

The internet was thought to be assist with bringing about a more democratic, equal space during its inception. What started off as peer to peer messaging through email turned into message boards with minor, if any, moderation, to chatting with synchronous messages between two individuals, to community groups supported by web sites with their various forms of communication platforms (Abrams, Maloney-Krichmar, & Preece, 2003). Accessibility to the internet continues to be a hot topic, especially in the United States and Europe. Debate roars on for and against declaring access as a human right with consideration of whether it should be a public service assisted by the government. With the continued corporatization of the internet, we see issues arising on just a few platforms containing the majority of traffic from certain nations, and monopolies being able to ruin competitors with ease. The internet has become nearly synonymous with “Google” for much of the population, but because they are a for-profit organization, many problems arise as they put profits over equality and effectiveness. Data collection brings about concern of individuals’ privacies, and a lack of an open, equal internet allows unfair discrimination on platforms and consumers. The internet needs changes from governmental figures to go back to the democratic glory it once basked in.

One of the issues that was apparent early in the creation of the world wide web was accessibility for users. Not only do people need a physical or wireless connection to the web, but it’s necessary to have a computer powerful enough to make that connection and process the data received and transmitted. While some groups were able to mitigate issues with this by offering high and low bandwidth versions of their sites, such as activeworlds.com, this did not become common practice until much later (Abrams, Maloney-Krichmar, & Preece, 2003). Even today, to get the highest quality of video, audio, and other media streamed, an individual needs to be paying for a strong enough internet service. Some locations in the United States have families locked into only having one company of choice for service. These barriers for high quality internet are still very real, despite being a necessity for many, whether it be for communication, entertainment, learning, or work. Communities depend on internet connectivity to work and play, which has become even more evident with stay-at-home orders through the Covid-19 pandemic. Nonessential workers were told to work remotely from the safety of their homes, but this would not be possible for most without a highspeed internet connection. Schools were pushed to remote learning – also requiring highspeed internet for Zoom video calls and easy, speedy transfer of information. A study from Consumer Reports found that eighty percent of people believe access to highspeed internet was equally important as access to water and electricity, and “Eighty-seven percent of people reported that the internet has been important to them during the [Covid-19] outbreak, and fifty-three percent of people reported that broadband is essential for critical purposes and everyday tasks” (Hizkias & Whipple, 2021). People are also using the Internet more frequently for staying in touch with family. A survey conducted in the United States and the United Kingdom by the Internet Society found that three-fourths of respondents reported a critical need for keeping them connected to friends and loved ones (2020). The Federal Communications Commission (FCC) in the United States has started an Affordable Connectivity Program that assist with cost of broadband and discounts for devices for households at or below 200 percent of the Federal Poverty Guidelines, or another set of criteria are met. Some cities and towns have begun building their own affordable networks, with many being publicly owned. A fix would be declaring broadband access as a public utility akin to electricity, which democrats such as Sanders are advocating for.

With the importance of accessibility to the internet as a whole comes the need for easy access to combing through web content easily and efficiently. Google continues to dominate the world's search engine traffic, holding 86.19% of the market share of desktop searches and 94.88% of the mobile search market share as of December 2021, and fielding over 3.5 billion searches every day (Chaffey, 2022). Along with their email, cloud storage, maps, and video sharing through YouTube, parent company Alphabet controls a significant portion of all traffic online. However, with all the convenience the environment brings for users comes potential for issues with competing services and companies. With the control Alphabet has over the internet, it is plausible for the conglomerate to snuff out competition with ease. Back in 2017, Alphabet was hit with a 2.42 billion euro fine from the European Commission due to breaking antitrust regulations for giving prioritized placement in searches of its own shopping service while lowering rivals in search results. Commissioner Vestager stated, "What Google has done is illegal under EU antitrust rules. It denied other companies the chance to compete on the merits and to innovate" (Yun Chee, 2017). More recently, the United States Justice Department, along with eleven state Attorneys General, filed a civil antitrust lawsuit in 2020 to stop Google from unlawfully continuing monopolies through exclusionary and anticompetitive practices in the search and search advertising spaces, specifically for putting pressure on phone manufacturers to default searches to theirs (Hughes, 2020). The mass control Alphabet has with their search indexing and other platforms must be put in check to bring about a fairer ground for competing companies. Hughes writes about the concept of a non-profit search engine that would allow users to drive algorithm changes by reporting bad results and collaborating on improvements, similar to an open-source project on Github. With a non-profit way to explore the web, smaller companies would not have to worry about being hidden from potential customers unfairly, and consumers would not have to worry about having their data collected and sold off. Hughes goes on to cite DuckDuckGo as a healthier alternative to Google, while still for-profit and closed source, their company does not store personal data, and has a decent general algorithm for finding what you need. The site also scored nearly as well as Google, Yahoo, and Bing in terms of result relevance, ranking, coverage, and unrelated documents in a study by Hajian Hoseinabadi and CheshmehSohrabi (2022). While Google still has plenty of headway in the fight for best search engine online, a subsidized, unbiased delivery service for internet content would be best for democracy.

