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POV: Congress is preventing us from fixing McDonald’s ice cream machines

The Taylor machines that McDonald’s uses are particularly error-prone. The Digital Millennium Copyright Act prevents us from creating a fix.

[Photo: subjug/Getty Images]

BY KYLE WIENS
5 MINUTE READ

In the sweltering heat of July, one universal human desire transcends borders and cultures: the unassailable craving for a cone of creamy, cool ice cream. But too often, the promise of that sweet reprieve turns to disappointment when we hear, "Sorry, our ice cream machine is broken."

At least, that's the case with McDonald's. At any given moment, one in 10 McDonald's restaurants across the U.S. has a broken ice cream machine, according to McBroken.com, a website run by a Github infrastructure engineer.

Just take a look at the dismal spread in New York yesterday:

[Image: McBroken.com]

Now, there are many people, myself included, who could undoubtedly make a repair tool to get ice cream back on the menu. But, unfortunately for consumers, such a solution is unlikely to see the light of day.

Why? Blame copyright law. We don’t really own our things any more. As software is integrated into more and more products, laws that were designed to protect creative works are being abused to take away our freedom to tinker.

The fight for the Right to Repair has revealed that all too often, repair is blocked at a deeper level, in the software brains of our devices. Software locks have made some repairs difficult or impossible forsuch necessities as tractors and smartphones and, yes, McDonald’s ice cream machines.

According to Section 1201 of the Digital Millennium Copyright Act (DMCA), any tool that would circumvent [illegible] would be illegal. This law was supposed to keep people from pirating CDs—it was never meant to block repair. It makes it illegal to get around “technological protection measures,” special software locks like the ones that keep your American Blu-ray player from reading a disc from Europe. But the DMCA was written in 1998 for a very different world—before code ran everything in our lives. Nowadays, manufacturers have exploited this law to take control of vast swaths of our digital lives.

particularly opaque, displaying inscrutable error codes that make even a veteran technician like me squint. And understanding these codes and clearing them from a machine requires access to a secret service menu, hidden behind a passcode not listed in the operator's manual. So when a machine needs help, no matter how easy the fix might be, franchise owners are forced to call in an expensive Taylor service technician.

The incentives here are all aligned against quick repair: Taylor makes more money when machines are broken. McDonald's corporate has a lucrative service contract with Taylor. As a result, poor franchisees, who have no choice about what equipment to buy or how to service it, are forced to deal with broken machines and annoyed customers.

This is clearly hurting the bottom line. So you can imagine how excited franchisees were when Melissa Nelson and Jeremy O'Sullivan launched Kytch, a Raspberry Pi-powered device that could diagnose and troubleshoot these obstinate machines. It was an innovative solution to a cold, hard problem. And of course, McDonald's put the kibosh on Kytch through a letter to franchise owners, forbidding them from buying the software repair tool.

Normally, the kind of reverse-engineering needed to make Kytch would be illegal according to Section 1201: Both hacking to figure out what the codes mean and distributing a tool to others are prohibited by copyright law. Kytch, however, *had permission from Taylor,* which gave them the power to figure it out. Taylor hasn't granted permission to anyone else.

That's why I've been fighting to get more and more products exempted from Section 1201. Every three years, I've joined with my lawyer friends at the Electronic Frontier Foundation and Public Knowledge nonprofit policy orgs to ask the U.S. Copyright Office to exempt repair activities from the law. We've won again and again and again—and so we've made software repair legal again for all kinds of things, from smartphones and tablets to tractors. Exemptions have to be renewed every three years, and this month, the time for exemption requests has come again.

This time, we're asking for ice cream machines (along with all commercial and industrial equipment) to be exempted from Section 1201, so that franchise owners can troubleshoot the machines they've been required to buy.

But there's still a major sticking point: Even though the Copyright Office can make *personal* reverse engineering legal, they say it's out of their scope to exempt the distribution of repair *tools*. So, without permission from Taylor, Nelson and O'Sullivan could make their *own* Kytch, but they couldn't distribute it to other people. For any McDonald's franchise owners who are also hackers, this exemption will be useful. For everyone else, it'll be academic.

