

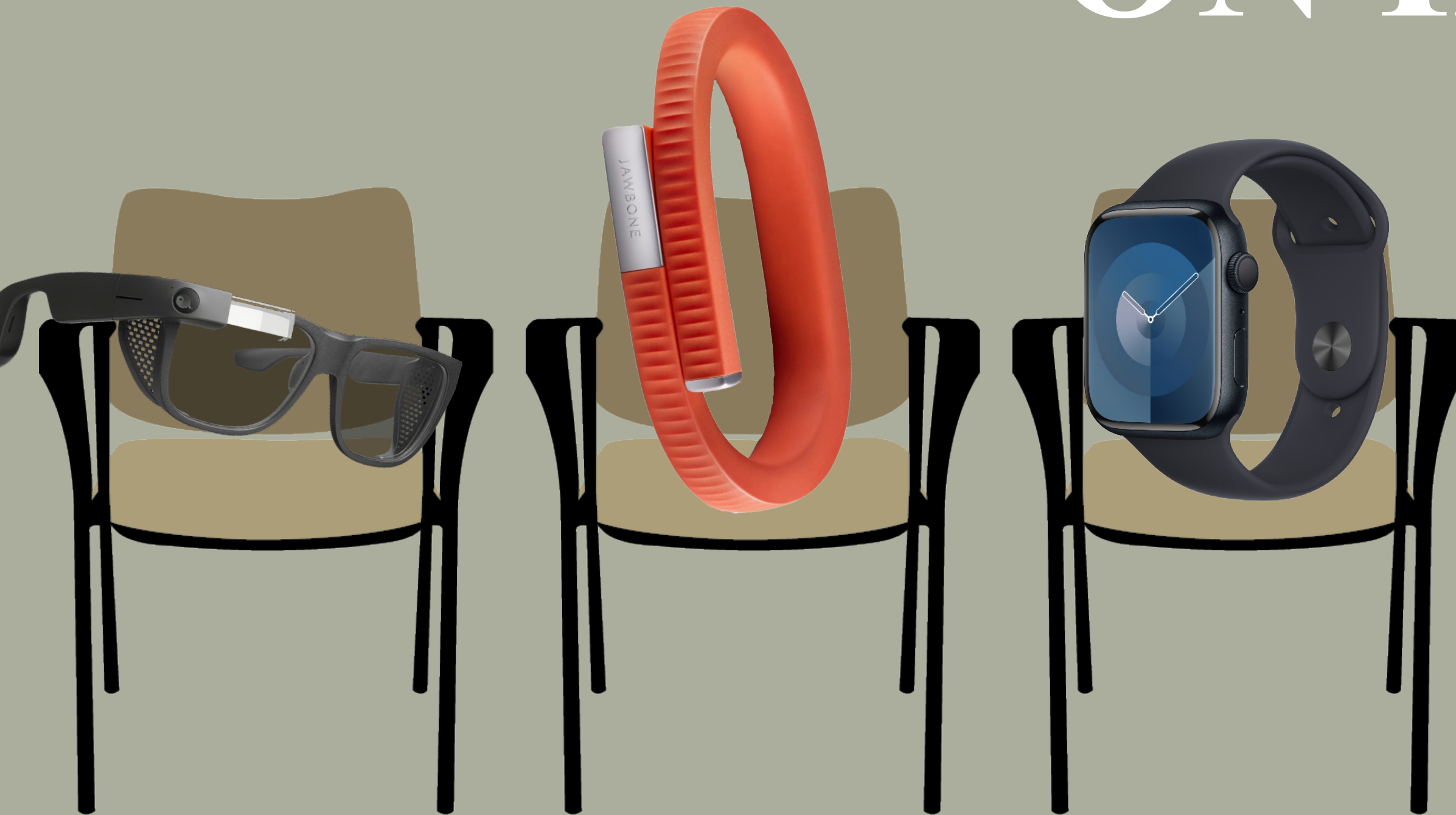
WAITING ROOM

# revolution ON HOLD

Wearable technology  
ends up in places you  
might not expect ...

BY NICK BILTON

The junk drawer in my home used to look just like yours, filled with loose change, batteries and birthday candles. But over the last year, a new category of junk has started to accumulate there: wearable devices. There's my old Fitbit, a fitness tracker I used for a couple of weeks, forgot to charge and never wore again. It sits next to a dusty Jawbone UP, another tracker that once told me I had walked three miles while I sat on my couch eating popcorn and watching a movie. And then there's the Apple Watch, the much-hyped device that was supposed to usher in a new era of mobile computing.



