

**REALIZING A NEW RIGHT: THE RIGHT TO REPAIR AT THE
FEDERAL STAGE**

*By Jared A. Mark**

The modern right to repair movement is a reactionary groundswell of consumer-rights advocacy, which opposes long-existing, monopolistic, and unfair market practices that have essentially been left unchecked in recent years. Specifically, the right to repair movement seeks to advance consumers' ability to repair their purchased goods, ranging from consumer electronics to multi-million-dollar farm equipment, so consumers have more autonomy in the market. The growing movement, in part, persuaded President Biden to issue an Executive Order ("E.O.") on "Promoting Competition in the American Economy," an action that thrust the movement into the national spotlight. This E.O. effectively calls upon the Federal Trade Commission ("FTC") to act in accordance with existing laws and promulgate rules to ensure consumers are afforded a "right to repair." However, the FTC's ability to comprehensively address President Biden's E.O. hinges on Congressional buy-in and support. Notably, recent Congressional discussions suggest that Congress is poised to bolster the FTC's ability to fulfill President Biden's E.O. Accordingly, this Article analyzes the modern right to repair movement, the Biden Administration's efforts to implement a federally recognized right to repair, and debates by Congress relating to the right to repair—ultimately setting forth recommendations, including administrative actions and legislative

* J.D. Candidate, University of North Carolina School of Law, 2023. The author would like to thank the NC JOLT editors and staff, particularly Keenan Conder, Meredith Doswell, and Anna Comer for their assistance throughout the editorial process. The author also extends his sincere gratitude to Professor Donald Hornstein for his guidance and constant support and Louis Rossmann for his willingness to interview and answer questions with candor. Lastly, he would like to thank his close family, friends, and partner for encouraging him every step of the way.

initiatives, for the FTC and Congress to provide consumers with a right that protects their ability to make decisions in the marketplace.

TABLE OF CONTENTS

I.	INTRODUCTION.....	384
II.	THE MODERN RIGHT TO REPAIR: A CONSUMER-CHOICE MOVEMENT GAINING TRACTION	388
	<i>A. History of the Right to Repair Movement</i>	<i>388</i>
	<i>B. The Benefits of a National Right to Repair.....</i>	<i>391</i>
	<i>C. Potential Externalities of a National Right to Repair...393</i>	
	<i>D. The Inflated Risks the Right to Repair Poses to Cybersecurity.....</i>	<i>394</i>
	<i>E. The Modern Right to Repair Laws in the European Union</i>	<i>395</i>
III.	THE LIMITED SUCCESS OF THE BIDEN ADMINISTRATION’S RIGHT TO REPAIR POLICIES.....	397
	<i>A. President Biden’s Executive Order on “Promoting Competition in the American Economy”</i>	<i>397</i>
	<i>B. The FTC’s Effort to Implement President Biden’s Broad Mandate.....</i>	<i>401</i>
IV.	CONGRESS’S INCREASING INTEREST IN THE RIGHT TO REPAIR MOVEMENT.....	403
	<i>A. The Unlocking Consumer Choice and Wireless Competition Act.....</i>	<i>404</i>
	<i>B. The Congressional Hearings Regarding Big Tech and U.S. Antitrust Laws</i>	<i>405</i>
	<i>C. The Critical Medical Infrastructure Right to Repair Act of 2020.....</i>	<i>408</i>
V.	RECOMMENDATIONS TO REALIZE A NATIONAL RIGHT TO REPAIR.....	410
	<i>A. FTC Actions to Address the Executive Order’s Weaknesses</i>	<i>410</i>
	<i>1. Enforcing Unfair Business Practices through Existing Antitrust Powers</i>	<i>410</i>
	<i>2. Promulgating Strict Rules Establishing Which Repair Restrictions are Unfair</i>	<i>411</i>
	<i>B. Legislative Actions to Address the FTC’s Weaknesses.....</i>	<i>411</i>

1. <i>Utilizing the Repair Association’s Model Bill</i>	411
2. <i>Mirroring the European Union’s Approach to the Right to Repair</i>	412
VI. CONCLUSION	413

I. INTRODUCTION

Imagine a man named Dave, a farmer in rural America. As a farmer, Dave’s financial success hinges upon completing a sequence of agricultural tasks within precariously short time windows dictated by changing weather and market conditions. For example, a harvest delay of only a few days can limit overall yield by half the expected crop.¹ Dave has been operating and maintaining large farm equipment—tractors, combines, and other heavy machinery—his entire life, but unfortunately, his indispensable and dependable tractor fully succumbs after years of heavy use. As a result, Dave necessarily purchases a brand-new, John Deere 8520T tractor with an air-conditioned cabin equipped with high-tech computer screens, which monitor the engine and auxiliary outputs.² Unfortunately for Dave, at the most critical time of the season (during peak harvest), the tractor shuts down with a “digital lock”³ and an error code flashes on a screen.⁴ A digital lock is a technological shutoff that prevents full access to an electronic device, effectively rendering a piece of equipment unusable until a certified mechanic can diagnose the device.⁵ Dave is forced to put his crop collection on hold, possibly jeopardizing a successful harvest.

¹ See James Giese, *Delayed Corn Harvest: Effect on Yield*, CERTIFIED CROP ADVISER, <https://www.certifiedcropadviser.org/science-news/delayed-corn-harvest-effect-yield/> [https://perma.cc/6BKQ-BZ9V] (last visited Nov. 4, 2021).

² See Laura Sydell, *DIY Tractor Repair Runs Afoul of Copyright Law*, NPR (Aug. 17, 2015, 4:20 PM), <https://www.npr.org/sections/alltechconsidered/2015/08/17/432601480/diy-tractor-repair-runs-afoul-of-copyright-law> [https://perma.cc/GX6U-BHZZ].

³ *Right to Repair*, N.C. PUB. RSCH. INT. GRP., <https://ncpirg.org/feature/ncp/right-repair> [https://perma.cc/GFJ6-H85Y] (last visited Oct. 27, 2021) (explaining that digital locks prevent consumer access to information due to a proprietary technological lock and key).

⁴ See Sydell, *supra* note 2.

⁵ See *id.*

Had this error occurred on Dave's previous tractor, Dave could have attempted to troubleshoot the problem and taken it upon himself to make the quick fix. However, per John Deere's digital rights and copyright protections,⁶ Dave is required to call an expensive, John Deere-certified technician to hopefully diagnose and fix the issue promptly.⁷ After two days, a technician comes to Dave's farm to diagnose the error code using John Deere's proprietary software, tools, and technology. The technician is able to diagnose the minor problem that left Dave's \$150,000, 27,000-pound tractor inoperable.⁸ The culprit: a faulty \$120 sensor the technician easily fixes by inputting two lines of code into a portable computer hooked up to the tractor.⁹ After the repair, Dave eagerly gets back to work, hoping to break even for the year by making up for lost time—his harvest days much longer than anticipated.¹⁰

Dave's situation is actually not hypothetical; Dave Alford is a real farmer living in California, who experienced this sequence of events in 2015.¹¹ Unfortunately, his story is becoming all too familiar to many farmers across the United States.

Nationwide, many farmers have faced similar issues when dealing with new equipment manufactured by large technology companies, such as John Deere.¹² Farmers could try to make their own fixes to save their harvest by effectively breaking the digital lock by changing parts within the proprietary software; however, such actions often lead to voided warranties on expensive equipment.¹³

⁶ See Jennifer Walpole, *Farmers Can't Legally Fix Their Own John Deere Tractors Due to Copyright Laws*, AM. GENIUS (June 28, 2015), <https://theamericangenius.com/business-news/farmers-cant-legally-fix-their-own-john-deere-tractors-due-to-copyright-laws/> [<https://perma.cc/SX8D-F276>].

⁷ See Sydell, *supra* note 2.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² See Kaleigh Rogers, *The 'Right to Repair' Movement Is Being Led by Farmers*, VICE: MOTHERBOARD (Jan. 31, 2017, 1:15 PM), <https://www.vice.com/en/article/kbzg/z/farmers-right-to-repair> [<https://perma.cc/UM26-N9T3>].

¹³ *Id.*

American farmers like Dave Alford, as well as technology consumers generally, such as those who buy computers,¹⁴ coffee machines,¹⁵ and Barbie dolls,¹⁶ are unable to break digital locks and repair purchased items because prominent technology companies have influenced national policies, via lobbying efforts, to maintain their profitable arrangement in the marketplace. Big tech companies' implementation of digital locks and, accordingly, their hold on the national market is harming everyday Americans who simply want their inoperable tech products to be repaired quickly and adequately.¹⁷ In opposition to this status quo, right to repair proponents stand in favor of a national recognition of consumers' rights.