The ongoing fight to reform Section 1201 of the Digital Millennium Copyright Act is, at its heart, an effort to restore a critical aspect of consumer autonomy: the Right to Repair. This year, there have been encouraging strides in the Right to Repair movement. Minnesota passed the broadest-yet Right to Repair bill, addressing electronics and appliances. Colorado passed the first-ever agricultural Right to Repair legislation. The European Parliament has proposed smartphone and tablet Right to Repair legislation. And Canada is considering federal legislation that would fix their version of Section 1201 and make reverse-engineering legal again.

independent repair shops to fix their devices.

In a world where software pervades every aspect of our lives and our machines, we must reevaluate how we approach the concept of ownership and repair. If we can crack the arcane ice cream machine codes and serve up sundaes in July, surely we can fix the outdated policies that are keeping our right to repair in deep freeze.

Access to software tools and manuals for repair shouldn't be a high-stakes game of digital cat-and-mouse. When your ice cream craving is thwarted by a coded message on a digital screen, it's a chilling reminder that we're living in an age in which companies control our devices long after we've bought them. We need to defrost the cold grip that Section 1201 has on our ability to repair, so we can enjoy not just the delicious fruits of innovation, but the liberty to repair them ourselves.

Today, we stand united, ice cream lovers and repair advocates alike, waiting for our digital devices to truly belong to us again. Because the only thing better than a repaired future is a repaired future with a side of soft serve.

Kyle Wiens is the CEO of iFixit.

What’s driving this job-hopping trend? The answers include a tight labor market in which there are almost twice as many job openings as job seekers. They also include changes in what employees expect from their employers, and the ways in which technology has upended when, where, and how we can work. Disruptive shifts like the evolution of the gig economy, which has blurred the lines between employer and employee, have given workers even more options. “All of this has created a big tension for organizations to try to understand a path forward,” says Brooke Weddle, a partner at McKinsey & Company.

Unfortunately, many companies haven’t acted quickly enough. As McKinsey notes in its “The State of Organizations 2023” report, companies have been grappling with these issues for several years, but have still struggled to keep up with the new contours of the labor market. Companies that once had little problem attracting new hires are finding it more difficult to find new talent—even amid a volatile economic environment. “Many companies will continue to struggle for a single reason: They don’t understand why their employees left in the first place,” says Patrick Guggenberger, a partner at McKinsey & Company and one of the report’s authors.

For employers that do recognize what motivates today’s workers—and adapt their strategies accordingly—there’s good news. McKinsey’s research shows that those companies aren’t just winning the competition for talent. They’re outperforming their peers in the marketplace as well.

ADAPTING TO THE NEW REALITY

At the beginning of the Great Resignation, many companies reached for traditional levers to attract and retain talent. They upped compensation, dangled more senior job titles, and promised a higher ceiling for advancement. While this approach may have given companies a short-term boost, it didn’t address the root cause of the talent squeeze—and left many companies to solve the same problems repeatedly.

By contrast, the companies that are having more success navigating the tight labor market are paying attention to how employees’ expectations were changing—and are taking steps to adapt. That has meant tailoring their value proposition to appeal to different segments of the workforce, from working parents in their forties to single employees in their twenties. It’s also meant modifying their hiring pitch—and benefits packages and workplace culture—accordingly. “It’s about finding the right combination of attributes to meet the very individual needs of employees,” Guggenberger says.

Companies have always focused on employees as individuals but haven’t always applied a strategic lens to managing employees and attracting new talent. But McKinsey research found that today’s successful companies are realizing the benefits of a more individualized approach. Employees these days want to feel valued and be inspired by the company’s leadership. They want to feel a sense of belonging in the workplace and have a better work-life balance that keeps burnout at bay.

Companies with strong focuses on diversity, equity, and inclusion, along with employee mental health and wellness, see dividends in the form of stronger employee attraction and retention and higher productivity. And companies benefit from more strategic approaches to matching talent to the right roles—even going so far as to hire promising talent that may not be quite ready for the job. “The

CHANGE STARTS AT THE TOP

To play by the new rules of attracting and retaining employees, C-suite leaders—including the HR execs who are increasingly shaping key leadership discussions—play a critical role. “The CHRO [chief human resources officer], CFO, and CEO are the triad of thought leadership for an organization,” Weddle says. “They’re critical to making connections between how you allocate financial capital and how you can activate human capital.”

