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Net Neutrality

The world we live in is an ever-evolving marketplace. Nearly every individual and business is out to obtain a single goal – Profit. Call it natural selection if you will, but those who can’t keep up will face their inevitable demise. The Online world is no different. Within the walls of the Internet lies a global marketplace for nearly any good, the daily morning newspaper, even an almanac and weather reports dating back to the 1800’s. The Internet is an invaluable resource for many of our daily lives. We wake up and check the weather, which is sourced from the Internet. You walk out to the living room and say “Hey Alexa, what were the closing numbers on the DOW Jones stock last night?” - Powered by the Internet. Facebook, Daily News, and even that Netflix series you’ve been binging on. All brought to you by the mighty and powerful Internet. To us, the everyday use of the Internet is trivial. It’s just a part of life, access to endless TV shows and 600 different steering wheel cover options on Amazon is simply the norm now. This is the beauty of the Internet, and all the power that it harnesses. It’s ruined the lives of celebrities, and made millionaires out of teenagers with a couple dollars and a dream. On the Internet, we’re all free to do, be and sell (to an extent) whatever we wish. So with a free and open online world and nearly no regulation, the Internet is a prime target for Government intervention – a grab at your wallet and a swift kick at your first amendment rights.

So what’s the big deal here? This issue is better known simply as Net Neutrality. Essentially, the Internet has always been neutral – it just hadn’t been a thing until around 2003. According to Merriam-Webster, Net Neutrality is defined as “the idea, principle, or requirement that Internet Service providers should or must treat all Internet data as the same regardless of its kind, source, or destination (Net Neutrality, n.d.).” Simply put, companies such as Cox and Centurylink that provide you with Internet service, could “throttle” your speeds to a specific website or server, yet prioritize the connection to others. This would be dictated by the amount the company could pay the ISP’s in order to obtain Internet presence, and not slow their website down into oblivion. To us consumers, we would effectively be contracted into certain websites and company domains that we could visit – therefore limiting and censoring your choices of other lower capital competitors. ISP’s could in theory create a fast and slow lane for Internet traffic, and what traffic goes to which lane is completely decided by them. Ranging from competitors traffic, to political opinions that they may not agree with, this undermines the integrity and reliability that lies at the core of the Internet. The concept of a Neutral Net is one of the guiding principles of the Internet, and is what allows us to freely communicate online.

It’s easy to take advantage of things we’ve been given free of charge for so long. The ability to express your opinions, gather and innovate, and even start a new business online have been all thanks to the Neutral Net. As a protestor against civil inequality, you’re able to gather and reach out to a broad community without having your information or messages censored because someone doesn’t agree with you. As a new company, you may not have much excess cash flow, especially to spend on something like being better noticed on Google. The issue of Net Neutrality becomes especially important for up-and-coming small businesses. For these companies, capital is low, and they’re just looking to get their name out there. They’re run dry by the cost of rent and upkeep, and the high monthly bill from Verizon. Verizon now controls the traffic to their website, and decides for them whether people will be able to efficiently access it. If loading or access times are noticeably higher than that of a competitor, they’d more than likely just prefer to head to the competitors site and complete the purchase there. This turns the Internet companies into a gatekeeper, and into a market force much larger than they may have anticipated. This is too much power, and too much regulation at the hands of an ISP.

T-Mobile knows all about how the exploitation of their power could quickly cause an uproar. A couple years ago, T-Mobile created an unlimited plan for their customers. It was all inclusive, and everything was unlimited. That is, unless you’re watching Netflix. Consumers quickly found out that the data-hogging giant wasn’t included in their so-called “unlimited” plans. As you can assume, most people found out after they began receiving sky-high bills and all their video was throttled back to 480p. This caused quite a scene for T-Mobile, as they began to face backlash about whether they really were an adversary of a Neutral Net. After all, they’re discriminating how the user connects based on the nature of the data that’s being transmitted. After all the smoke cleared, today T-Mobile offers many plans that completely include a Netflix subscription, as well as no data fees for any usage of Netflix. What a coincidence, huh?