The right to repair is precisely as it sounds. The right encompasses the notion that individuals should be able to repair their own devices ("self-repair") or at least take their devices to a repair technician of their choosing.¹⁸ The concept of self-repair has been accepted in many aspects of American life today; individuals can choose where to take their cars to be repaired and can even decide to service their cars themselves.¹⁹ At its core, the right to repair simply transfers the power one has to repair a technological device or equipment from manufacturers to consumers.

¹⁴ See *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 542 (2013).

¹⁵ See, e.g., AARON PERZANOWSKI & JASON SCHULTZ, *THE END OF OWNERSHIP: PERSONAL PROPERTY IN THE DIGITAL ECONOMY* 149–50 (2016) (explaining how Keurig, a popular coffee-making appliance company, used various measures to prevent its customers from using non-Keurig-branded coffee filters and accessories).

¹⁶ See, e.g., Alyssa Newcomb, *Hello Barbie: Internet Connected Doll Can Have Conversations*, ABC NEWS (Feb. 17, 2015), <http://abcnews.go.com/Technology/barbieinternet-connected-doll-conversations/story?id=29026245> [<https://perma.cc/7FLP-D9WY>] (reporting on technological developments enabling new Barbie dolls to have conversations with consumers via internet connections and proprietary artificial intelligence).

¹⁷ See Sydell, *supra* note 2.

¹⁸ Thorin Klosowski, *What You Should Know About Right to Repair*, WIRECUTTER (July 15, 2021), <https://www.nytimes.com/wirecutter/blog/what-is-right-to-repair/> [<https://perma.cc/VVM3-U5N4>].

¹⁹ *Id.*

Big tech companies, including Apple and Microsoft, oppose consumers' "right to repair" their products.²⁰ These tech giants argue that right to repair laws could "let pirates rip off intellectual property and expose consumers to security risks."²¹ Further, tech giants claim that "allowing unvetted third parties" to "access . . . sensitive diagnostic information, software, tools, and parts would jeopardize the safety and security of consumers' devices and put consumers at risk for fraud."²² However, these claims are not backed by evidentiary support.²³ In fact, the cybersecurity risks associated with the national right to repair movement are less significant than what these tech giants claim.²⁴ Rather, a more substantive fear for tech manufacturers is consumer choice.²⁵ The movement puts power in the hands of purchasers by giving them the freedom to decide who will repair their increasingly relied-upon technology. Therefore, to ensure the right to repair will be instituted nationally, the Federal Trade Commission ("FTC") should utilize its rulemaking and enforcement authorities to hold big technology manufacturers accountable for unfair practices, and Congress should pass federal laws promoting consumer choice.

This Article challenges the overblown, perceived risks associated with the right to repair movement and argues that the benefits of a right to repair outweigh the moderate risks it poses by the movement. Accordingly, this Article advocates for a federally recognized right to repair and provides recommendations for government action to build on the recent advances of the right to repair movement. Part II discusses the modern right to repair movement, specifically addressing the arguments in support of and against the movement in the United States, as well as the European Union's approach to the right to repair. Part III addresses the federal

²⁰ Mark Bergen, *Microsoft and Apple Wage War on Gadget Right-to-Repair Laws*, BLOOMBERG (May 20, 2021), <https://www.bloomberg.com/news/articles/2021-05-20/microsoft-and-apple-wage-war-on-gadget-right-to-repair-laws> [<https://perma.cc/KKV5-KP62>].

²¹ *Id.*

²² *Id.*

²³ See *infra* notes 75–89 and accompanying text.

²⁴ See *id.*

²⁵ See *id.*

government's recent efforts to effectuate a national right to repair, focusing on President Biden's Executive Order, "Promoting Competition in the American Economy," and the FTC's efforts to implement the Executive Order. Part IV covers recent Congressional discussions on the right to repair, suggesting Congress is ready to recognize the right. Part V specifically recommends the government establish a federal right to repair similar to the FTC's 2021 "Nixing the Fix" report. Lastly, Part VI concludes that the FTC and Congress should jointly act to nationally recognize a consumer's important right to repair, affording Americans the autonomy they desire in the marketplace.

II. THE MODERN RIGHT TO REPAIR: A CONSUMER-CHOICE MOVEMENT GAINING TRACTION

The modern right to repair movement in the United States emphasizes the right to repair consumer products, which consequently promotes jobs, reduces electronic waste, ensures value retention in used goods, and preserves owners' rights.²⁶ Although the right to repair movement touches many economic sectors (e.g., the agricultural, automotive, and even the textile industries), the modern movement heavily focuses on consumer products.²⁷

A. *History of the Right to Repair Movement*

The modern right to repair movement, which emphasizes broad consumer choice, was sparked out of necessity following a high-profile antitrust case.²⁸ In 1956, the U.S. Department of Justice ("DOJ") charged International Business Machines Corporation ("IBM"), a major technology company, for violating antitrust laws after IBM eliminated a purchaser's choice to buy punch-card machines outright, rather than lease them.²⁹ As a result, IBM entered

²⁶ See *History*, THE REPAIR ASS'N, <https://www.repair.org/history> [<https://perma.cc/XVZ3-GYFD>] (last visited Sept. 27, 2021).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

a consent decree with the DOJ.³⁰ The consent decree “enjoined and restrained [IBM] from requiring any purchaser of an IBM tabulating or electronic data processing machine to have it repaired or maintained by IBM or to purchase parts . . . from IBM” because IBM maintained control over all components of electronic creation, sale, and repair.³¹ IBM continued to face these restrictions until the company reached a settlement with the DOJ in 1996—forty years after the decree.³² Following the consent decree and its eventual demise, IBM’s dominance diminished and the general market for consumers began to shift in favor of the public.³³

Nearly six years after the settlement between IBM and the DOJ, and in response to the changing market, new technologies, and excessive manufacturer dominance over repair, Senator Paul Wellstone (D-MN) introduced the Motor Vehicle Owners’ Right to Repair Act of 2001 (“MVORRA”).³⁴ The express purpose of MVORRA was to “protect the rights of American consumers to diagnose, service, and repair motor vehicles.”³⁵ This effort, albeit in the narrow context of motor vehicles, was the first attempt by the federal legislature to consider consumer choice to repair purchased products as a right.³⁶ Unfortunately, the MVORRA went no further than the Senate floor.³⁷

Since the MVORRA, a right to repair has remained on the minds of many consumers, as technologies have evolved and become more

³⁰ See generally *United States v. Int’l Bus. Mach. Corp.*, Civ. Action No. 72-344 (S.D.N.Y. Jan. 25, 1956) (ordering IBM to enter a consent decree with the U.S. government).

³¹ *Id.*

³² See David Lazarus, *Judge to IBM: It’s Not 1956 Anymore*, WIRED (May 2, 1997, 12:00 PM), <https://www.wired.com/1997/05/judge-to-ibm-its-not-1956-anymore/> [<https://perma.cc/H7RX-29H5>].

³³ *Id.*

³⁴ S. 2617, 107th Cong. (2002).

³⁵ *Id.*

³⁶ *History, supra* note 26.

³⁷ The bill was primarily opposed by auto manufacturers who argued the bill was unnecessary. See AUTOMAKERS AND INDEPENDENT REPAIRERS REACH HISTORIC AGREEMENT ON SERVICE INFORMATION, <https://web.archive.org/web/20100615085352/http://asashop.org/news/2002/sept2002/jointrelease.htm> [<https://perma.cc/2DHG-BNUM>] (last visited Nov. 20, 2021).

complex. For instance, revelations of companies deliberately slowing down outdated products have led to increasingly frustrated consumers.³⁸ Thus, as a direct result of these unfair practices and consumers' ensuing anger, the right to repair movement has gained serious momentum.³⁹ The leading organization spearheading this consumer-based repair movement is The Repair Association,⁴⁰ which was founded in 2013.⁴¹ Since its inception, the Repair Association has worked with thirty-two different states to integrate right to repair-related legislation into their respective state laws using a template bill to prevent digital locks for repair.⁴² While these

³⁸ See, e.g., Stephanie Bodoni, *Apple Is Sued in EU Over iPhones That Wear Out Too Quickly*, BLOOMBERG (Dec. 2, 2020), <https://www.bloomberg.com/news/articles/2020-12-02/apple-faces-eu-lawsuits-over-iphones-that-wear-out-too-quickly> [<https://perma.cc/4YQW-MRHQ>] (explaining Apple designs devices with a short-lived usable timeframe); see also Scott Brown, *Samsung Fined \$5.7 Million for Slowing Down Phones, Apple Style*, ANDROID AUTHORITY (Oct. 24, 2018), <https://www.androidauthority.com/samsung-slow-down-fine-2018-917806/> [<https://perma.cc/FLL2-FP3M>] (reporting Samsung was fined \$5.7 million for purposefully degrading performance of older mobile phones with new software updates).

