YAHOO!

Net Neutrality Won't Save the Internet. Competition Will

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Judging by what you might have read online, you'd think the world was about to end with the imminent rollback of existing net neutrality rules, due for a vote by the Federal Communication Commission (FCC) on Dec. 14.

The reversal would give "major corporations — like Verizon and Comcast — the power to block mobile apps, slow websites and even control which news outlets we can access," according to <u>the ACLU</u>.

"Comcast, Verizon and AT&T ... want to gut FCC rules and then pass bad legislation that allows extra fees, throttling & censorship," said the digital-activist group <u>Fight for the Future</u>.

The rule change "paves the way for an internet that works more like cable television, where wealthy insiders decide which speakers can reach a broad audience," warned <u>the Electronic Frontier Foundation</u>.

Oh please. I oppose the FCC's proposal to reserve its 2015 decision reclassifying broadband as a utility, but the major internet service providers (ISPs) are not likely to change the way they do business as a result. They make tons of money under the existing rules, and they also made plenty of money before the rules were changed.

"If the internet was not a terrible dystopia in 2014, there's not a ton of reasons to think that companies are going to do any of these awful things that they didn't seem to have any reason to do before," said <u>Julian Sanchez</u>, an analyst with the libertarian Cato Institute, on Wisconsin Public Radio last month.

Instead of getting angry about net neutrality, we should be outraged that we Americans pay more for broadband and have slower speeds than consumers in almost every other developed country.

We should demand that the government force the major broadband ISPs (mostly, cable-TV companies) to open up their last-mile networks (the physical connections between customers' homes and ISP facilities) to competition — to "unbundle local loops," in industry parlance.

But such forced unbundling is unlikely to happen in the current political climate. The cable ISPs will fight such action tooth and nail, as it completely undermines their business model.

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So, as an imperfect substitute for local-loop unbundling, we can instead choose to let Verizon, AT&T, Google and other companies roll out technologies such as VDSL, satellite broadband and 5G fixed-wireless broadband to compete with the cable companies. Such moves are already underway, and they've even got support in Congress. They deserve our support.

Why I'm neutral about net neutrality

The quest for net neutrality is a well-intentioned distraction, a palliative half-measure aimed at preventing the stagnant U.S. broadband market from getting worse. It won't get us what we really need: faster speed and lower prices.

No one can agree on what net neutrality exactly means. Are "fast lanes" allowed? Can companies "throttle" bandwidth-hogging consumers? It's like arguing about the shape of a cloud — people make it look like whatever they want to see.

Tim Wu, the Columbia law professor who came up with the phrase "net neutrality" 15 years ago while he was at the University of Virginia, wrote in <u>his paper introducing the concept</u> that "broadband carriers should not be allowed to discriminate in how they treat traffic on their broadband network."

Most proponents (and opponents) of net neutrality would agree. But there's more.

Wu's entire sentence for the above quotation: "Absent evidence of harm to the local network or the interests of other users, broadband carriers should not be allowed to discriminate in how they treat traffic on their broadband network on the basis of internetwork criteria."

The first clause means that broadband ISPs should be able to throttle bandwidth hogs. If a customer needs more bandwidth, Wu argued in 2002, the customer can pay for more. Many of today's net-neutrality advocates <u>might be disappointed</u> with that interpretation.

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The second clause — "on the basis of internetwork criteria" — is even more relevant today than when Wu wrote it.

In his paper, Wu drew a bright line between the open internet and the local, "last-mile" networks that broadband operators own and control. Broadband ISPs should "police what they own," Wu said, but they should not discriminate among the many forms and sources of content passing through their local networks on the way to consumers.

Fifteen years out of date

The problem is that, in 2017, the bright line between the open internet and the local ISP networks has been washed away. Today, Facebook, Netflix, Google and other large online content providers can bypass the open internet to get data more quickly to your ISP — and to you.

They can connect their own networks directly to your ISP's local network in a procedure known as "peering." They can also use a "content-delivery network," or CDN, to place servers caching their content geographically close to, or even within, your ISP's local network.

When I <u>watch a movie on Netflix</u>, the video stream doesn't have to travel from California through a dozen different autonomous networks (the big blobs that make up the internet "backbone") to my living room in Brooklyn. Instead, it needs to travel only a few miles from a Netflix server that's near, or even inside, Time Warner Cable's local New York City network.

This arrangement violates some definitions of net neutrality. It gives Netflix an advantage — a "fast lane" — over other streaming services that can't afford to pay for CDNs. And by hooking into that local Netflix server instead of reaching all the across the continent, the ISP is arguably discriminating in favor of one streaming service at the expense of others.

But this arrangement also gives me what I want: faster speed without greater cost. Only the most bloody-minded net-neutrality proponents would argue that this is a bad thing. Most people would agree that peering and CDNs benefit the consumer.