Users are no longer experiencing the same privacy they once did in an early internet age. Nearly every business with an online offering has either an in-house data capturing and researching team, or at least one outside connection for data usage, collecting personal information on millions of consumers worldwide. The general consensus is that the European Union (EU) has been much more attentive to updating policy surrounding individuals' privacy compared to the United States (US), where legislature is still not up to date with the online nuances of data capturing, interpretation, and storing. In May of 2018, the EU instated the General Data Protection Regulation (GDPR) to allow citizens greater understanding and control of how their personal data is being used by companies, as well as a gateway to filing complaints against companies misusing their data (Frankenfield, 2020). In the US, the closest thing that exists to this is the California Consumer Privacy Act of 2018 (CCPA), created to outline standards for data collection, the consequences for companies improperly storing user data, and the rights of California consumers exercising over their own data (Hennel, 2021). The country itself does not yet have a comprehensive, equivalent guideline put into place for data protection

of individuals, but policies are upcoming as of next year; Virginia, Colorado, Connecticut, and Utah all have state specific privacy and consumer data protection acts that will go into effect sometime in 2023 (Blair et al., 2022). Federal laws in the US have gone back and forth in regard to privacy, alongside net neutrality laws. A vote in 2017 was passed to remove the FCC's broadband privacy rules designed to prevent internet service providers (ISPs) from selling users' personal data to advertisers and other companies (Clement, 2017). With billions of consumer records being exposed each year due to negligence of corporations' security practices surrounding data collection, causing identities to be stolen, credit cards to be opened fraudulently, and accounts being accessed without the owners' permission, the US government is doing a disservice to the population by leaving legislation outdated.

Trouble with social media platforms has been growing more apparent in the past decade along with the rise of data privacy and security concerns. Facebook made headlines worldwide in 2018 when the attorney general of Washington D.C. filed a lawsuit against the company over sharing data with analytics company Cambridge Analytica, who had been reportedly creating psychologically tailored advertisements based off 87 million users' Facebook profiles, done to influence people's voting preferences in the 2016 US presidential election (Hinds, Joinson, & Williams, 2020). In addition to breaking down democracy at a national level, parent company Meta's other platform, Instagram, has been shown to harm users' mental health. "Studies have linked Instagram to depression, body image concerns, self-esteem issues, social anxiety, and other problems. By design, the app capitalizes on users' biological drive for social belonging—and nudges them to keep on scrolling" (Abrams, 2021). Zuckerberg, the CEO of Meta, voiced concerns about the platforms himself in the Washington Post, describing the overwhelming power over speech that comes with ownership of the sites. He references third-party bodies setting standards for harmful content distribution to be kept to a minimum, legislation for protection of elections with a focus on advertising, and a globally agreed upon regulation for data privacy and protection (2017). While some countries have begun work on creating and instating laws on these focuses, international groups should be put together to communicate and regulate platforms online because of the reach they hold, and the different languages and contexts that are posted. The Budapest Convention on Cybercrime is a good beginning for this, which outlines assistance for investigation and prosecution of criminal activity by means of a computer system, and sets up a fast, effective regime of international cooperation (Seger, 2016). As lines blur in cyberspace, it comes to reason continued international cooperation is necessary for regulation on large platforms.