To somewhat regulate this, the Federal Communications Commission proposed the Open Internet Order 2010, which effectively outlawed the practice of providers preventing access to competitors or specific websites. With this, Service Providers must be transparent in their network management process, not block legal content, or unreasonably discriminate transmission of Internet traffic (Preserving the Open Internet, Para. III Sec. B,C,D). This was a big step towards preserving the free and open Internet. Later, in the *Verizon Communications Inc. v. Federal Communications Commission (2014)* case, it was determined that the FCC has no stance to enforce Net Neutrality guidelines. Since Internet Service Providers aren’t considered “common carriers”, they are not governed by the FCC. This was amended in February of 2014, when the Net Neutrality firestorm really began to take hold. The FCC announced recent rule changes, including the main and most controversial change to the classification of broadband Internet Service Providers. With these changes, companies like Verizon and Comcast would be free to create special, dedicated “lanes” to preferential customers. The “preference” here is obviously being decided based on who pays the most to the ISP.

Much of the Neutrality issue lies in the details. Internet Service Providers like Verizon weren’t considered “common carriers,” like those that are managed and overseen by the FCC. Common carriers are essentially companies and organizations that ensure the delivery of our everyday goods and services. Things such as pipelines, mail carriers, and public utilities are all common carriers, but telecommunications is a much different ball game than that of a physical good market. A little over a year after the Verizon case, the FCC ruled in favor of classifying broadband Internet service as a “common carrier” good, thus bringing it back to it’s previous state of being managed by the FCC, and unable to discriminate based on the type of data being transmitted.

With broadband ISP’s now under the classification of Title II, the Internet is no longer an unregulated, private system of networks. Although the FCC oversees telecommunications, too tight of a leash can also cause a strain on the public. “The FCC and net-neutrality advocates correctly recognize that if the agency can monitor and control the distributors of speech, they can shape culture and politics (Skorup, Para. 6).” Most don’t realize, but users of broadband already face networking tradeoffs. “… Like giving an Internet-protocol phone call precedence over another user’s monthly operating-system update. Others are complex tradeoffs related to interconnection price, content costs, the protocols the applications use, predicted consumer demands, and available capacity (Skorup, Para. 12).” The FCC then acts as the mediator, and regulates when and what trade-offs are acceptable. In reality, it’s nearly impossible to give everyone the exact same service simultaneously.

Internet Service Providers would see sizable benefits from strangling the Net into their grasps. The advantages are glaringly obvious.

“The record in this proceeding reveals that broadband providers potentially face at least three types of incentives to reduce the current openness of the Internet. First, broadband providers may have economic incentives to block or otherwise disadvantage specific edge providers or classes of edge providers, for example by controlling the transmission of network traffic over a broadband connection, including the price and quality of access to end users. A broadband provider might use this power to benefit its own or affiliated offerings at the expense of unaffiliated offerings (Preserving the Open Internet, Para. II Sec. B, N. 21).”

It seems apparent that this would be too much control in the hands of a standard Internet Service Provider. ISP’s would effectively then own the Internet, and control what websites and organizations receive the notoriety of consumers browsing the Web. Myself, I only pay attention to the first few results of a Google search, and almost never venture onto the second and third pages of results. I would assume this is somewhat universal. Companies and e-commerce websites that don’t have the relationship or capital to pay for a higher tier service get pushed into the dark corners of the Web, where consumers will almost never find them. “By interfering with the transmission of third parties’ Internet-based services or raising the cost of online delivery for particular edge providers, telephone and cable companies can make those services less attractive to subscribers in comparison to their own offerings (Preserving the Open Internet, Para. II Sec. B, N. 22).” ISP’s would be able to monopolize any product of theirs that they so choose. By forcing higher prices from edge providers and those that provide substitutable services, ISP’s act as an immense Internet presence that can almost completely control the market.

Freedom of speech is a sensitive topic for many Americans, and also one that can warrant a reaction out of anyone. This isn’t any different on the Internet - some feel that they would be suppressed on the Internet if Net Neutrality is abolished. Many different organizations and communities of people are gathered all over the Internet, ranging from knitting groups to groups that make explosives. Regardless of how you feel about some of these groups or organizations, they have a right to assemble and use the Internet as a tool for that. Like us, they also have the right to their speech, but if these groups can no longer participate in an open Internet, ISP’s may not be very supportive of their ideas and push them out of their Internet space. Emotions and opinions aside, these people have the right to speak their beliefs and attempt to spread their ideals just as much as we do – and if they’re being suppressed on the Internet, what does “Freedom of Speech” even do for us anymore? Does it also apply to the Internet? The FCC has considered requiring a “minimum level service” for edge providers to hopefully combat this type of discrimination. Although, it seems it would be cumbersome implementing this policy:

“the FCC acknowledges that under the Court’s approach, ISPs would not be obligated ‘to actually provide an edge provider with the minimum service necessary to satisfy the rules.’ Any and every edge provider could be upsold to a service that exceeds the bare minimum, because ISPs would be free to craft arrangements with individual edge providers, charging those who are similarly situated completely different prices for the same service (Net Neutrality’s Impact on Free Speech, Para. 18).”

