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Net Neutrality: Fighting for An Open Internet

The internet is an essential part of our daily lives. We use it to do our jobs, listen to music, play games, watch videos, connect with others, and so much more. However, the free, open internet we know so well is in grave danger. Large telecommunication companies are exploiting the internet and its users for their own gain, all made possible by the repeal of net neutrality regulations. The repeal of net neutrality threatens the civil liberties and economic freedom of America’s citizens and should be reversed immediately.

Net neutrality is the principle that all data should be treated equally, regardless of source, content, or destination. From a legal standpoint, the debate over net neutrality centers on whether Internet Service Providers (ISPs) should be classified as common carriers. Common carriers are defined as any entity that transports freight, people, or information for the public. Some examples of common carriers include airlines, shipping companies, railroads, and public utilities. Because common carriers serve the public need, they cannot discriminate by refusing service or changing pricing. In the United States, the Federal Communications Commission (FCC) is responsible for regulating all telecommunication companies, such as radio stations, cable tv providers, and ISPs. The FCC classifies telecom companies as either Title I (Information Services) or Title II (Common Carriers). Title I companies are not considered common carriers thus they are subject to far fewer regulations regarding how they manage their networks. Traditionally, the FCC has favored classifying ISPs as Title II entities, however, this position has reversed under the Trump Administration. On June 11, 2018, the FCC reclassified ISPs as Title I providers, effectively eliminating net neutrality at the federal level.

The removal of net neutrality encourages ISPs to engage in anticompetitive business practices such as paid prioritization and zero rating. A side effect of widespread improvements to internet speeds and loading times, internet users are less patient than ever before. In 2013, researchers from UMass Amherst found that viewers start to abandon online content “if the startup delay exceeds about 2 seconds”, with each additional second “[resulting] in roughly a 5*.*8% increase in abandonment rate” (Krishnan and Sitaraman 8). Because most digital content providers generate revenue from ads viewed by users, the will do anything to keep their sites fast and responsive for consumers. Keenly aware of this, ISPs have started to exploit content providers via paid prioritization. Paid prioritization is when ISPs will prioritize data transfer from specific customers for a fee. During times of heavy network congestion, prioritization ensures content providers can still offer a smooth experience to their customers. Because ISPs have total control over data transfer speeds, they can charge providers exorbitant amounts to access these “internet fast lanes” without consequence. This practice is highly anticompetitive because only the largest content providers, such as Netflix and Facebook, can afford to pay these fees, leaving smaller companies and startups at a huge disadvantage.

Another anticompetitive practice employed by ISPs is zero-rating. Zero-rating is when ISPs will not count data used to access specific content towards a user’s monthly data usage. This practice is especially common with mobile carriers as most mobile plans have monthly data caps. Zero-rating is not free, rather content providers pay ISPs in exchange for their content being zero-rated, similar to the concept of a toll-free telephone number. Many ISPs have exploited this by launching their own zero-rated streaming services. Because these ISPs owned services do not incur additional costs associated with zero-rating, they can significantly undercut their competitors’ prices, reducing competition. Both of these practices were made legal by the repeal of net neutrality. Reduced competition is not the only effect of the net neutrality repeal.

The repeal of net neutrality has also led to higher consumer costs. One cause of these higher costs is an increase in zero-rated content. At first glance, one would think zero rating would lower costs by offering users “free data” to use their normal services. However, a 2019 report by epicenter.works, an Austrian digital rights group, found that the introduction of zero rating throughout the European Union coincided with an 11.6% *increase* in internet prices (Lohninger 61). Zero rating is not solely responsible for increasing consumer costs.

Throttling is also increasing consumer costs. Throttling is when an ISP slows a user’s access speeds, usually to alleviate network congestion. After the net neutrality repeal, mobile providers have started to throttle users if they exceed certain usage thresholds on their “unlimited” data plans. Once throttled, users must either wait until the next billing cycle or upgrade their plan to one with a higher usage threshold. One famous example of this occurred in August 2018 when Verizon throttled Santa Clara County Fire’s unlimited data plan during the Mendocino Complex fire. While coordinating fire response, their incident command’s unlimited data plan was throttled after exceeding 25gb of usage. Even though the department was conducting disaster operations Verizon would not stop throttling them unless the department upgraded to a significantly more expensive plan (Brodkin). While Verizon’s actions were legal even under Title II, the repeal of net neutrality removed the ability for Santa Clara Country Fire to file a complaint with the FCC, leaving them with no options to seek recourse from Verizon.

By far the worst-case scenario for US consumers is that ISPs will transition to a tiered service format similar to cable television. This would force consumers to pay to access certain types of content such as social media, video and music streaming, and online gaming, drastically increasing monthly bills. This is not the worst effect of the net neutrality repeal.

