

Who Killed Mr. Fixit, and How to Bring Him Back

By Adam Minter, <https://www.bloomberg.com/opinion/articles/2018-11-22/trump-pressure-on-made-in-china-2025-is-doing-beijing-a-favor>

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Late in the evening of Sept. 21, X-rays of the innards of the iPhone 8 appeared on Twitter. The images didn't come from Apple. They were posted by a team from iFixit Inc., a repair-parts, tool and software company in San Luis Obispo, California, that had flown to Australia to take advantage of the 18-hour time difference to buy the new model before it became available in the U.S. When U.S.-based Apple fans woke on iPhone 8 release day, iFixit had a step-by-step guide posted for taking apart the new phone.

Over the last decade, the repair culture that spawned generations of driveway mechanics, vacuum-cleaner shops and itinerant TV-fixers has been eroded by manufacturers keen to claim service contracts and revenues. They've used intellectual-property laws to restrict access to repair manuals and repair software for products ranging from iPhones to John Deere tractors.

So iFixit writes free repair manuals (thousands of them) and then sells tools and parts to go with them. According to CEO and co-founder Kyle Wiens, the company has helped 100 million people fix their stuff.

He's also become the leading figure in a global movement to pass "Right to Repair" laws to give independent repair shops access to the same parts and tools as authorized service centers like the Apple Genius Bar. Bills have been introduced in 12 U.S. states, generating fierce opposition from consumer electronics companies, especially Apple. Wiens recently spoke to me from iFixit's European offices in Stuttgart, Germany. Here's a condensed transcript of our conversation.

Q: Is repair good for the economy? Wouldn't we all be better off if we just bought new stuff?

A: If you take an iPhone, it's around \$5 in labor that Apple pays Foxconn to assemble an iPhone. It's far more labor when you take your phone into a repair shop -- it might be \$50 in labor. And if your phone needs two or three battery swaps over its lifetime, that's \$150 in labor in the U.S. over its lifetime compared to \$5 on the manufacturing side.

Look, it's going to be very hard to bring manufacturing jobs back to the U.S. And the manufacturing jobs that we do bring back are going to be very automated. Whereas the repair sector -- if you need the blue-collar jobs -- they're going to be repairing things.

Q: So what, then, is the right to repair?

A: People should have the right to tinker with, modify or fix the things they own. It used to be that every television came with a schematic of all the parts inside of it. Over time, manufacturers have stopped including service information and parts have become harder to get, sometimes purposely so.

For example, starting around five years ago, we went from having around 3,000 camera stores around the country to having just a few dozen. And that was partly a result of Nikon deciding one day in 2012 that they were going to stop selling parts to independent shops.

Q: Apple has taken a similar approach over the years, hasn't it?

A: So the back of the new iPhone 8 is made of glass. It has an Apple logo imprinted on the glass, and the only way to make an aftermarket sheet of glass would be to license the logo from Apple. But Apple refuses to license that to anyone, and so they have a monopoly on that product. They have also chosen to sell that particular repair sheet of glass for \$349, and only through Apple service centers. So that's not good for consumers, it's not good for the market.

Q: Historically speaking, opening things up worked out really well for automobile manufacturers, owners, and independent garages.

A: General Motors is required to sell auto parts to independent service garages. And it's been a good thing for GM. The auto manufacturers have capacity in their dealerships to perform around 28 percent of repairs that are needed on cars in the U.S. So if, all of a sudden, there were no independent repair shops, the manufacturers would really struggle.

Q: Is Apple capable of doing what GM can't? Becoming the sole repair option for the iPhone?

A: Apple has around 500 repair shops around the world. And they've sold over a billion iPhones. The math just doesn't work. And as most of us have found, if you try to go into Apple for service it's an incredibly frustrating and time-consuming experience. Because they're consistently overbooked.

Q: Apple has been famously hostile to right to repair. At a recent TechCrunch forum, Lisa Jackson, an Apple vice president who was administrator of the Environmental Protection Agency under President Barack Obama, said Apple designs for durability, not repairability.

A: It seems a little bit detached from reality to say that we design products not to break that have glass on both sides and come out of your pocket 10 times per day.

Q: Is Apple becoming more repairable?

A: Some Apple products are designed to be repairable and some aren't. I personally don't spend very much time worrying about Apple repair issues. Apple is the only company in the world with repair information online for all of their products. But it's because I did it for them!

Q: Isn't the ultimate solution to design repairable products?

A: Yes. A good example of this is Keurig. Keurig's business model is around selling the coffee pods, not the machines. The design they have is not particularly repairable. If you have a line that

gets clogged because you haven't used it for 6 months, you basically have to buy a new one. That's bad for Keurig because the machine is basically a loss leader to get people to buy coffee.

So a better model would be to design the coffee maker so it's straightforward to open, include instructions for consumers on how to clean it, and then make a business selling repair parts. Then they can have two revenue streams: coffee and service parts.

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