³⁹ See, e.g., Laura Bliss, *Broken Ventilators Add Momentum to 'Right to Repair' Movement*, BLOOMBERG (May 6, 2021), <https://www.bloomberg.com/news/articles/2021-05-06/right-to-repair-movement-gains-momentum-as-states-consider-bills> [<https://perma.cc/7DPT-XMAT>] (explaining over twenty states, at the time of this Article, have considered legislation surrounding an individual's right to repair, and much of the progress has been made in the past few years).

⁴⁰ The Repair Association's members include industry leaders in cybersecurity, copyright law, agriculture, consumer rights, legislative advocacy, and organizations directly impacted by legislation favoring big-tech companies and technical limitations on third-party consumer goods repair. *Organizational Members*, THE REPAIR ASS'N, <https://www.repair.org/members> [<https://perma.cc/NC7M-JFFK>] (last visited Sept. 27, 2021); see also *About Us*, THE REPAIR ASS'N, <https://www.repair.org/aboutus> [<https://perma.cc/8D2P-ZUYR>] (last visited Sept. 27, 2021) (listing current members of The Repair Association).

⁴¹ See *History*, *supra* note 26. The Repair Association was founded as the Digital Right to Repair Coalition. *Id.*

⁴² See *Legislation*, THE REPAIR ASS'N, <https://www.repair.org/legislation> [<https://perma.cc/4H6J-ZTHL>] (last visited Oct. 27, 2021).

states have attempted to pass pro-repair legislation, unfortunately, no state has successfully implemented such a policy.⁴³

B. The Benefits of a National Right to Repair

While the story of Dave Alford exhibits why farmers are major proponents of a right to repair, the right to repair is also supported by third-party repair businesses, environmentalists, and the FTC alike.⁴⁴ Louis Rossmann,⁴⁵ a third-party and consumer repair shop owner, as well as a YouTuber with over 1.6 million subscribers and 308 million views across all of his videos at the time of this Article, agreed to a telephone interview for this Article to provide insight on the right to repair. In the interview, Rossmann noted consumers' desire to repair their own products is not new:⁴⁶

In the 1950s, '60s, and '70s, if one opened up some of their electronics or appliances, there would have been schematics inside that showed exactly how everything was put together, and if there weren't, one would often be able to contact the company, and the company would simply send over the schematics.⁴⁷

Today, electronics companies are not as willing to provide schematics.⁴⁸ Rossmann accredits this shift away from widely available repair information towards no information to two frames of mind: (1) "people not being aware of what is going on and what they are losing" and (2) a "general apathy towards repair in our never-ending consumerism."⁴⁹ Though Rossmann believes Americans have become apathetic, technology manufacturers have created a culture against repair by making it difficult for Americans to repair their own devices and by automatically making choices for

⁴³ James Seddon & Darrell M. West, *President Biden's Right to Repair Order Needs Strengthening to Aid Consumers*, BROOKINGS INST. (July 14, 2021), <https://www.brookings.edu/blog/techtank/2021/07/14/president-bidens-right-to-repair-order-needs-strengthening-to-aid-consumers/> [https://perma.cc/U8XB-7E6R].

⁴⁴ Juan Londoño, *The Debate on Right to Repair: A Primer*, AM. ACTION F. (July 22, 2021), <https://www.americanactionforum.org/insight/the-debate-on-right-to-repair-a-primer/> [https://perma.cc/SQ8C-MBD8].

⁴⁵ Louis Rossmann has testified before Congress regarding the right to repair.

⁴⁶ Telephone Interview with Louis Rossmann, Youtuber & Owner of Rossmann Repair Grp. (Nov. 17, 2021).

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

consumers.⁵⁰ Rossman, as an independent shop owner not authorized by large tech companies to provide services, supports providing consumers with the option to pick affordable and timely repair services, rather than forcing consumers to rely on costly manufacturer-approved technicians.

Likewise, environmentalists generally support a right to repair as a more sustainable consumer policy. By limiting repairs and pushing the sale of new devices, “manufacturers limit the ability of recyclers to legitimately reuse products.”⁵¹ For example, preventing repairs “inhibit[s] every recyclers’ right to return products and goods back into the marketplace for legitimate reuse.”⁵² As a result of consumers’ inability to adequately reuse electronic devices, electronic devices litter landfills.⁵³

Lastly, the FTC has recently signified its support of the right to repair movement. In following Congress’s directive requiring the FTC to report anti-competitive practices related to “repair markets,”⁵⁴ the Commission convened a workshop in May 2021 to gain input from consumers, manufacturers, and other third-party repair.⁵⁵ The FTC workshop was a sweeping success, whereby the FTC subsequently published a report called “Nixing the Fix” that included arguments both supporting and opposing the right to repair and outlined approaches to increasing consumer choice.⁵⁶

The “Nixing the Fix” Report identified restrictions to non-manufacturer-approved repairs, along with explanations for those restrictions.⁵⁷ Specifically, the FTC uncovered numerous hurdles to

⁵⁰ *Id.*

⁵¹ *The Environment*, THE REPAIR ASS’N, <https://www.repair.org/the-environment> [<https://perma.cc/V6CS-C96J>] (last visited Oct. 21, 2021).

⁵² *Id.*

⁵³ *Id.*

⁵⁴ H.R. REP. NO. 116-456, at 67 (2021).

⁵⁵ F.T.C., NIXING THE FIX: AN FTC REPORT TO CONGRESS ON REPAIR RESTRICTIONS, 1 (May 2021), https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf [<https://perma.cc/GRH4-WAYF>] [hereinafter F.T.C., NIXING THE FIX].

⁵⁶ *Id.*

⁵⁷ *Id.*

repair by manufacturers, including: physical techniques;⁵⁸ limiting the tools required for repairs;⁵⁹ designing items so that independent repairs are unsafe;⁶⁰ overbroadly asserting patent and IP rights and disparaging non-OEM parts; and lastly, asserting highly restrictive licensing agreements.⁶¹ In the Report, FTC Commissioners Christine Wilson and Noah Phillips voiced a “concern with repair restrictions dat[ing] back more than forty years,”⁶² supporting the notion that the FTC is in favor of a right to repair. In fact, the Report concluded that “the FTC will pursue appropriate law enforcement and regulatory options[,]. . . consumer education[, and] . . . work with legislators . . . to ensure that consumers have choices when they need to repair products that they purchase and own.”⁶³ By identifying specific techniques that prevent consumer choice in its “Nixing the Fix” Report, the FTC created a tool to utilize in its investigations of unfair practices.

C. Potential Externalities of a National Right to Repair

Manufacturers and tech giants, including Apple, Microsoft, Amazon, and Google, have continuously challenged the principles underlying the modern right to repair movement.⁶⁴ The leading justification for heavy restrictions on consumer repair from these companies concerns cybersecurity and data privacy.⁶⁵ Microsoft, for instance, explained that consumers face significant risks when turning in their devices to non-authorized technicians for repair.⁶⁶ Frequently, devices are littered with personal information, including

⁵⁸ Physical repair restriction techniques may include adhesives, proprietary screws, and restrictive software locks and firmware updates.

⁵⁹ Tools for repair may include manuals, software, and proper tools to fit proprietary hardware (such as screws).

⁶⁰ Repairs could be unsafe because some batteries may be unstable and chemicals within devices may be toxic.

⁶¹ F.T.C., NIXING THE FIX, *supra* note 55, at 1.

⁶² *Id.* at 5.

⁶³ *Id.* at 54.

⁶⁴ *Who Doesn't Want the Right to Repair? Companies Worth Over \$10 trillion*, U.S. PUB. INT. RSCH. GRP. (May 3, 2021), <https://uspirm.org/blogs/blog/usp/who-doesn%E2%80%99t-want-right-repair-companies-worth-over-10-trillion> [<https://perma.cc/E4L8-H32N>].

