

How anti-repair practices are contributing to an excess in waste

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Abstract—Right-to-repair legislation is challenged by OEMs and larger firms, claiming concerns for end-user data privacy, IP infringement, and degrading of products with cheaper replacement parts. They use these claims to perpetrate practices of locking down software crucial for diagnosing technical issues, building products to be difficult to disassemble, and voiding warranty if they are opened. These practices reduce the incentive for a consumer to continue using a product after it fails, even if the issue is a minor fix, such as replacing the screen or battery. These often still functional electronic products are treated as disposables, instead of a tool which is able to be serviced back to its original function. Supporting right to repair is crucial to allowing the extension of product lifespan, which will reduce electronic waste, and minimize the environmental footprint of consumer goods.

I. THESIS

Despite claims of privacy concerns and IP infringement by corporations and manufacturers, right to repair laws are crucial to a sustainable circular economy—extending product lifespan, reducing electronic waste, and minimizing the environmental footprint of consumer goods.

II. WHAT IS RIGHT TO REPAIR?

The principle of the right to repair movement is giving consumers the freedom to disassemble, diagnose, and fix/refurbish all products that they own.

III. WHY IS RIGHT TO REPAIR IMPORTANT?

A. Environmental concerns

[1], [2], [3]

B. Cost saving

[4], [5]

C. Ownership

IV. HOW ARE MANUFACTURERS FIGHTING BACK?

[6]

A. Ethical Issues

This section will focus on the ethical issues surrounding IP infringement, and how replicability may parasitize manufacturer profits. [7]

B. OEMs' arguments

This section will focus on debunking other less-justified arguments for limiting repair. I will use these sources broadly throughout this whole section. [8], [9], [10], [11] a) *Consumer Data Privacy*: The basis of this argument is that providing open access to debugging tools would allow a bad-faith independent repair person unfederated access to consumer data stored on such device. This risk can be mitigated by allowing consumers control over their data and making end users responsible for the data security (I.E: Give them the option to set a password). This argument is from [11]. b) *Disincentivizing Innovation*: This argument comes from [10]. Reinauer claims that companies may shy away from creating more complex devices, or devices with electronics due to pressure from the law, as they would also have to provide consumers with access to repair parts, which would be a costly distribution effort.

V. WHAT CAN BE DONE TO HELP?

A. Ongoing Lawsuits

[12], [13]

B. Other Activism and Demonstrations

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