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## Untangled

## Can a universal cable end the cord war for good?

By David Pogue

The best new technology of the past year wasn't some phone or an app.

Believe it or not, it was a new kind of USB cable.

Now, before you suspect that I've inhaled a bit too much of that new-tablet smell, consider:

The new cable, called USB Type-C (or USB-C), is the same on both ends, so you never have to fiddle with it. The connector is also identical on both sides—there's no upside down.

USB-C can replace four different jacks on your gadget: data, video, power and, soon, audio. That's right: A single connector can handle flash drives, hard drives, screens, projectors, charging and headphones (simultaneously, if you have a splitter). Yet the connector is tiny enough for phones and tablets and sturdy enough for laptops and PCs.

Every device from every brand can use the same cable. You can use the charger from my Google phone to charge your Apple laptop or someone else's Microsoft tablet. No more drawers full of mismatched power bricks.

In other words, USB-C represents the dawning of the universal cable.

That USB-C even exists at all is something of a miracle, con-



sidering what a big business accessories have become. Apple, for example, makes a staggering amount of money selling cables. Cynical observers accuse it of changing connector types *deliberately*, just to drum up accessory sales. For example, good luck using a 2009 power cord with a 2013 MacBook.

Apple's not alone. A typical charger for a Windows laptop costs \$60 to \$80.

Several of these big companies worked together to come up with the USB Type-C standard, and even more have adopted it.

The question is: Why? Why would these archrivals work together to create a charger that works interchangeably across devices and brands, wiping out the proprietary-charger industry in one fell swoop?

Brad Saunders, who works for Intel, is chair of the USB 3.0 Promoter Group, a group of six companies that designed USB Type-C (including Intel, Hewlett-Packard and Microsoft). He says that the original reason to design it was speed; the 20-year-old regular USB connector couldn't be made any faster.

"At the same time," he says, "PCs were changing, becoming thinner and lighter. The existing USB connector was just way too big. And it's not as user-friendly as we'd like: you can plug it in the wrong way."

But surely, I asked him, these companies knew that designing One Cable to Rule Them All meant that they'd lose big bucks in sales of their proprietary chargers.

"Well, job one is making money for your company," he admits. "But over time we became motivated by the fact that we could change the world from a green perspective. If we could standardize all these power supplies, we could reduce waste. We started to realize we could have a real impact."

It's weird to imagine all these blood rivals working together, side by side, to create a new standard for everyone's mutual benefit. How often does the world work that way?

"Standards work is kind of odd," says Jeff Ravencraft, president of the USB Implementers Forum. "Companies work together to bake a bigger pie, to expand the market for their products. But once it's over, they have to compete for how big a piece of the pie they'll get. You cooperate at the beginning, and then you compete like hell at the end."

And the cable is already here. Some of the latest phones, tablets and laptops from Google, Apple, Microsoft, Samsung and others come with USB-C jacks built in.

You might think that only the nerdiest nerds could get excited about USB-C. And yet in the coming years this invention could save you hundreds of dollars in duplicate cords, adapters and chargers. It will permit our gadgets to get smaller and faster. It will save space in our drawers, packages, purses and laptop bags. It will keep tons of e-waste out of the landfills.

If that doesn't qualify USB-C as the invention of the year, I don't know what does.

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