⁶⁵ *Id.*

⁶⁶ *Id.*

pictures, documents, financial records, and passwords.⁶⁷ During repairs, technicians can access an entire device using diagnostic tools, potentially placing consumers' sensitive information at risk.⁶⁸

Additionally, manufacturers allege that third-party repairs may compromise the physical security of consumers' devices. For example, Microsoft and other manufacturers embed into all of their devices "hardware security technology" designed to protect user data.⁶⁹ Untrained technicians could disable hardware security technology and render devices vulnerable to hacking or other malware.⁷⁰ CompTIA, an analyst nonprofit, explained that one compromised device might compromise an entire technological system's security;⁷¹ "with more than 20 billion connected products by 2020, including appliances, thermostats, fire alarms, automobiles[,] etc., the insecure repair of a device can place numerous other connected devices and the data they hold at risk."⁷² Linked devices could enable criminals to circumvent security protections and harm users on whole networks and servers.⁷³ Thus, manufacturers believe third-party repair is dangerous, unnecessary, and threatening to cybersecurity.⁷⁴ While big tech dogmatically advances the view that a right to repair would pose significant cybersecurity risks, recognizing a right to repair, as evidenced by the findings in the "Nixing the Fix" Report, will not harm consumers' cybersecurity and data privacy.

D. The Inflated Risks the Right to Repair Poses to Cybersecurity

Although consumers may perceive some risk by bringing a device to a non-authorized dealer for repair, these fears are largely unfounded for several reasons. First, there is "no empirical

⁶⁷ Claire Hoplin, *Search and Seizures – Abandoned, Surrendered, or Disclaimed Items: The Unique Sensitivity of Cell Phones*, 96 N.D. L. REV. 81, 81 (2021).

⁶⁸ F.T.C., NIXING THE FIX, *supra* note 55, at 30.

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ COMPTIA, SIZING UP THE INTERNET OF THINGS (2020).

⁷² F.T.C., NIXING THE FIX, *supra* note 55, at 31 (quotations omitted).

⁷³ Michael J. Covington & Rush Carskadden, *Threat Implications of the Internet of Things*, INT'L CONF. ON CYBER CONFLICT 1, 1 (2013).

⁷⁴ *Id.*

evidence” suggesting independent repair shops are more likely than authorized repair shops to compromise consumer data.⁷⁵ Moreover, there is very little evidence to suggest repair technicians—authorized or unauthorized—actually browse through a customer’s data when conducting a repair.⁷⁶ According to Rossmann, “It’s easy [to protect somebody’s data]; just don’t go through their [stuff];” thus, with regards to data threats, third-party technicians are on par with authorized technicians.⁷⁷ Second, according to Gay Gordon-Byrne, the Executive Director of the Repair Association, third-party technicians who swap manufacturers’ items with functionally equivalent, third-party parts are not likely to create a cybersecurity risk to consumers.⁷⁸ Third, agreements between repair technicians and their customers generally prohibit technicians from misusing their customers’ data; many of these contracts include language that obligates technicians to keep data private and maintain the security of devices and personal information.⁷⁹ Given the lack of evidence supporting the right to repair is harmful to consumers’ cybersecurity and data privacy, manufacturers’ claims relating to consumer protection have little weight.

E. The Modern Right to Repair Laws in the European Union

The European Union (“EU”) recently adopted regulations in favor of a right to repair and consumer choice.⁸⁰ These rules require manufacturers to make parts available to individuals and third-party repair shops for a specified minimum period of time.⁸¹ However, these laws only apply to household appliances, such as

⁷⁵ F.T.C., NIXING THE FIX, *supra* note 55, at 31.

⁷⁶ *Id.*

⁷⁷ Telephone Interview with Louis Rossmann, *supra* note 46.

⁷⁸ F.T.C., NIXING THE FIX, *supra* note 55, at 31.

⁷⁹ See e.g., REPAIR TERMS AND CONDITIONS, <https://www.ubreakifix.com/terms-conditions> [<https://perma.cc/5MTF-Q37F>] (last visited Nov. 4, 2021) (stating in ubreakifix’s repair terms and conditions that data that is collected “will not be distributed . . . without [a consumer’s] consent.”).

⁸⁰ See F.T.C., NIXING THE FIX, *supra* note 55, at 48–49.

⁸¹ Commission Regulation, 315/187, 2019 O.J. 3.

refrigerators,⁸² washing machines,⁸³ and dishwashers.⁸⁴ The EU also implemented a policy where easily repairable projects are distinguished from those which should be done by a professional in order to provide notice to which repairs are safe or cost-effective for consumers to make themselves.⁸⁵ The EU also requires manufacturers to make parts available for professional-grade repairs to ensure open and fair access to consumer choice.⁸⁶ Lastly, the EU's right to repair policies "require manufacturers to ensure that spare parts can be replaced using commonly available tools and without causing permanent damage" to the device.⁸⁷ Despite the limited application of the right to repair in the EU market, the European Commission, the EU's executive branch of government, announced on March 1, 2020, that the Commission will introduce legislation to establish a right to repair for broad types of electronics.⁸⁸

* * *

The right to repair movement erupted in the United States as a response to vast technological development.⁸⁹ The movement is supported by American consumers of all kinds, the FTC, and even the EU, but is opposed by American big tech companies. Big tech lobbyists continue to emphasize tired concerns related to cybersecurity and data privacy⁹⁰ despite a lack of substantive

⁸² *Id.*

⁸³ Commission Regulation, 1016/2010, 2019 O.J. 3.

⁸⁴ Commission Regulation, 1275/2008, 2019 O.J. 3.

⁸⁵ F.T.C., NIXING THE FIX, *supra* note 55, at 49 (noting, generally, projects that may only be completed with the use of special tools are only available to professional technicians, including repairs on circuit boards, heaters, and motors).

⁸⁶ *Id.*

⁸⁷ *Id.* at 49.

⁸⁸ *Id.*; see also Eur. Comm'n, CIRCULAR ECONOMY ACTION PLAN: FOR A CLEANER AND MORE COMPETITIVE EUROPE (Mar. 2020) (stating that the European Commission plans on expanding a right to repair to "mobile phones, tablets, and laptops, . . . [and] [p]rinters").

⁸⁹ *History, supra* note 26.

⁹⁰ See, e.g., Letter from Jason L. Brown, Vice President Gen. Couns. & Sec'y, Dyson, Inc., to David Harris, Ill. Gen. Assembly (Apr. 17, 2018), <https://www.documentcloud.org/documents/4446373-DYSON-Illinois-Opposition.html> [<https://perma.cc/V4GX-6MMA>]; Letter from Rick Habben, Safety Compliance Eng'r, Wahl Clipper Corp., to David Harris, Ill. Gen.

evidence supporting these contentions.⁹¹ So far, big tech lobbyists control the conversation around right to repair. However, even when considering the tech lobbyists' claims, the benefits of a right to repair still outweigh the negative consequences.

III. THE LIMITED SUCCESS OF THE BIDEN ADMINISTRATION'S RIGHT TO REPAIR POLICIES

With the recent headlines of continuous “chip shortage[s]”⁹² and technological failures, the right to repair movement frequently pops up in national news, propelling the current upward trend of the movement's public support.⁹³ Two recent federal actions suggest that the Nation is moving towards a recognized right to repair: (A) President Biden's Executive Order on “Promoting Competition in the American Economy,” and (B) the FTC agreeing to sign onto the standards outlined in the Executive Order.

A. *President Biden's Executive Order on “Promoting Competition in the American Economy”*

In an effort to decelerate the corporate consolidation occurring within the United States' economy and this consolidation's consequential effect on the right to repair, President Biden, on July 9, 2021, passed Executive Order 14036 (“E.O. 14036”) dedicated to promoting competition within the American marketplace.⁹⁴ President Biden maintains that service-related competition is essential within the free market because it keeps product and service

Assembly (Apr. 17, 2018), <https://www.documentcloud.org/documents/4446374-WahlOpposition-Illinois.html> [https://perma.cc/23F8-46TZ].

⁹¹ F.T.C., NIXING THE FIX, *supra* note 55, at 31.

⁹² See e.g., Stephen Wilmot, *The Great Car-Chip Shortage Will Have Lasting Consequences*, WALL ST. J. (Sept. 27, 2021), <https://www.wsj.com/articles/the-great-car-chip-shortage-will-have-lasting-consequences-11632737422> [https://perma.cc/8CYD-EKE3].

⁹³ Avery Wendell & Mark White, *The Public Supports a Right to Repair*, DATA FOR PROGRESS (May 29, 2019), <https://www.dataforprogress.org/blog/2019/5/29/right-to-repair-laws-are-popular> [https://perma.cc/F2LN-PWA2].

