

Insight

The Debate on Right to Repair: A Primer

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Executive Summary

- President Biden's recent executive order on competition reinvigorated a longstanding debate over whether manufacturers should be able to restrict who can access and repair their products, with the administration and others pushing for a "right to repair."
- The right to repair could benefit citizens living in rural and low-density areas who often struggle to find authorized repair shops, create new opportunities for entrepreneurs to provide repairs, and reduce e-waste by extending the lifetime of current devices.
- Some manufacturers are concerned a right to repair could potentially put consumer's safety and privacy in danger, undermine intellectual property protections, and diminish their brand's image.
- Instead of jumping straight to a right to repair, policymakers could consider more moderate measures such as increased licensing of independent repair shops by manufacturers and examples of success such as the car-repair market.

Introduction

The Biden Administration's executive order on "Promoting Competition in the American Economy," issued on July 9, 2021, has reinvigorated a longstanding debate regarding the restrictions that manufacturers of various goods place on their products preventing repairs or modifications by independent repair shops or users. Some advocate for prohibiting these restrictions and for allowing independent repair shops and users access to the tools, parts, and manuals needed to service and repair these goods. This mandated access is commonly known as the "right to repair." Most action around right to repair has occurred at a state level, but the Federal Trade Commission (FTC) endorsed a broader right to repair in a policy statement passed on July 21, 2021.

The right to repair could benefit consumers and entrepreneurs alike, but manufacturers have legitimate concerns about security and privacy that policymakers should take into account. Before jumping straight to a right to repair, policymakers should consider other, more moderate options and examine success stories.

The Arguments for a "Right to Repair"

One of the biggest arguments toward advancing right to repair policies is the need to extend repairability of current devices in underserviced areas. Rural, dispersed areas tend not to have an authorized first-party repair shop close by, which means they often must drive for long distances or ship their products away. Shipping a cellphone or videogame console to get it serviced will often be costly and burdensome, leaving users without their devices for an extended amount of time. The situation is even more costly in the case of tractors, as farmers not only would face extended downtime of a valuable work tool but may have more limited choices if

they or their local repair shop are not allowed to conduct the necessary repairs.

Beyond the logistics discussed above, third-party independent repair services can also have their own advantages both for entrepreneurs operating them and consumers in need of repairs. Third-party repair shops tend to service multiple devices of multiple brands, allowing them to respond to the different needs of a town. As first-party and authorized repair shops often focus on a single brand or device, they lack the financial incentives to open shops in low-density areas or may not meet the multiple needs of rural areas.

A right to repair could also have a significant environmental impact. Current estimates show that e-waste is on track to reach 75 million metric tons by 2030, with 53.6 metric tons discarded in 2019. Increasing repairability allows consumers to repair rather than replace their devices when they present any issues. It also allows for the extension of the lifespan of older devices, as collectors often struggle to find spare parts due to restrictions from Section 1201 of the Digital Millennium Copyright Act. This law does not allow parts to be de-linked from their devices, so older devices are thrown out instead of being dismantled to service future repairs.

Ultimately, an increase of competition in repair services would translate into higher savings for consumers. Due to the lack of alternatives for repairs, prices for repair certain devices can be equal or higher than the price of the device itself. Allowing for higher repairability would allow households to save money by repairing their devices, as right now their only viable option is to replace them. Additionally, there could come economic benefits due to the rise of a new repair-services market.

The Challenges of Right to Repair

While the benefits mentioned above could benefit consumers and independent repair stores, the implementation of a right to repair mandate also has serious concerns that policymakers should address. Some manufacturers including Dyson, John Deere, and Apple have raised concerns over right to repair legislation regarding the potential impact these laws could have on users' safety and privacy. Additionally, they have expressed the negative impact on intellectual property rights, research and development (R&D) investment, and the potential negative impact to their brand due to faulty repair services.

Critics of right to repair legislation highlight the potential safety risks that could come with a mandate of this nature. While at times these may seem hyperbolic, there are legitimate concerns about potentially dangerous components such as high-energy lithium-ion batteries and the use of unauthorized repair networks or unauthorized parts that could put both consumers and repair workers at risk. As the infamous Samsung Galaxy Note 7 fiasco in 2017 exposed, a bad quality battery could result in users' devices exploding, putting them in serious danger. Meanwhile, incorrect training or mishandling of these dangerous batteries could result in a similar threat for independent repair shops.

