

My name is Sam Mencimer. I'm seventeen years old and I've been running a business fixing electronics in Washington D.C. since I was twelve. I started out fixing iPhone screens in the middle school cafeteria, and now I fix phones, computers, and tablets for consumers, other repair shops, and even school district contractors across the country. There are two main points I'd like to make today.

The first is that without independent repair outlets, a lot of consumers would be out of luck. Before the COVID pandemic, I was fixing lots of things, but mainly out-of-warranty devices that manufacturers would charge insanely high prices to repair, and that's if they would even agree to fix them. The COVID pandemic has changed that dynamic entirely. Apple closed all their store locations for several months, and other manufacturers like Nintendo shut down repairs entirely. This left many in the dark about what to do if their electronics, now more important than ever, broke down. The demand for independent repair skyrocketed. I fixed more iPads in a month than I had in the past four years. I think every kid in the world decided to drop their tablet with the charger connected so that the charge port broke off. I fixed my A.P. US History teacher's Nintendo game console only a week after purchase because Nintendo refused to fix it for her, citing pandemic concerns. A family friend came to me after his Macbook's screen and keyboard stopped working. I informed him that both items were covered under an Apple recall, but he insisted on paying me over \$900 because he couldn't wait the four weeks that Apple was quoting as the turnaround time. I was able to get him up and running again in a day and a half.

My second point is that our industry still faces structural obstacles to delivering customers what they need. In mid to late 2020, a friend in the industry who repairs chromebooks for schools in Long Island, NY contacted me asking me for help because he was unable to source replacement motherboards for his customers. Even his attempts to strip parts from fully working computers ended in failure. He asked me if I could figure out how to revive the hundreds of broken motherboards he had sitting in boxes. After some trial and error and browsing on some questionable Russian websites, we were able to find some of the information we needed. A parts vendor on AliExpress was somehow able to find us USB ports that fit in the sockets on the boards. Now, I can fix about 50% of the boards that come across my desk. However, I have a problem. The other 50% have a chip on them that dies from the pins in the charging port being bridged together after a drop or a small child pushing too hard on the charger. This chip is not replaceable, by design: it carries firmware that's paired to the motherboard. I have experimented with swapping chips between a fully working machine and a dead one, and it still doesn't work. There is no way to reprogram the firmware on this chip without proprietary software. In our work alone, we've had to discard at least a hundred Chromebook motherboards in the past few months because of this pointless technical roadblock.

It's just another example of unnecessary software pairing. Apple does it with screens, batteries, and now even cameras. It provides no benefit to the consumer, and just makes it more difficult to perform repairs.

Some of the opposition's arguments consist of misleading statements about cybersecurity, safety, and piracy. These are, to put it nicely, ridiculous. Right to Repair is not about trade

secrets, it's not about being able to access source code, it's not about bypassing security safeguards. We just want to be able to replace parts and have them work afterwards without proprietary software, we want schematics so we can fix motherboards for data recovery, and we want to be able to provide our customers with original parts without having to go through the gray market.