⁹⁴ THE WHITE HOUSE, FACT SHEET: EXECUTIVE ORDER ON PROMOTING COMPETITION IN THE AMERICAN ECONOMY (2021).

prices down,⁹⁵ fosters innovation, and increases general productivity.⁹⁶ Accordingly, E.O. 14036 “includes 72 initiatives by more than a dozen federal agencies to promptly tackle some of the most pressing competition problems across” the United States and stresses that, “[o]nce implemented, these initiatives will result in concrete improvements to people’s lives.”⁹⁷

In an attempt to institute a national right to repair, E.O. 14036 calls for the Chair of the FTC:

[T]o exercise the FTC’s statutory rulemaking authority . . . in areas such as . . . unfair anticompetitive restrictions on third-party repair or self-repair of items, such as the restrictions imposed by powerful manufacturers that prevent farmers from repairing their own equipment . . . [The Secretary of Defense shall] submit a report to the Chair of the White House Competition Council on a plan for avoiding contract terms in procurement agreements that make it challenging or impossible for the Department of Defense or service members to repair their own equipment, particularly in the field.⁹⁸

The robust language in this passage emphasizes the federal government’s interest in recognizing the right to repair. By limiting manufacturers from blocking self-repairs and third-party repairs, the implementation of E.O. 14036 will make it easier and cheaper to repair consumer’s technological goods.⁹⁹ Notably, E.O. 14036 expressly targets unfair repair practices in the context of the agriculture industry.¹⁰⁰ In a press release, the President stressed the impact powerful companies have on farmers’ livelihoods:¹⁰¹

Corporate consolidation even affects farmers’ ability to repair their own equipment or use independent repair shops. Powerful equipment manufacturers—such as tractor manufacturers—use proprietary repair tools, software, and diagnostics to prevent third-parties from performing repairs. For example, when certain tractors

⁹⁵ See Jan de Loecker & Jan Eeckhout, *The Rise of Market Power and the Macroeconomic Implications*, 23687 NAT’L BUREAU OF ECON. RSCH. 5–6 (2017).

⁹⁶ Jason Furman, *Prepared Testimony to the Hearing on “Market Concentration”*, 67 ORG. FOR ECON. COOP. AND DEV. 2 (2018).

⁹⁷ THE WHITE HOUSE, *supra* note 94.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ Exec. Order No. 14036, 86 CFR § 36987.

¹⁰¹ THE WHITE HOUSE, *supra* note 94.

detect a failure, they cease to operate until a dealer unlocks them. That forces farmers to pay dealer rates for repairs that they could have made themselves, or that an independent repair shop could have done more cheaply.¹⁰²

For more traditional consumer technological goods, like cellphones and computers, E.O. 14036 compels the FTC to use its delegated authority to bar unfair methods of competition within internet marketplaces.¹⁰³ Cellphone manufacturers unfairly block out some independent repair shops from providing services with manufacturer authorization and self-repair “by restricting the distribution of parts, diagnostics, and repair tools,” thereby making repairs unduly expensive and slow.¹⁰⁴ To combat this monopolization within the repair market, E.O. 14036 encourages the FTC to promulgate rules for big tech manufacturers, focusing on enabling consumers to independently repair their goods.¹⁰⁵

E.O. 14036 successfully brings the right to repair to the forefront of the federal government’s political playing field. The Executive Order calls for an increase in competition, a reduction of monopolization, and the creation of pro-consumer policies.¹⁰⁶ Effectively, the federal government—via E.O. 14036, as well as the FTC’s “Nixing the Fix” Report—is signaling to big tech companies, including those that manufacture farm equipment, cellphones, and cars, that their monopolistic practices are not only unfair and un-American, but also unwelcome.¹⁰⁷

E.O. 14036 suggests that the federal government is poised to join the right to repair movement; however, this recent federal action

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ Tik Root, *Apple Effectively Has a Monopoly on Fixing Your iPhone. There’s Now a Fight to Change That*, VOX (July 3, 2019), <https://www.vox.com/the-goods/2019/7/3/18761691/right-to-repair-computers-phones-car-mechanics-apple> [<https://perma.cc/ZM3P-6FUJ>].

¹⁰⁵ Exec. Order No. 14036, 86 CFR § 36987.

¹⁰⁶ *See id.* (“This order affirms that it is the policy of my Administration to enforce the antitrust laws to combat excessive concentration of industry, the abuses of market power, and the harmful effects of monopoly and monopsony . . . [on] repair markets.”).

¹⁰⁷ *Id.*

fails to effectively protect consumers, as the Executive Order does not propose a calculated plan. Instead, E.O. 14036 calls upon the FTC to utilize its delegated rulemaking authority to address big tech companies' current "unfair" practices.¹⁰⁸ Further, the scope of E.O. 14036 barely affords Americans a right to repair.¹⁰⁹ In fact, the Executive Order only references the word "repair" five times, only in the *last* section titled "Further Agency Responsibilities."¹¹⁰ Moreover, the practical effects of E.O. 14036 remain unclear because the Order fails to address the political influence of big tech companies over state and federal legislation.¹¹¹ Despite the right to repair not serving as a main objective of President Biden's political agenda, its mention in E.O. 14036 still supports the notion that the government is progressing towards a broad adoption of the right to repair.

E.O. 14036 can facilitate the movement's future success because most Americans want more autonomy in the marketplace.¹¹² In a 2019 bipartisan study led by YouGov,¹¹³ seventy-one percent of participants supported a right to repair, only seven percent directly opposed a right to repair, and twenty-two percent either had no preference or did not know what the right to repair is.¹¹⁴ The results of this study suggest, with an overwhelming majority of the nation's support, President Biden's E.O. 14036 has a strong chance of garnering public support and effectuating actual change. Moreover, if constituents put pressure on both their state and federal legislators, E.O. 14036 could serve as a linchpin in establishing a long-lasting, observed right for consumers.

¹⁰⁸ *Id.*

¹⁰⁹ *See id.*

¹¹⁰ *Id.*

¹¹¹ Emma C. Smizer, *Epic Games v. Apple: Tech-Tying and the Future of Antitrust*, 41 LOY. L.A. ENT. L. REV. 215, 217 (2021).

¹¹² Wendell & White, *supra* note 93.

¹¹³ YouGov is a global public opinion, data, and polling company.

¹¹⁴ Wendell & White, *supra* note 93.

B. The FTC's Effort to Implement President Biden's Broad Mandate

President Biden's E.O. 14036 calls for the FTC, as well as other federal agencies,¹¹⁵ to sign onto the Order.¹¹⁶ In response, the FTC announced a new policy implementing sanctions against manufacturers that abridge a consumers' right to repair.¹¹⁷ The FTC's actions are justified by the agency's following public policy goals: (1) substantially reducing repair costs for consumers, (2) decreasing electronic waste, (3) enabling more timely repairs, and (4) promoting economic development and growth.¹¹⁸

The FTC's new policy sets forth four express and unprecedented plans of action.¹¹⁹ First, the FTC asks the public to submit complaints detailing violations of the Magnuson-Moss Warranty Act.¹²⁰ The Magnuson-Moss Warranty Act prohibits manufacturers from engaging in certain monopolistic practices such as requiring consumers to purchase manufacturer-branded equipment or voiding warranties without cause.¹²¹ The FTC will monitor complaints and private litigation to "investigate a pattern of unfair or deceptive practices."¹²² Monitoring complaints allows the FTC to gauge which companies limit fair repair for purchasers.

Second, the FTC will "scrutinize repair restrictions for violations of the antitrust laws."¹²³ For example, some repair

¹¹⁵ Exec. Order No. 14036, 86 CFR § 36987 (calling upon the Secretary of Defense and Department of Defense "to submit a report to the Chair of the White House Competition Council on a plan for avoiding contract terms in procurement agreements that make it challenging or impossible for the Department of Defense or service members to repair their own equipment, particularly in the field").

¹¹⁶ Claire Hao, *FTC Votes to Prioritize Consumers' Right to Repair Products (1)*, BLOOMBERG L. (July 21, 2021), <https://www.bloomberglaw.com/product/blaw/bloomberglawnews/bloomberg-law-news/X5FQONO4000000?https://perma.cc/6J5Z-FWQ7>.

¹¹⁷ F.T.C., POLICY STATEMENT OF THE FEDERAL TRADE COMMISSION ON REPAIR RESTRICTIONS IMPOSED BY MANUFACTURERS AND SELLERS (2021) [hereinafter F.T.C., POLICY STATEMENT].

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ Magnuson-Moss Warranty Act, Pub. L. No. 93-637, 88 Stat. 2183.

¹²² F.T.C., POLICY STATEMENT, *supra* note 117.

¹²³ *Id.*

restrictions may be considered illegal “monopolistic practices,” as defined in the Sherman Act.¹²⁴ The Sherman Act was established in 1890 to serve as a “comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade.”¹²⁵ Due to the broad nature of the Sherman Act, monopolistic practices can include exclusive deals preventing market growth, consolidation of parts manufacturers and availability, or other market-controlling actions.¹²⁶ Like the first approach, scrutinizing repair restrictions for violations of antitrust laws enables the FTC to determine which companies abridge consumer choice.