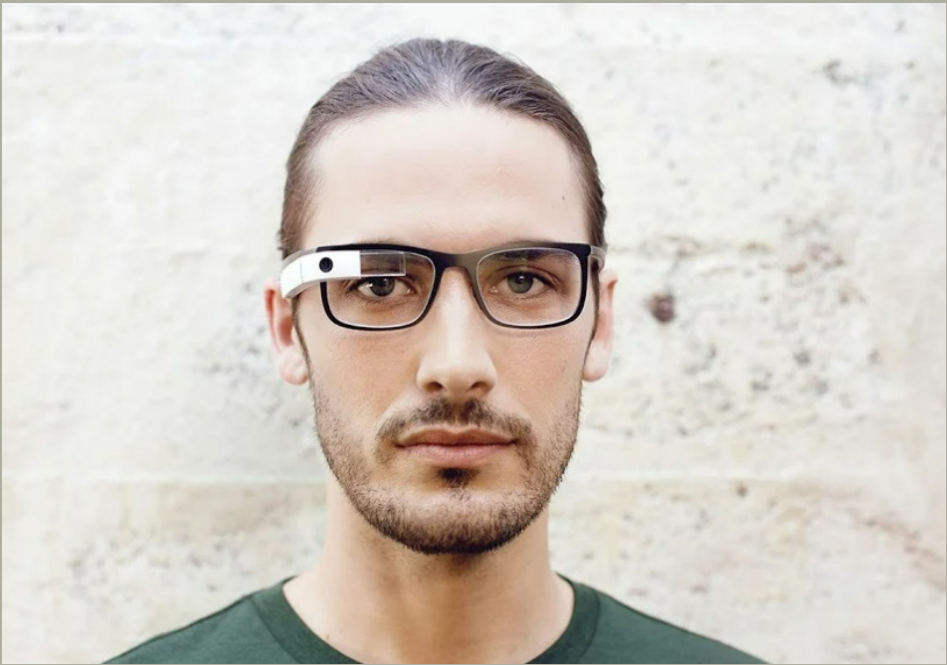


Instead, these gadgets are ending up in drawers and closets as expensive reminders of how wearable gadgets are not ready for prime time — at least for the foreseeable future.

Like others, I once believed that wearables were going to change the way we live. In much the way that smartphones put the Internet into our pockets, wearable devices were going to place information that much closer to our fingertips, and make us healthier and less dependent on our smartphones.

I wasn't alone in the belief that these technologies were going to transform our lives for the better. Many analysts predicted that wearables would become widely adopted, in one form or another. Almost a decade ago, BI Intelligence, a research division of Business Insider, predicted that by 2018, Google Glass would be an \$11 billion business. (It wasn't.) A report by ABI Research, a technology market research firm, said that by that same year, people would be buying almost half a billion wearables a year. (They did, though not until last year.)

And yet the wearable tech revolution has been slow to gather steam. Now I know there are some of you reading this who still love your wristbands. And sure, Apple has sold a few million watches, as have Samsung and Pebble. But for every success, there are dozens of failures.



A man wearing a pair of Google Smart Glasses.



A drawer of old apple watches that are no longer used to their full potential.

Notably, Google Glass, which flopped in the quest to attract consumers, and also raised a raft of privacy concerns (especially in men's restrooms). There are plenty of others, including Nike's FuelBand, which disappeared off store shelves in 2014. For those products still on store shelves, it's been tough going. Fitbit has gone from a market capitalization of over \$10 billion in early 2015 to \$3.7 billion today. (The company was also hit with a class-action lawsuit that alleged

two heart-monitoring wristbands, the Charge HR and the Surge, are inaccurate.) And Jawbone, the maker of the UP wristband, lost half its worth over a single year, falling from a \$3 billion valuation in 2014 to \$1.5 billion at the end of 2015. Still, some analysts remain bullish on wearables, though they have been forced to reassess some of the timing of their earlier forecasts. For example, the technology research firm IDC once predicted that smartwatches would become a mainstream product by 2018. "We recently revised our estimate because we don't think it's going to happen anymore," said Jitesh Ubrani, the senior research analyst for mobile devices at IDC. If you looked at the wearables on offer at the Consumer Electronics Show in Las Vegas this month, you can see why IDC might say it will be at least another five years before consumers adopt these gadgets. The trade show was full of booths offering sensor-laden clothing, watches and goggles that failed to generate much interest. They were joined by more esoteric products, like smart bras, intelligent shirts, heated sneakers and more wristbands than a Chuck E. Cheese. As my colleague Farhad Manjoo noted about the electronic show, "Over the next couple of CESes, there's a good chance we will see a lot of devices that will feel not quite ready," including "wearables you