Managing and monetizing the Internet space would be no easy task – especially when we’re not even sure if it’s completely necessary or beneficial. Freedom of Speech is a pivotal belief in America, and companies and consumers refuse to have their rights infringed upon.

Everyday consumers of Internet services wouldn’t be the only ones affected by banishing Net Neutrality. Small businesses and e-commerce websites, grass roots charities and startups would all be affected by changes in the regulations of the neutral net. Smaller businesses and mom-and-pop shops are increasingly relying more on online sales and their presence on the Internet. “… roughly eight-in-ten Americans are now online shoppers: 79% have made an online purchase of any type, while 51% have bought something using a cellphone (Smith, Para. 1).”

People are doing more of their shopping at home, and having things delivered right to their door in just a few days. Especially with services like overnight delivery and Amazon Prime, it makes it hard to resist saving a few bucks *and* not having to make a trip to the store. For a small company reliant on their online revenue while also managing a storefront, they don’t have as much money laying around for extra expenses. Suddenly their Internet Provider hits them with a bill that must be paid in order to obtain “data prioritization”. Companies like this would almost never be able to pay these fees, while large competitors in their space may be able to clear the payments with ease, and remain strong and present on the Internet. This is detrimental to these up-and-coming businesses and they’re plagued by unnecessary recurring costs.

Some may wonder about the technicalities of Net Neutrality, and how it would really be enforced. For many, Net Neutrality is the concept that all bits are treated equally – no matter their source, destination, or type. Yet some believe in a semi-neutral net, where different types of Internet services can be prioritized over another, but not two of the same type. “Thus they would allow carriers to schedule conversational video packets differently than those carrying streaming video, which is less time sensitive. But they would not allow carriers to differentiate between streaming video packets from two different companies (Hecht, Para. 35).” Much of the network discrimination would be identified with a process called deep packet inspection. “DPI is a filtering technique that examines the contents of data at an inspection point as they are transmitted across the network (Williams, Para. 7).” This allows the ISP to analyze the traffic that is going through and decide whether the connection should be throttled or not. Contained in the header, is the source and destination information for the specific packet. With this information, Service Providers can effectively decide whether or not to throttle the speed at which packets are transmitted over this particular network. Depending on which tier they belong to, would then dictate the speed at which you connect.

There are many people who don’t propagate the idea of Net Neutrality. They propose that a regulated, government controlled Internet could be more beneficial to us as a whole - some more notable than others; our FCC chairman Ajit Pai, Senator Ron Johnson of Wisconsin, and many other writers and journalists all over the Web. Most of them believe in the idea that dedicated “fast lanes” would make smaller companies want to invest into broadband. Also, that these regulations would allow us to have “more high-speed broadband” throughout the country. “The idea behind the exception is to give certain crucial services their own network capacity rather than a "fast lane" within the same broadband pipe shared by most other Internet services (Brodkin, Para. 10).”

As always, there are two sides to every story. Likewise, there are many adversaries of Net Neutrality - companies like Mozilla, Amazon, Google and Netflix. Recently there was an open commenting period for the proposed regulations on Net Neutrality, which received a record breaking ~2,000,000 comments submitted to the FCC (It was originally documented around 21 million, but around 90% were found to be comments sent by bots). There have been national protests against regulating the Internet, such as the “Internet Slow Down Day” in September of 2014 where dozens of large companies (and even Mark Zuckerburg) deliberately slowed their connection speeds to demonstrate how we would be affected by abolishing Net Neutrality.

Tried and true, talk to anyone (who knows of the subject) about Net Neutrality and you’re almost guaranteed a heated discussion. From the FCC regulations and proposed acts, to the obvious discrimination of big name companies, Net Neutrality is a buzzing topic in the world of the Internet. Maybe we’ve just been spoiled all this time with unrestricted access to any website we choose. But really, that is where the core of the Internet lies. Everyone has their chance on the Internet and a neutral net keeps things at a level playing field for all. From Internet startups to someone selling their knitted blankets, the Internet is a beautiful place. A free and open world for those that enjoy it for entertainment, work, school, even binge watching your favorite show and watching the baby on a digital monitor. It’s all thanks to the Internet, and even more so, a neutral Internet.

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