Third, the FTC will analyze complaints and consider whether repair restrictions (including digital locks) are prohibited under Section 5 of the Federal Trade Commission Act (“FTC Act”).¹²⁷ Specifically, Section 5(a) of the FTC Act prohibits, among other things, “unfair methods of competition,” including violations of the Sherman Act.¹²⁸ In analyzing complaints in its adjudications, the FTC will be able to use its adjudicatory powers to determine which private actions constitute unfair methods of competition. In determining which behaviors violate established federal regulations, the FTC can lay the groundwork for sanctioning companies that do not promote competition.

Fourth, the FTC will take an interdisciplinary and interagency approach, relying on its resources and experts across various federal agencies to combat unlawful repair restrictions.¹²⁹ The FTC will also work alongside law enforcement and legislators to ensure compliance with various standards and update current laws “to advance the goal of open repair markets.”¹³⁰ This increased governmental cooperation indicates that E.O. 14036 is already

¹²⁴ Sherman Antitrust Act, Pub. L. No. 84-135, 69 Stat. 282; F.T.C., POLICY STATEMENT, *supra* note 117; *see, e.g.*, *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451 (1992) (providing an example of exclusive dealing violating the Sherman Antitrust Act and the Supreme Court finding private action illegal because of its specific intent to monopolize).

¹²⁵ *Northern Pac. Ry. Co. v. United States*, 356 U.S. 1, 4 (1958).

¹²⁶ F.T.C., POLICY STATEMENT, *supra* note 117.

¹²⁷ *Id.*

¹²⁸ 15 U.S.C § 45(a).

¹²⁹ F.T.C., POLICY STATEMENT, *supra* note 117.

¹³⁰ *Id.*

strengthening consumer autonomy in the marketplace, signaling a shift towards a federal right to repair.

Beyond making significant progress towards establishing a substantive right to repair policy under E.O. 14036, the FTC could use its authority established in current laws to reinforce its new policy.¹³¹ For instance, the FTC can assess charges of unfair market practices pursuant to Section 5 of the FTC Act.¹³² Specifically, the FTC could promulgate a rule¹³³ via its delegated rulemaking authority¹³⁴ and broadly determine digital locks are unfair and monopolistic, and thus impermissible, because they prevent an individual's ability to repair a tractor—helping farmers like Dave Alford who purchased John Deere tractors equipped with digital locks.¹³⁵ Afforded the authority to establish rules that make consumer choice a recognized right, the FTC can likely drive the United States to federally recognize a right to repair.

* * *

The right to repair now has significant backing from major federal actors, including the President and the FTC, which is a positive step forward for consumers. E.O. 14036 and the FTC's new policy statement exemplify progress in realizing a national right to repair. However, despite the general support and recent developments, there is still much to be done.

IV. CONGRESS'S INCREASING INTEREST IN THE RIGHT TO REPAIR MOVEMENT

Historically, Congress has indicated support for the right to repair movement in certain circumstances for increased consumer choice, albeit this support has occurred while framing the issue

¹³¹ *Id.*

¹³² *Id.*; see 15 U.S.C. § 45.

¹³³ *J.W. Hampton, Jr., & Co. v. United States*, 276 U.S. 394, 409 (1928).

¹³⁴ *Id.*

¹³⁵ Exec. Order No. 14036, 86 CFR § 36987 (noting farmers face hardship from “restrictions imposed by powerful manufacturers” preventing repair on their own equipment).

within larger antitrust concerns.¹³⁶ Within the past ten years, Congress has specifically discussed the following: (A) cellphone carrier choice, (B) monopolistic conduct by big tech companies, and (C) a right to repair for medical infrastructure.¹³⁷

A. The Unlocking Consumer Choice and Wireless Competition Act

In the early 2000s, cellphone carriers and data providers offered discounted devices in exchange for lengthy contracts for wireless service.¹³⁸ Unfortunately for consumers, these contracts included the right for carriers to lock devices from being paired with competing data servicers.¹³⁹ The only way around these digital locks involved unlocking and hacking the devices,¹⁴⁰ which was illegal under the Digital Millennium Copyright Act of 1998 (“DMCA”).¹⁴¹

Responding to the possibility that many Americans could face significant penalties under the DMCA,¹⁴² Senator Patrick Leahy (D-VT) introduced the Unlocking Consumer Choice and Wireless Competition Act (“UCCWCA”).¹⁴³ The UCCWCA expressly stated:

Circumvention of a technological measure that restricts wireless telephone handsets or other wireless devices from connecting to a wireless telecommunications network . . . may be initiated by the owner of any such handset or device [or] by another person at the direction of

¹³⁶ *History, supra* note 26 (noting the right to repair has been discussed at the Congressional level with regards to cellphone use, big tech monopolies, and medical infrastructure).

¹³⁷ *Id.*

¹³⁸ Kellen Wittkop, *Unlocking Cell Phones Made Legal Through Unlocking Consumer Choice and Wireless Competition Act*, JOLT DIGEST (Aug. 5, 2014), <https://jolt.law.harvard.edu/digest/unlocking-cell-phones-made-legal-through-unlocking-consumer-choice-and-wireless-competition-act> [<https://perma.cc/8XFN-MWPW>].

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ 12 U.S.C. § 1201(a) (establishing that “[n]o person shall circumvent a technological measure that effectively controls access to a work protected under this title,” which includes anything protected under copyright law).

¹⁴² Penalties include fines up to \$1,000,000 or imprisonment up to ten years. 12 U.S.C. § 1204.

¹⁴³ The Unlocking Consumer Choice and Wireless Competition Act, H.R. 1123, 113th Cong. (2014).

such owner . . . solely in order to enable such owner or a family member of such owner to connect to a wireless telecommunications network.¹⁴⁴

The proposed UCCWCA undoubtedly appealed to consumers by affording consumers the ability to “circumvent” any restrictive measure, such as a digital lock, and accordingly not be subjected to the harsh penalties under the DMCA.¹⁴⁵ Notably, the UCCWCA also appealed to wireless network providers because the Act prohibited the right to unlock devices for the purpose of resale.¹⁴⁶ This specific provision makes sure wireless network providers are still able to reap ample profits by preventing an individual consumer from selling unlocked devices. With the support of both consumers and telecommunications providers, the UCCWCA passed a milestone in recognizing a greater consumer choice at the federal level.¹⁴⁷ The UCCWCA marks the most recent “initial step in a movement towards broadening consumer choice in technologies”¹⁴⁸ because it struck down a significant component of the DMCA, setting a precedent for the DMCA to be weakened over time.

B. The Congressional Hearings Regarding Big Tech and U.S. Antitrust Laws

On July 29, 2020, the CEOs of Apple, Google, Facebook, and Amazon, colloquially called “big tech,” testified before Congress with the hope of convincing the House Judiciary Committee that their practices were not monopolistic and in violation of American antitrust laws. The House Judiciary Committee, after three months of investigating competition in the digital marketplace, released a 450-page report, titled the “Investigation of Competition in Digital Markets,” that ultimately favored restricting the practices of big tech companies.¹⁴⁹ In the Report, Chairman Jerrold Nadler (D-NY) remarked: “To put it simply, companies that once were scrappy, underdog startups that challenged the status quo have become the

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ Wittkop, *supra* note 138.

¹⁴⁸ *Id.*

¹⁴⁹ STAFF OF H. COMM. ON THE JUD., 116th CONG., INVESTIGATION OF COMPETITION IN DIGITAL MARKETS (2019).

kinds of monopolies we last saw in the era of oil barons and railroad tycoons.”¹⁵⁰ Like those oil barons and railroad markets, the current digital market revolves around a winner-takes-all system where market power tips in favor of a few companies, “shifting . . . the competitive process from competition *in* the market to competition *for* the market.”¹⁵¹ This market structure particularly strengthens the prowess and pockets of big tech companies, pushing smaller entities out of operation.¹⁵²

The Report provided three broad recommendations for Congress: (1) “restor[e] competition in the digital economy,” (2) “strengthen[] the [current] antitrust laws,” and (3) “strengthen[] antitrust enforcement.”¹⁵³ Considering the thoroughness of the House Judiciary Committee’s investigation, Congress should act in accordance with those three recommendations.

First, to combat monopolies in the digital economy, Congress should take steps to ensure increased competition in the marketplace. Congress can “reduce conflicts of interest through structural separations and line of business restrictions” to overcome the issue of market consolidation and to increase competition.¹⁵⁴ Here, conflicts of interest form out of the competition from tech giants and cross-platform consolidation.¹⁵⁵ For example, many cross-platform companies collect data and sell it for a profit to bigger tech companies, leaving smaller companies that cannot afford to buy into the shared data to suffer.¹⁵⁶ By setting rigid restrictions for company interaction, marketplace dominance would decrease and competition within the marketplace would flourish.