It's that kind of consumer benefit that the FCC considered a couple of years ago when it <u>chose</u> <u>not to penalize T-Mobile</u> for "zero-rating" certain sources of video content over the company's mobile networks.

Zero rating means that content from some providers — in this case, Netflix, HBO and a dozen other big-name video providers — doesn't count against a mobile customer's monthly data allotment. T-Mobile's plan discriminated against smaller video streamers, yet the FCC let it slide because it benefited consumers, at least in the short term.

As technology-business analyst <u>Ben Thompson</u> pointed out in a recent blog post, this (plus T-Mobile's aggressive pricing) benefited consumers in the long term, too. T-Mobile gained lots of new customers, sparking <u>a price war in the U.S. cellular market</u> that led to plunging subscription costs and more cellular broadband data for consumers.

That's exactly the kind of price war the U.S. home broadband market needs.

"Increasing competition would not only have the same positive outcomes for customers that T-Mobile demonstrated," said Thompson in his blog post, "but would solve the (mostly theoretical) net-neutrality issue at the same time: The greatest check on an ISP is the likelihood of an unsatisfied customer leaving."

Sadly, the competition isn't there yet. While American consumers can choose from among <u>four</u> <u>big nationwide cellular carriers and half a dozen smaller ones</u>, most consumers have only two choices for home broadband: a pricey but fairly fast cable-broadband provider and a cheaper but pitifully slow DSL provider.

Fast fiber-to-the-home broadband, often provided by a telephone company, exists in some places as a third alternative, but its coverage is patchy and is likely to stay that way. My boss can get fiber at his house in New Jersey, but I can't get it in Brooklyn.

A decade ago, Verizon spent millions rolling out its Fios fiber-broadband service to several areas in the Northeast, but in 2010, stopped the expansion in favor of "filling in" territory the company already controlled. <u>Google Fiber reached four cities</u>, then stopped expanding a year ago.

Only AT&T's expansion is continuing, bringing fiber broadband to more locations in California, the South and parts of the Midwest. <u>A University of California, Berkeley, study</u> found that AT&T's fiber coverage was rolling out primarily to wealthy communities.

The accidental industry

Cable companies got into the ISP business by a historical accident that shaped the entire broadband industry and led directly to the demand for net neutrality.

In most developed countries, the telephone company's lines are the primary conduit to access the internet. The U.S. started that way too — I remember having the Verizon guy install a second dial-up line in my apartment in 2000 so my wife and I could go online and use the phone at the same time.

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But when American consumers started demanding broadband, the phone companies couldn't deliver. Their DSL connections were much slower than the cable companies' connections. (Even today, Verizon can't guarantee me more than 7 Mbps via DSL at my address, less than half what I get with Time Warner Cable.)

The cable companies could deliver fast speeds because they had laid tens of thousands of miles of fat copper wires across the continental U.S. in the '80s and '90s as cable TV went from being a luxury to a near necessity. TV cable wasn't designed to carry two-way traffic, much less internet traffic, but it was quickly adapted to broadband delivery.

Why the cable-TV model is a dead end for broadband

This stopgap, jerry-rigged solution to the demand for widespread broadband access works just fine technically. The problem is that these accidental broadband ISPs still think like cable companies.

Cable companies operate their television-transmission businesses on a local-monopoly basis. They got exclusive television-connection rights to specific towns and neighborhoods in deals made decades ago. There are no such exclusivity rights for broadband, but the costs to build out a competing last-mile broadband network infrastructure are enormous, which is one reason Verizon gave up on its fiber-network expansion.

As a result, the ISP business can be pretty profitable for cable companies.

"It's just very simple economics," Wu told <u>The New York Times</u> in 2014. "The average market has one or two serious internet providers, and they set their prices at monopoly or duopoly pricing."

But once there's no more new territory left to seize, the only way to grow your business if you're a cable-TV operator is to keep raising your rates. Because your customers are captive and can't jump to a different cable-TV provider, you can get away with that every couple of years.

Cable companies pay big cable channels like ESPN and Fox News a few bucks per subscriber per month for the right to carry the channels' signals. But when a cable channel is just starting out, it's the other way around — it pays cable operators for "carriage" of its signals.

So, if cable companies can charge some cable channels for carriage, why can't they charge Facebook or Netflix as well? Why can't they pick and choose which online services their customers can access? The rollback of net-neutrality regulations might make this possible.

This nightmare scenario of internet-content packages — basically, turning the internet into cable TV — is what American broadband consumers are worried about. They don't want cable companies controlling what they can see and do on the internet. That's perfectly reasonable, but net-neutrality regulations may be the wrong solution.

Let loose the lions of competition

What if you could choose among six or eight different broadband providers and could easily switch from one to the other? That's the situation in many European countries and in South Korea. (For example, <u>here's what you can get</u> if you live near the American Embassy in London.)