The concerns regarding the potential impact for consumers extend beyond faulty hardware or improper training and may also raise questions about privacy or cybersecurity risk. Some manufacturers are concerned about allowing consumers to "jailbreak" their devices. Jailbreaking is the practice of removing or modifying a device's software in order to circumvent its current software-related design and limitations. Users usually jailbreak their devices in order to introduce functions not currently supported by their devices' operative system or to install apps that are not in their official app stores. This practice, however, is also associated with higher exposure to malware and spyware. Additionally, there are concerns regarding the potential privacy and security risks that users would be subjected to, as ill-intentioned repair workers could be granted access to users' devices and hardware, potentially exposing their data. This concern is exemplified in the Hunter Biden laptop scandal,

where the device was initially taken in for liquid exposure repairs, but it's hard drive ended up being copied and handed over to political adversaries for public exposure. Manufacturers claim third-party repair services lack the accountability mechanisms to prevent this sort of behavior, and expanding the availability of repairs would increase the potential for harm.

Trade associations such as the Consumer Technology Association have also pointed out the potential reputational damage to a brand due to faulty repairs. Manufacturers have voiced their fear that third-party repair shops might sell their refurbished devices to consumers without any quality guarantee or with lesser-quality parts, thus resulting in a rapidly decaying product. They claim consumers might blame the original manufacturer rather than the repair shop that conducted the faulty repair job or be disappointed by a manufacturer's inability to undo poorly done repairs.

Major electronics manufacturers' other major concern is the potential intellectual property rights violations that might take place if a mandate is enacted. Manufacturers fear that expanded public access to proprietary information might undermine their investments in R&D. If proprietary information is easily accessible by the public, manufacturers' investments into innovative technologies and designs might have lower returns, as their designs would be more susceptible to being copied. They claim that a failure to protect intellectual property rights ultimately harms consumers, as companies would be deterred from investing resources into R&D because the revenue increases from new technologies might not outweigh the costs. Therefore, consumers would face a less innovative market and slower technological progress.

A Balanced Approach to Right to Repair

Increasing device repairability in a way that addresses the concerns of both critics and advocates poses a serious challenge. Open-ended and broad right to repair mandates might harm consumers by increasing safety hazards and privacy concerns.

A possible mechanism to support an intermediary step toward right to repair could be the expansion and implementation of certification or licensing programs for third-party repair services from the manufacturers. Such a licensing expansion could allow independent repair workers to get the necessary training for the correct handling of the devices, while also giving consumers certainty about the quality of the repair. Conditioning access to spare parts on the completion of a training program provides a win-win scenario where shops are able to buy parts from manufacturers, while giving the brands the necessary reassurance regarding the quality of their repair service. It could also allow for the use of intellectual-property protection mechanisms, as manufacturers can make signing non-disclosure agreements a condition for entrance into the certification program. Independent certifications can also help consumers identify trustworthy options to minimize privacy and security concerns.

Additionally, a policy creating a right to repair should address questions regarding the potential loss of warranty coverage and the potential reputational harm from faulty repairs. Warranty and quality assurance responsibilities ought to rest on the party that tinkers with the device, not the one that built it, once the product has been modified. Such an approach to liability has proven successful in other markets such as the car repair market, in which the passing of a right to repair bill in Massachusetts led to a memorandum of understanding between manufacturers and mechanics. This agreement was able to assuage many of the concerns manufacturers had while still providing consumers and entrepreneurs more opportunities for services.

Conclusion

Strengthening the offering of repair services benefits users by reducing the costs of repairing electronics and other essential goods such as tractors. But the implementation of a right to repair mandate is not as simple as it may seem, as it can also negatively impact both consumers and manufacturers. Promoting independent repair services must also come with safeguards that protect the intellectual property rights of manufacturers and the safety of consumers. Alternatives such as an expansion or implementation of a certification or licensing program provided by manufacturers could solve most of these concerns. Advancing right to repair ought to examine cases of success such as the car repair market, where ultimately manufacturers and repair shops worked together to create a standard where consumers, repair shops, and manufacturers all benefit.