Second, Congress should strengthen current antitrust laws to lessen the power of big tech monopolies. The judiciary, over time, has weakened the constraints of antitrust laws. For example, since Congress established the foundational Sherman Act, the Clayton Act, and the FTC Act, “courts have significantly weakened these

¹⁵⁰ *Id.* at 6.

¹⁵¹ *Id.* at 37.

¹⁵² *See id.*

¹⁵³ *Id.* at 4–5.

¹⁵⁴ STAFF OF H. COMM. ON THE JUD., *supra* note 149, at 378.

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

laws and made it increasingly difficult for federal antitrust enforcers and private plaintiffs to successfully challenge anticompetitive conduct and mergers.”¹⁵⁷ Accordingly, Congress can restore the anti-competitive goal of those laws and codify bright-line rules for market competition.¹⁵⁸ Therefore, by reinstating the focus of antitrust laws to general market competition and establishing strict standards, antitrust laws will have more breadth and authority.¹⁵⁹

Lastly, Congress should strengthen its enforcement power through broad Congressional oversight. Congress had a “strong tradition of performing vigorous oversight of the enforcement¹⁶⁰ and adequacy of the antitrust laws,” but this tradition faded as the scope of the laws narrowed through judicial action.¹⁶¹ Historically, Congress exercised its enforcement power and oversight, alone, through hearings and investigations of monopolistic behaviors.¹⁶² But presently, Congress grants significant deference to the other branches of government in considering potential monopolies in the free market.¹⁶³ Because of this deference to courts and administrative agencies dedicated to antitrust policies, such as the FTC, “[Congress’s] inaction has been read as acquiescence to the narrowing of the antitrust laws.”¹⁶⁴ Thus, in reclaiming its enforcement powers, Congress can strengthen current antitrust statutes and redefine how the laws should be executed.¹⁶⁵

In sum, the Congressional Report drafted in response to the Congressional hearing on big tech trusts established a feasible framework for Congress to combat big tech’s dominance over consumers’ right to repair. If Congress chooses to follow the report’s three recommendations, the right to repair can be acknowledged and afforded in the context of antitrust laws.

¹⁵⁷ *Id.* at 391 (adopting a view focused on consumer welfare as the only goal of antitrust laws enabled the Supreme Court to limit the reach of the statutes).

¹⁵⁸ *Id.*

¹⁵⁹ STAFF OF H. COMM. ON THE JUD., *supra* note 149, at 391.

¹⁶⁰ Congress’s strong tradition of enforcement includes promulgating statutes with clear language determining what is to be executed by agencies. *See id.*

¹⁶¹ *Id.* at 399.

¹⁶² *Id.*

¹⁶³ *Id.*

¹⁶⁴ STAFF OF H. COMM. ON THE JUD., *supra* note 149, at 400.

¹⁶⁵ *Id.*

Moreover, the report lays the groundwork for repair market reform and for effectuating President Biden's E.O. 14036 on market competition. Lastly, the Congressional Report opened the door for the "Nixing the Fix" Report and continuous investigations of unfair market practices by big tech companies.¹⁶⁶

C. The Critical Medical Infrastructure Right to Repair Act of 2020

The most recent Congressional action addressing the right to repair has come in the form of a proposed consumer choice bill. On August 7, 2020, Representative Yvette Clarke (D-NY)¹⁶⁷ introduced the Critical Medical Infrastructure Right to Repair Act of 2020 ("CMIRRA") as a response to the COVID-19 pandemic.¹⁶⁸ Medical professionals faced hardships in keeping important medical devices running, given the incredible stresses from the unprecedented influx of COVID-19 patients and the overworked biomedical repair technicians ("BMETs").¹⁶⁹ Like farmers, medical professionals depend on electronic devices for their job's success.¹⁷⁰ Ventilators, for example, are common machines used in hospitals across the world for patients requiring respiratory assistance.¹⁷¹ During the COVID-19 pandemic, hospitals have been using ventilators extensively, far surpassing their typical hours of operation.¹⁷² This continued use stresses components of the machine, thereby increasing the likelihood that these electronic systems will fail, just like tractors after repeated use in the field.¹⁷³ As authorized ventilator

¹⁶⁶ *Id.* at n. 2125 (calling for the continued investigation of the "repair markets for Apple products").

¹⁶⁷ The Critical Medical Infrastructure Right to Repair Act, H. R. 7956, 116th Cong. (2020).

¹⁶⁸ Caroline Trabucco, *Critical Medical Infrastructure and the Right to Repair: H.R. 7956 and Beyond*, HEALTH L. POL'Y, (Feb. 15, 2021), <http://www.healthlawpolicy.org/critical-medical-infrastructure-and-the-right-to-repair-h-r-7956-and-beyond/> [<https://perma.cc/RV4J-HK3A>].

¹⁶⁹ Emily Rusch, *Hospital Repair Professionals: Just Let Us Fix Life-Saving Devices Like Ventilators*, CA PUB. INT. GRP. (May 18, 2020), <https://calpirg.org/news/cap/hospital-repair-professionals-just-let-us-fix-life-saving-devices-ventilators> [<https://perma.cc/8NVN-4BJR>].

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Id.*

technicians, BMETs have been trained to repair the machines, proving to be a life-changing skill in high-pressure, emergency situations.¹⁷⁴ However, some ventilator manufacturers make it difficult “to access manuals, read error logs, or run diagnostic tests,”¹⁷⁵ potentially causing repair delays that could cost a patient’s life.

Representative Clarke introduced the CMIRRA as a direct result of the substantial hardships medical professionals have faced, evidenced by a petition signed by hundreds of BMETs.¹⁷⁶ The CMIRRA specifically calls for manufacturers of critical medical infrastructure to make tools and repair information available to owners and operators of medical equipment.¹⁷⁷ In effect, the CMIRRA acknowledges a right to repair, notes copyright challenges, and further weakens the DMCA, like the UCCWCA.

* * *

In conclusion, Congress has already expressed support to recognize a federal right to repair. Although Congress has realized a right to consumer choice only for wireless service via the UCCWCA, Congress’s recent actions present the possibility that the right to repair could be recognized using an antitrust justification. Moreover, the Congressional Report on the “Investigation of Competition in Digital Markets” highly favors market fairness and rejects a consolidated market of any kind, including a repair market. Further, a right to repair medical devices has the potential to be codified in law because the CMIRRA has already been introduced into the legislative process and is sitting in the House Committee on the Judiciary.¹⁷⁸

¹⁷⁴ Rusch, *supra* note 169.

¹⁷⁵ *Id.*

¹⁷⁶ The Critical Medical Infrastructure Right to Repair Act, H.R. 7956, 116th Cong. (2020).

¹⁷⁷ *Id.*

¹⁷⁸ *H.R. 7956 - Critical Medical Infrastructure Right-to-Repair Act of 2020*, CONGRESS.GOV <https://www.congress.gov/bill/116th-congress/house-bill/7956> [https://perma.cc/BA3B-YP57] (last visited Nov. 4, 2021).

V. RECOMMENDATIONS TO REALIZE A NATIONAL RIGHT TO REPAIR

The future of the right to repair at the federal stage hinges on the FTC's success in implementing E.O. 14036 and executing the FTC's plan of action. Essentially, the Executive Order gives the FTC the "green light" to implement regulations that could grant consumers a right to repair their purchased products.¹⁷⁹ To solidify this right, Congress could promulgate policies in line with the Repair Association's model bill or the EU's approach to the right to repair.¹⁸⁰

A. *FTC Actions to Address the Executive Order's Weaknesses*

The FTC can limit big tech companies' power in the right to repair realm by promulgating rules that, for example, forbid—or at the very least heavily regulate—physical repair limitations, software release limitations, and repair market consolidation. In fact, the FTC has indicated in a policy statement that the agency plans to enforce broad unfair business practices;¹⁸¹ repair limitations, as evidenced by farmers and BMETs, surely constitute unfair business practices. Second, the FTC could revise and establish bright-line rules that clarify which repair restrictions are unfair, putting the public and companies on notice of which behaviors could negatively impact consumer choice and be considered monopolistic.¹⁸²

1. *Enforcing Unfair Business Practices Through Existing Antitrust Powers*

The FTC has the power to enforce certain laws under its statutorily-granted authority.¹⁸³ Under Section 5 of the FTC Act (as explained in the FTC's policy statement), if a repair restriction "is likely to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition," it could

¹⁷⁹ Exec. Order No. 14036, 86 CFR § 36987.