Most importantly, repealing net neutrality threatens freedom of speech and information. Part of what makes the internet such a powerful platform is that all content is freely accessible. However, without net neutrality, ISPs now can restrict access to content for whatever reason. For example, say an individual creates a blog with the goal of convincing the public that Comcast is an evil company. Comcast obviously does not want people tarnishing their reputation. Until 2018, Comcast’s only method of recourse was to sue the offending site for defamation, a process that costs significant amounts of time and money. After the 2018 net neutrality repeal Comcast can simply slow down all traffic through the offending site to decrease viewership, effectively censoring that individual. While there are zero documented cases of ISPs explicitly censoring content, the potential exists for it to occur systemically.

In response to the rise of internet streaming services, many ISPs have merged with large media corporations. Two recent examples include the Comcast-NBC and the AT&T-Time Warner mergers. In both cases, the resulting conglomerates have complete control over the production and distribution of a wide variety of media forms, including movies, tv shows, news, sports broadcasts, music, etcetera. By employing tactics such as zero-rating, paid prioritization, and throttling these corporations can effectively create walled gardens isolating their users from outside content. This corporate-sponsored quasi-censorship is dangerous to democracy because users are only shown viewpoints that are supported by the company, depriving them of the capacity to develop well-reasoned arguments on controversial issues. Clearly, there are many arguments against repealing net neutrality, however, are there any supporting arguments?

One common concern with net neutrality regulations is their effect on broadband infrastructure investment. To keep up with exponentially increasing data consumption by its users, ISPs are implementing groundbreaking technologies into their networks. For example, 5th generation mobile networks are expected to start being rolled out this year, which will increase mobile internet speeds by up to 20X (Edwards). While these technologies are necessary to keep up with consumer demand, they also require significant capital to implement. Like most companies, ISPs will not make significant capital investments without ensuring they can recover their investment. Because of this, critics of net neutrality believe that the costs associated with Title II compliance will stifle investment into these revolutionary technologies, harming related sectors of the economy in the process. This is a reasonable concern. Regulatory compliance often forces companies to hire dedicated legal counsel which is extremely expensive and cuts into capital improvement budgets.

The FCC claims this was the driving factor behind the repeal of net neutrality, citing a 2016 report that found investment in broadband infrastructure dropped 5.6% from 2015 to 2017 as a result of Title II regulations (Brake). However, there are significant flaws in the FCC’s argument. For one, their cited report incorrectly assumes that all decreases in infrastructure investment happened because of net neutrality regulations. AT&T, for example, had reduced investment in 2016 because they had wrapped up a massive network upgrade project the year before. Smaller ISPs have also refuted the claim net neutrality especially harms their operations. In a 2017 letter to the FCC, thirty regional ISPs claimed that they had “encountered no new additional barriers to investment or deployment” as a result of net neutrality regulations (Finley). These examples significantly weaken the argument that net neutrality stifles broadband investment.

It is abundantly clear that the repeal of net neutrality is the antithesis of a free and open internet and is not in the best interest of the public. However, it can be reversed. Congress has the legal authority to reinstate net neutrality permanently, protecting this invaluable resource for generations to come. This will not happen without your help. Donate to net neutrality groups, write to your representatives, and make your opinion known. United we can liberate the internet from corporate interests and ensure it will remain free for years to come.

Works Cited

Brake, Doug. "Broadband Myth Series, Part 1: What Financial Data Shows About the Impact of Title II on ISP Investment." *Information Technology & Innovation Foundation*, 2 June 2017, itif.org/publications/2017/06/02/broadband-myth-series-part-1-what-financial-data-shows-about-impact-title-ii. Accessed 28 Feb. 2019.

Brodkin, Jon. "Verizon Throttled Fire Department's 'Unlimited' Data during Calif. Wildfire." *Ars Technica*, arstechnica.com/tech-policy/2018/08/verizon-throttled-fire-departments-unlimited-data-during-calif-wildfire/. Accessed 23 Feb. 2019.

Edwards, John. "5G versus 4G: How Speed, Latency and Application Support Differ." *Network World*, 7 Jan. 2019, www.networkworld.com/article/3330603/5g-versus-4g-how-speed-latency-and-application-support-differ.html. Accessed 28 Feb. 2019.

Finley, Klint. "The FCC Says Net Neutrality Cripples Investment. That's Not True." *WIRED*, 12 Dec. 2017, www.wired.com/story/the-fcc-says-net-neutrality-cripples-investment-thats-not-true/. Accessed 11 Mar. 2019.

Krishnan, S. Shunmuga, and Ramesh K. Sitaraman. "Video Stream Quality Impacts Viewer Behavior: Inferring Casuality Using Quasi-Experimental Designs." *IEEE/ACM Transactions on Networking*, PDF ed., vol. 21, no. 6, 2013.

Lohninger, Thomas, et al. *The Net Neutrality Situation in the EU*.   
     Epicenter.Works, 29 Jan. 2019, epicenter.works/sites/default/files/   
     2019\_netneutrality\_in\_eu-epicenter.works-r1.pdf. Accessed 11 Mar. 2019.