At Mars, Incorporated, which is profiled in the McKinsey & Company report, activating human capital means empowering associates to innovate, act, and grow in service of a common purpose. Mars identifies its professional development opportunities as a core competency. “Since joining the company more than 20 years ago, I have had far more access to training and mentorship than I have experienced at any other company,” says Poul Weihrauch, CEO at Mars. “As a CEO, you must personally lead transformation and be willing to transform yourself. Only then will the rest of your company follow your lead.”

These days, volatility is a feature, not a bug. Organizations need to be adaptable to keep pace with the constant—and sometimes seismic—shifts in their industries and the world at large. Applying the resilience lens to attracting and retaining talent is one way that companies can ensure they’re ready for what’s to come. “We’re seeing research that points to adaptable and resilient leaders—from senior executives to middle managers—driving more dynamic, high-performing organizations,” Weddle says. “And that’s critical for today’s environment.”

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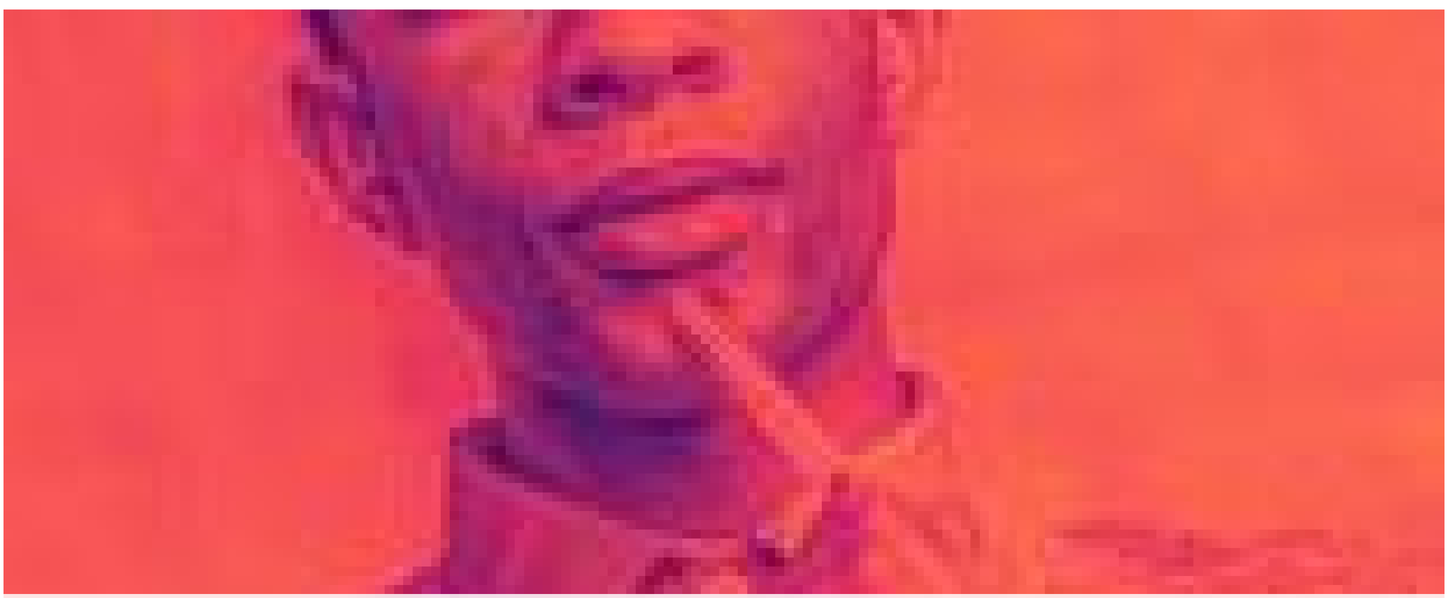

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