¹⁸⁰ Commission Regulation, 315/187, 2019 O.J. 3.

¹⁸¹ F.T.C., POLICY STATEMENT, *supra* note 117.

¹⁸² F.T.C., NIXING THE FIX, *supra* note 55, at 44.

¹⁸³ U.S. CONST. art. II, § 3 ("[The President] shall take care that the laws be faithfully executed and shall commission all the officers of the United States.").

be challenged as an unfair practice.¹⁸⁴ By connecting the harms associated with repair restrictions to market unfairness and reduced competition and relying on both antitrust-focused, and consumer protection-focused laws, the FTC can broadly enforce a right to repair. Violation enforcement could include monetary penalties, consent decrees (as seen with IBM),¹⁸⁵ or court action in the form of compelled or injunctive relief.

2. *Promulgating Strict Rules Establishing Which Repair Restrictions Are Unfair*

The FTC could engage in its rulemaking authority to “declare certain types of repair restrictions illegal.”¹⁸⁶ By promulgating a set of bright-line rules and giving parties notice of which practices are illegal, the FTC could create clear guidelines for manufacturers when introducing devices into the market. This solution would effectively give notice to big tech companies about what conduct is expressly illegal, which would hopefully minimize any potential violations.

B. *Legislative Actions to Address the FTC’s Weaknesses*

Many of the FTC’s weaknesses stem from the possibility of legislative inaction and uncertainty of future Congressional buy-in. Fortunately, Congress’s recent legislative actions in favor of consumer choice with the UCCWCA and the Congressional Report against big tech conglomerates, Congressional approval in favor of a right to repair seems steadfast. In realizing a federal right to repair, Congress should promulgate legislation that mirrors the principles and approaches in either (1) the Repair Association’s model bill or (2) the EU’s approach to the right to repair, or both.

1. *Utilizing the Repair Association’s Model Bill*

First, Congress could promulgate policies that align with the Repair Association’s model bill and “require manufacturers of digital electronic equipment to make available to any independent repair provider” or owner of the equipment, “documentation, parts,

¹⁸⁴ 15 U.S.C. § 45(n).

¹⁸⁵ See *supra* notes 28–33 and accompanying text.

¹⁸⁶ F.T.C., NIXING THE FIX, *supra* note 55, at 44.

and tools, inclusive of any updates to information or embedded software.”¹⁸⁷ This model law would likely appeal to manufacturers because it requires parts to be broadly distributed *only* if the parts are also shared with authorized technicians.¹⁸⁸ This selective requirement means that manufacturers would not need to circulate every component of their devices, rather, only the pieces *necessary* for repair.¹⁸⁹ Moreover, to garner support from powerful manufacturers, the model legislation expressly notes that it does not “require a manufacturer to divulge a trade secret . . . except as necessary to provide, on fair and reasonable terms, documentation, parts, and tools.”¹⁹⁰ Thus, this model legislation, if enacted, would sufficiently address the concerns raised by President Biden in E.O. 14036, further the goals of the FTC, and quash cybersecurity concerns of big tech companies—all while protecting consumers from unfair practices.

2. *Mirroring the European Union’s Approach to the Right to Repair*

Additionally, Congress’s proposed legislation could mirror the EU’s recently adopted regulations that favor a right to repair and consumer choice for specific markets.¹⁹¹ As discussed above, the EU has compartmentalized its laws by observing a right to repair in specific industries relating to home appliances.¹⁹² By establishing particular areas where a right to repair exists, the EU has immensely strengthened consumers’ rights of choice and repair in those fields.¹⁹³ Also, by utilizing a repair stratification model,¹⁹⁴ the EU further protects consumers by listing which repairs consumers can perform themselves.¹⁹⁵ The EU’s broad approach allows for the right to repair to be observed over a long period of time. By starting out with specific industries, like household appliances, consumer choice

¹⁸⁷ *Id.*

¹⁸⁸ *Id.*

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ F.T.C., NIXING THE FIX, *supra* note 55, at 44.

¹⁹² See *supra* notes 80–88 and accompanying text.

¹⁹³ *Id.*

¹⁹⁴ A model where certain types of repairs are placed in groups (known as “strata”) where they are eligible for amateur repair or professional repair only.

¹⁹⁵ F.T.C., NIXING THE FIX, *supra* note 55, at 49.

gradually gets introduced into the consumers' market (avoiding market shock) and protects the delicate transition towards consumer choice.

Following the EU's policy guidelines would please both consumers and manufacturers within the United States. In effect, the policy would afford consumers the power of choice and a right to make those "amateur" repairs that are feasible to do at home. Yet, manufacturers would still be able to maintain some element of protecting proprietary technology and tools by requiring professionally required repairs.

Notably, the United States may struggle with precisely mirroring the EU's laws—what works in the EU may not work in the United States due to broad cultural differences in consumption and waste.¹⁹⁶ Nonetheless, the EU crucially recognizes a right to repair, a right for which many Americans yearn. Thus, the EU's implementation of this right could reasonably be used as a guidepost for its realization in the United States.

VI. CONCLUSION

The right to repair movement is generally supported by the masses and opposed by big tech companies with deep pockets.¹⁹⁷ Arguments in favor of the right to repair include: (1) it is more

¹⁹⁶ See, e.g., Laura Parker, *U.S. Generates More Plastic Trash Than Any Other Nation, Report Finds*, NAT'L GEOGRAPHIC (Oct. 30, 2020), <https://www.nationalgeographic.com/environment/article/us-plastic-pollution> [<https://perma.cc/M6YF-L28F>] (explaining the United States generates substantially more waste than countries within the EU).

¹⁹⁷ See Press Release, Apple, *Apple Announces Self Service Repair* (Nov. 17, 2021) <https://www.apple.com/newsroom/2021/11/apple-announces-self-service-repair/> [<https://perma.cc/F5ZK-K5LX>]. Apple announced on November 17, 2021, that the company plans to implement a right to repair. *Id.* Apple reported its self-service repair initiative "will allow customers who are comfortable with completing their own repairs access to Apple genuine parts and tools" by early 2022. *Id.*; see also Brian X. Chen, *What Apple's New Repair Program Means for You (and Your iPhone)*, N.Y. TIMES (Nov. 17, 2021) <https://www.nytimes.com/2021/11/17/technology/personaltech/apple-iphone-self-repair.html> [<https://perma.cc/A68N-6T6K>] ("If Apple, one of the world's most valuable public companies, is setting a new standard with repairs, you can expect other tech manufacturers to follow — especially if they want to avoid fines from the federal government.").

efficient for business practices,¹⁹⁸ (2) it has the potential to reduce electronic waste, (3) it puts power in the hands of consumers, and (4) it creates a more fair and competitive economic market. Arguments in opposition to the movement primarily consist of big tech companies' unsubstantiated claims of cybersecurity and intellectual property concerns.¹⁹⁹ The FTC's "Nixing the Fix" Report heavily considered the pros and cons of a right to repair and recommended it to government actors.

In fact, key government actors have already started to bring the FTC's Report to life. Together, the Biden Administration and the FTC have made significant progress in recognizing a right to repair. President Biden released E.O. 14036 calling for a more open repair market, urging the FTC to work with its broad authorities to fight for just that. The FTC has been slow to enact any new rules; however, the FTC's policy statement in response to President Biden's Order establishes an action plan and concrete goals. Legislative and Congressional investigative history clearly support consumer choice in markets and a right to repair in specific instances, and once the FTC establishes its rules, Congress will likely back the developments.

Looking forward, the federal government has a lot of ground to cover to observe a national right to repair. Congress has sat on the Critical Medical Infrastructure Right to Repair Act of 2020 for over a year without any further legislative development. Agency and legislative action generally take time; however, this slow-paced governmental action is made at the expense of consumers and a free market. The FTC must take some action beyond a policy statement, and Congress must implement the CMIRRA.

President Biden's Executive Order on "Promoting Competition in the American Economy" effectively brings the right to repair into the federal spotlight. Accordingly, the FTC and Congress should recognize a "new" right to repair for all American consumers. Notably, the FTC's "Nixing the Fix" Report negated big tech companies' central argument against the right to repair by revealing the right to repair does not impact consumers' security or data

¹⁹⁸ For example, look at farmer Dave Alford's story.

¹⁹⁹ See *supra* notes 70–71 and accompanying text.

privacy. Therefore, the FTC should utilize its enforcement and rulemaking authorities in favor of fair market practices, and Congress should pass a federal law that grants consumers protection against big tech corporations—recognizing and supporting a much-needed right to repair—so that Dave Alford and other consumers alike can work with peace of mind.