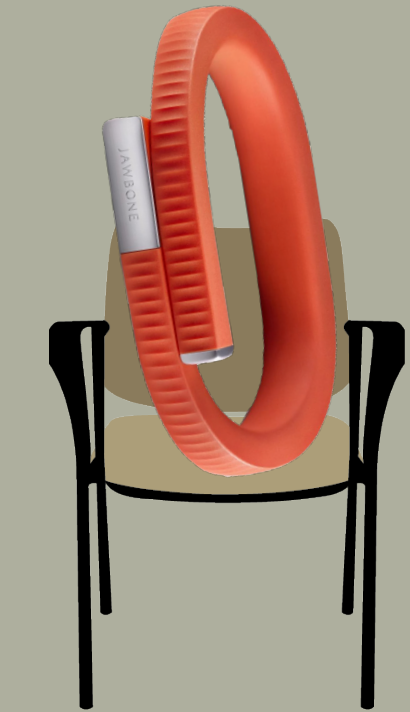
won't want to wear."

So why have all these gadgets failed to gain traction? First, almost all of them require a smartphone to be fully operational, so instead of replacing our mobile phone, a wearable becomes yet another gadget that we need to lug around. There's also the fact that most of these devices are quite ugly. While male nerds may not mind their design, women don't seem as interested in wearing a fax machine on their wrist, even if it's painted rose gold or comes with a fancy leather strap.

Then there's the unpleasant fact that the technology just doesn't seem ready. The Apple Watch, for example, can feel sluggish when performing basic tasks like using Siri to look up a contact or replying to an email. Battery life is also an issue; people have to charge their watch every

day or it becomes a fancy-looking bracelet. (Meanwhile, a power-hungry device like the Samsung Gear S2 smartwatch, which has its own cellular data connection, needs huge batteries, which makes the watch big and bulky.) But the biggest issue of all may be price. Mr. Ubrani of IDC said that consumers can't justify buying a smartwatch that costs nearly as much as a smartphone. "A lot of consumers have tried out smartwatches, and they don't see the need for them right now," he said. "This is mainly because they only offer notifications for your smartphone. And more importantly, you're paying the same price for a smartphone."

So for the next few years, I'm skipping new wearable devices that come on the market. I have no choice. I'm running out of room in my junk drawer.



# Epic Fails

## 5 Wearable Tech Disasters

**Virtual Boy**  
**1995-96**  
**Retail price: \$180 (\$340 today)**

Basically, the Oculus Rift's batty great uncle, Nintendo's first and only stab at virtual reality was released to a lukewarm reception in 1995. It got some things right — the dual-sticked pad which would become essential for 3D gaming. But the ultimate experience was disappointing, with buyers complaining of jumpy images, a lack of head tracking, and dizziness and nausea when using the device. Just over 700,000 were sold, making it one of gaming's biggest flops.

**Xybernaut Poma**  
**2002-2004**  
**Retail price: \$1,500 (\$2,400 today)**

The Poma (Personal Media Appliance) Wearable PC was a foray into the head-mounted display market that launched way before Google Glass. It was billed as the world's first portable computer, but walking around in one put the vision-obscured wearer in danger of colliding with lampposts, among other shortcomings. Hemorrhaging money amidst fraud alle-

gations, the company filed for bankruptcy in 2005, and the Poma, it seems, died with it.

**Logbar Ring**  
**2014-15**  
**Retail price: \$269 (\$325 today)**

The company raised almost a million dollars from Kickstarter with a product that promised the wearer could control just about any device with a simple hand gesture, or send a text message by drawing in the air. But the Ring was bulky and uncomfortable, and rarely worked. One reviewer called it "the most inconvenient, useless piece of hardware and software that I have ever seen."

**Basis Peak**  
**2012-2016**  
**Retail price: \$199 (\$250 today)**

Many reviewers raved about this smartwatch, hailing its unusually long battery life. But In June 2016, sales were halted after a small number were found to be overheating, causing burns, blisters and discomfort. Three months later, all the watches were recalled, and the devices went dark in December. Unfortunately for Basis, that wasn't the end of it. There were also reports that some customers' charging

cables were overheating and melting as well. Double fail.

**Cat Ear headphones**  
**2015-**  
**Retail price: \$309.00**

Unlike the other items on this list, these headphones (made by Brookstone) are currently available, even if the company itself has closed all its non-airport stores and mostly survives as an online shopping

