrease the ability of employers to impose coercive surveillance practices on their employees.

We propose two recommendations for how antitrust enforcement can be reinvigorated to benefit workers.

i. The FTC and DOJ Should Amend the Merger Guidelines to Enact Bright-Line Enforcement Rules

Dominant firms routinely acquire and entrench market power by taking advantage of permissive merger enforcement.[120] Substantial research has shown the adverse effects of mergers on competition, innovation, workers, and prices.[121]

The Clayton Act, the primary anti-merger law in the United States, features robust and broad language. Section 7 of the act prohibits mergers

that may "substantially … lessen competition, or … tend to create a monopoly."[122] Congress amended the law in 1950 to increase both its reach and enforcement. The 1950 amendments aimed to create a more robust merger enforcement regime to promote local ownership to stem the "rising tide of economic concentration in the American economy."[123] Soon thereafter, the Supreme Court and antitrust enforcers enacted strong presumptions against mergers that unduly increased concentration.[124] In *United States v. Von's Grocery Co.*,[125] the Supreme Court held in 1966 that a merger between two grocery store chains with a local market share of almost 8% violated the Clayton Act.[126] Soon thereafter, in 1967, the Supreme Court prohibited Procter & Gamble's acquisition of Clorox.[127] The court reasoned that the acquisition would entrench Clorox's dominance in household bleach and deprive consumers of the benefit of a competitive market.

The Clayton Act and the subsequent 1950 amendments were a clear and direct policy choice to favor corporate expansion by means other than acquisition, and to establish a vigorous merger enforcement regime.[128] Despite the clear congressional intent, federal agencies have withdrawn from enforcing even the most clearly harmful mergers, such as the recent 4-to-3 merger of T-Mobile and Sprint. The agencies have also chosen not to block other mergers that appear illegal under the statute.[129] Moreover, the agencies have chosen to challenge only a small handful of the more than 700 acquisitions that Google, Apple, Amazon, Facebook, and Microsoft have made since 1987.[130] Amazon, in particular, has made 83 acquisitions between 1998 and 2019—none of which were challenged by federal agencies. Many of Amazon's mergers have simply bought a significant market share for the corporation.[131]

This lackluster enforcement stems from unclear merger enforcement rules that provide the Department of Justice (DOJ) and the FTC with too much discretion on when to enforce the Clayton Act. Additionally, the current enforcement regime forces federal agencies and the courts to make speculative decisions concerning how competitive a market will be in the future.

We propose that the FTC and DOJ amend their merger guidelines to incorporate bright-line rules similar to the 1968 Merger Guidelines, so that if a firm controls 20% of a relevant labor market or product market, any merger involving the company would be illegal.

Before being watered down by the DOJ, the 1968 Merger Guidelines had a similar construction and sought to enact the strong congressional command against mergers from the 1950 Clayton Act amendments.[132]

Bright-line rules, such as the ones we propose and that were implemented in the 1968 Merger Guidelines, encourage firms to grow organically instead of

through acquisition. When the Clayton Act was vigorously enforced, between 1948 and 1952, corporations chose to invest in building out their operations rather than in acquiring competitors.[133] During this time, companies spent less than 3% of their total investment dollars on acquisitions.[134] Historical examples have shown that when acquisitions are not pursued, firms invest in innovation. For example, the telecommunications giant AT&T was prohibited from acquiring T-Mobile in 2011. Instead of T-Mobile faltering as a competitor, T-Mobile radically altered the industry's entire business model by slashing prices and ending long-term consumer contracts.

Establishing bright-line rules also prohibits agencies from engaging in what is called cross-market balancing. Cross-market balancing is when the harm caused by an antitrust violator to one set of economic actors can be offset by the alleged beneficial effects the conduct has in another market with another set of economic actors. The Supreme Court has repeatedly prohibited this practice.[135] In *United States v. Philadelphia National Bank*, the Supreme Court stated that "a merger the effect of which 'may be substantially to lessen competition' is not saved because, on some ultimate reckoning of social or economic debits and credits, it may be deemed beneficial."[136]

Despite this clear ruling, courts still engage in this cost-benefit analysis, and these institutions still try to promote anti-competitive and other exclusionary conduct, based on court opinions that such conduct is healthy for a competitive market. In addition to promoting a vigorous anti-merger enforcement regime in line with congressional intent, bright-line rules would reinforce the agency's commitment to follow Supreme Court precedent and prohibit cross-market balancing.

ii. The FTC Should Ban Noncompete Agreements and Class Action Waivers

The FTC has broad powers granted by its enabling statute, the Federal Trade Commission Act.[137] Section 5 of the act allows the FTC to prohibit unfair or deceptive acts or practices and unfair methods of competition.[138] The FTC also has broad rule-making powers to define the meaning of these terms. The FTC can use its rule-making authority to establish bright-line rules to prohibit some of the most egregious business practices that dominant firms routinely employ to disenfranchise workers, limit their employment opportunities, and prevent them from engaging in collective litigation.[139] Specifically, the FTC should ban noncompete clauses and class action waivers in employee contracts. These coercive contracts suppress wages, limit the formation of new firms, and limit worker mobility by disincentivizing workers from leaving abusive or unsafe work environments.

Employers currently bind millions of workers to these restrictive agreements. Scholars have determined that noncompetes bind roughly 20% of the labor force, and at least 40% have agreed to one in the past.[140] A study by the Economic Policy Institute found that corporations have bound 60 million workers to mandatory arbitration agreements.[141] In the past, Amazon imposed agreements that prohibited warehouse workers from accepting employment with any product or service competitor to Amazon for an astonishing 18 months.[142] Although Amazon stopped this practice for its warehouse workers under public pressure, the corporation still uses noncompetes with its executives and technical professionals.[143]

V. Conclusion

Amazon is one of the most dominant corporations in history. A fundamental aspect of its power is the corporation's ability to surveil every aspect of its workers' behavior and use the surveillance to create a harsh and dehumanizing working environment that produces a constant state of fear, as well as physical and mental anguish. The corporation's extensive and pervasive surveillance practices deter workers from collectively organizing and harm their physical and mental health.

Amazon's vast surveillance infrastructure constantly makes workers aware that every single movement they make is tracked and scrutinized. When workers make the slightest mistake, Amazon can use its surveillance infrastructure to terminate them.

Amazon's conduct has provided a roadmap for other dominant corporations, such as Walmart, to implement similar surveillance practices. Amazon's tactics ultimately seek to weaken the power of its workers and entrench its control over them.

Federal and state agencies, as well as legislatures, can enact several policies to prevent the implementation of invasive surveillance practices, restrain the market power of dominant corporations like Amazon, and invigorate unionization in the United States.Our solutions can create a new working environment in this country, an environment where workers have representation and bargaining power to determine their working conditions and protect their right to privacy and their right to collectively organize.

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