The concept of net neutrality is the idea that all content downloaded and uploaded is treated equally, regardless of content of the data being transmitted (Choi, Jeon, & Kim, 2018). While net neutrality was intact, website owners would not need to worry about having their content delivery slowed down because they could not afford to pay ISPs. Discrimination for other reasons was not a concern, which is very important with consideration of the internet's ability to empower 'previously excluded groups' (Curran et. al., 2013). Lobbyists, including previous FCC chairman Ajit Pai, have pushed for a two-tier system of internet delivery to customers, allowing companies to work with ISPs to ensure their content would be delivered to consumers with a faster, steadier connection than those companies not paying up, and removing net neutrality. Legislation has gone back and forth in the past decade of being for an equal internet during Obama's administration, to having net neutrality ripped away in 2015 during

Trump's presidency, to a potential positive change coming in the near future with Biden's appointments of Rosenworcel and Sohn to the FCC's leadership team, the latter being a net neutrality pioneer (Falcon, 2021). These concepts of slowed website connections are noted as hypotheticals by Pai, but Verizon, AT&T, and T-Mobile have caused issues with their customers in the past, once blocking access completely to Google Wallet, while promoting their own alternatives (LastWeekTonight, 2017). In addition to this, Verizon was caught throttling connection to a firefighting command center during an active wildfire, causing real harm outside the internet (Falcon, 2021). Currently, seven states, and Puerto Rico, have enacted legislation or adopted resolutions for equality through the net, with eleven having introduced new net neutrality laws this year. Attorneys general from more than 20 states have filed lawsuits against the FCC's Restoring Internet Freedom Order, arguing that their action was in violation of the Administrative Procedure Act (Morton, 2022). More than half of the United States currently has no legislation in place for net neutrality, but H.R.8573 - Net Neutrality and Broadband Justice Act of 2022 has been introduced into the House of Representatives, sponsored by Representative Doris O. Matsui of California, to classify broadband as telecommunications service, opening up ISPs to stricter oversight by the FCC (Lima, 2022). This will better consumers quality of internet connections, necessary for so much day-to-day life.

Other western nations have fared slightly better in terms of internet accessibility and equality online. In Canada, the Telecommunications Act (S.C. 1993, c. 38) states that no Canadian carrier shall unjustly discriminate or give unreasonable preference toward any individual, or subject anyone to an unreasonable disadvantage. Shortly after the repeal of net neutrality rules in America, Canada's government expressed support of an open internet through telecommunications policy, reiterating endorsement of a regulatory framework the Canadian Radio-television and Telecommunications Commission put into place in 2009 (Loprespub, 2018). Similarly, in Europe the Open Internet Regulation (2015/2120) protects the principle of non-discriminatory traffic management for end-users accessing services and lawfully distributing content, generally prohibiting blocking or slowing down of traffic except where necessary (European Commission, 2022). Article 5 of this Regulation ensures National Regulatory Authorities publish annual reports on compliance for the open internet in the nation. With this, new guidelines were put in place the past year "in response to a September 2021 Court of Justice ruling that 'zero tariff' options that distinguish between types of Internet traffic 'on the basis of commercial considerations' violate Europe's Open Internet rules requiring 'equal treatment of traffic, without discrimination or interference'" (Brodkin, 2022). Between the comprehensive net neutrality legislation and the GDPR, Canada and Europe show great structures for democratic internet that America could look up to.

The majority of individuals in the United States agree the internet should remain open and not managed by a single entity (Internet Society, 2020), but with Title II regulations removed for broadband access, Americans are not getting what they want. Internet access should be considered a public utility for connections to be more easily accessed, and California state laws should be used as a baseline for federal regulation of net neutrality. The pandemic has made internet access an even more integral part of users' lives, connecting family and friends, and being a necessity for many to work and learn. Individuals' private data is at risk with security measures not being strong enough, and monopolies reign supreme in cyberspace. Great change

in legislation needs to occur to better suit Americans and break up the online world that has been monopolized by corporations.

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