The Internet Is Dying.

Repealing Net Neutrality Hastens That Death.



The internet is dying.

Sure, technically, the internet still works. Pull up Facebook on your phone and you will still see your second cousin's baby pictures. But that isn't really the internet. It's not the open, anyone-can-build-it network of the 1990s and early 2000s, the product of technologies created over decades through government funding and academic research, the network that helped undo Microsoft's stranglehold on the tech business and gave us upstarts like Amazon, Google, Facebook and Netflix.

Nope, that freewheeling internet has been dying a slow death — and a vote next month by the Federal Communications Commission to undo net neutrality would be the final pillow in its face.

<u>Net neutrality is intended</u> to prevent companies that provide internet service from offering preferential treatment to certain content over their lines. The rules prevent, for instance, AT&T from charging a fee to companies that want to stream high-definition videos to people.

Because net neutrality shelters start-ups — which can't easily pay for fast-line access — from internet giants that can pay, the rules are just about the last bulwark against the complete corporate takeover of much of online life. When the rules go, the internet will still work, but it will look like and feel like something else altogether — a network in which business development deals, rather than innovation, determine what you experience, a network that feels much more like cable TV than the technological Wild West that gave you Napster and Netflix.

If this sounds alarmist, consider that the state of digital competition is already pretty sorry. As I've argued regularly, much of the tech industry is at risk of <u>getting</u> <u>swallowed by giants</u>. Today's internet is lousy with gatekeepers, tollbooths and monopolists.

The five most valuable American companies — Amazon, Apple, Facebook, Google and Microsoft — control much of the online infrastructure, from app stores to operating systems to cloud storage to nearly all of the online ad business. A handful of broadband companies — AT&T, Charter, Comcast and Verizon, many of which are also aiming to become content companies, because why not — provide virtually all the internet connections to American homes and smartphones.

Together these giants have carved the internet into a historically profitable system of fiefs. They have turned a network whose very promise was endless innovation into one stuck in mud, where every start-up is at the tender mercy of some of the largest corporations on the planet.

Many companies feel this shift. In <u>a letter to Ajit Pai</u>, the F.C.C. chairman, who drafted the net neutrality repeal order, more than 200 start-ups argued this week that the order "would put small and medium-sized businesses at a disadvantage and prevent innovative new ones from even getting off the ground." This, they said, was "the opposite of the open market, with a few powerful cable and phone companies picking winners and losers instead of consumers."

This was not the way the internet was supposed to go. At its deepest technical level, the internet was designed to avoid the central points of control that now command it. The technical scheme arose from an even deeper philosophy. The designers of the internet understood that communications networks gain new powers through their end nodes — that is, through the new devices and services that plug into the network, rather than the computers that manage traffic on the network. This is known as the "end-to-end" principle of network design, and it basically explains why the internet led to so many more innovations than the centralized networks that came before it, such as the old telephone network.

The internet's singular power, in its early gold-rush days, was its flexibility. People could imagine a dazzling array of new uses for the network, and as quick as that, they could build and deploy them — a site that sold you books, a site that cataloged the world's information, an application that let you "borrow" other people's music, a social network that could connect you to anyone.

You didn't need permission for any of this stuff; some of these innovations ruined traditional industries, some fundamentally altered society, and many were legally dubious. But the internet meant you could just put it up, and if it worked, the rest of the world would quickly adopt it.

But if flexibility was the early internet's promise, it was soon imperiled. In 2003, Tim Wu, a law professor now at Columbia Law School (he's also a contributor to The New York Times), saw signs of impending corporate control over the growing internet. Broadband companies that were investing great sums to roll out faster and faster internet service to Americans were becoming wary of running an anything-goes network.

Some of the new uses of the internet threatened their bottom line. People were using online services as an alternative to paying for cable TV or long-distance phone service. They were connecting devices like Wi-Fi routers, which allowed them to share their connections with multiple devices. At the time, there were persistent reports of broadband companies seeking to block or otherwise frustrate these new services; in a few years, some broadband providers would begin blocking new services outright.

To Mr. Wu, the broadband monopolies looked like a threat to the end-to-end idea that had powered the internet. <u>In a legal journal</u>, he outlined an idea for regulation to preserve the internet's equal-opportunity design — and hence was born "net neutrality."

Though it has been through a barrage of legal challenges and resurrections, some form of net neutrality has been the governing regime on the internet since 2005. The new F.C.C. order would undo the idea completely; companies would be allowed to

block or demand payment for certain traffic as they liked, as long as they disclosed the arrangements.

At the moment, broadband companies are promising not to act unfairly, and they argue that undoing the rules would give them further incentive to invest in their broadband capacity, ultimately improving the internet.

Brian Hart, an F.C.C. spokesman, said broadband companies would still be covered by antitrust laws and other rules meant to prevent anticompetitive behavior. He noted that Mr. Pai's proposals would simply return the network to an earlier, prenetwork-neutrality regulatory era.

"The internet flourished under this framework before, and it will again," he said.

Broadband companies are taking a similar line. When I pointed out to a Comcast spokeswoman that the company's promises were only voluntary — that nothing will prevent Comcast from one day creating special tiers of internet service with bundled content, much like the way it now sells cable TV — she suggested I was jumping the gun.

After all, people have been predicting the end of the internet for years. In 2003, Michael Copps, a Democratically appointed commissioner on the F.C.C. who was alarmed by the central choke points then taking command of the internet, <u>argued that</u> "we could be witnessing the beginning of the end of the internet as we know it."

It's been a recurrent theme among worriers ever since. In 2014, the last time it looked like net neutrality would get gutted, Nilay Patel, editor of the Verge, <u>declared the internet dead</u> (he used another word for "dead"). And <u>he did it again this year</u>, anticipating Mr. Pai's proposal.

But look, you might say: Despite the hand-wringing, the internet has kept on trucking. Start-ups are still getting funded and going public. Crazy new things still sometimes get invented and defy all expectations; Bitcoin, which is as Wild West as they come, just hit \$10,000 on some exchanges.

Well, O.K. But a vibrant network doesn't die all at once. It takes time and neglect; it grows weaker by the day, but imperceptibly, so that one day we are living in a digital world controlled by giants and we come to regard the whole thing as normal.

It's not normal. It wasn't always this way. The internet doesn't have to be a corporate playground. That's just the path we've chosen.

FARHAD MANJOO in the New York Times, November 2017