

**2021 Model Senate on Science and Technology**  
**Briefing Paper – Big Tech and Social Media Regulation**  
**December, 2021**

**Topic Background - Big Tech and the Internet Revolution**

Since the mid-1990's, the Internet age has altered humanity in profound ways. In just the past quarter century, advancements in technology have revolutionized people's access to data and information, shifted modes of communications, and created opportunities for open connections to billions of others around the world. A new type of company has emerged in this Internet age, often loosely grouped together as '**Big Tech**', and have become ever-present and dominating aspects in the lives of ordinary citizens across the globe. Hardware products such as the iPhone and Android smartphones have become so **ubiquitous** that it's difficult to imagine life without them. Software applications have made an equally important impact, with apps like Uber and Lyft revolutionizing transportation, and Google providing near instantaneous access to information. Paralleling the growth of other Big Tech companies, social media has fundamentally changed interpersonal communication, allowing users to instantly reach millions of friends, contacts, and followers around the world like never before in human history.

The Internet has also created a new generation of mega-corporations, each competing with various products and services in new markets around the world. Apple, Facebook, and Google, amongst many others, have achieved enormous success and become world leaders in tech innovation and product development. These companies continue to create new technologies, access new markets, and push the American and global economies forward. However, with such a large impact, oversight and regulation of Big Tech has become increasingly important to the U.S. Congress.

**Data and Algorithms - Controlling the User Experience**

Many Big Tech and social media platforms provide their services free of charge, allowing billions of people from across the world streamlined access to their platforms. For tech companies, the free-to-use model increases their global reach while expanding their main revenue stream: targeted advertising. This business model is not an inherently new system, with television, radio and other **legacy media** services operating this way for decades. However, Big Tech and social media companies are uniquely equipped to collect **user data**, also called **consumer data** or **customer data**, with extraordinary speed and accuracy.

User data is incredibly valuable information for advertisers and represents the specific personal, demographic, geographic, and behavioral interests of a given user.<sup>1</sup> For example, based on a user's social media and online search information, a tech company may be able to determine that the user is a 34 year old, white woman living in the Philadelphia suburbs who has two cats, and her favorite hobby is international travel. Big tech and social media are able to use this data to elevate products and services

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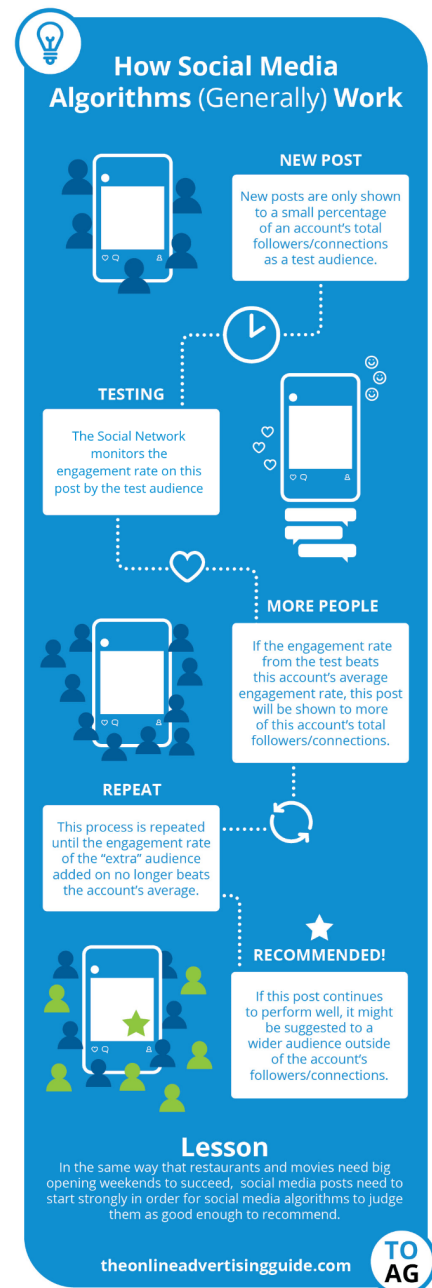
<sup>1</sup>[What are Different Types of Customer Data?](#) (Insightly, 2020).

that may be of interest to each specific user. Amazon or Facebook may be able to highlight for this fictional woman a new brand of cat food or fun new cat toys, providing the companies with critical advertising revenue. For many users, this represents a suitable trade-off; Big Tech records their interest in certain hobbies or topics, then offers related and easy to access products that they are likely to want.

Big Tech and social media companies rely on **algorithms** to process the vast amounts of data produced by users throughout the world, and develop advertising and content suggestions tailored for each individual user. Algorithms, in the context of marketing and social media, use consumer data, **artificial intelligence (AI)** and **machine learning** to process extraordinary amounts of data, in order to create interesting and desirable experiences. Algorithms can create an enjoyable experience specific to each user’s interests in order to maximize engagement on the platform. From a marketing standpoint, algorithms are extremely helpful for matching user interests to retailers, service providers, or products that meet those needs. For the vast majority of interactions, algorithms provide accurate recommendations for people willing to trade their data for exposure to goods and services.

However, from a content perspective, algorithms are used as a means of controlling the user experience, micromanaging the content that users see and engage with. Algorithms elevate content that it determines the user will interact with, while hiding content that users do not interact with. In many instances, users benefit greatly from this arrangement. For example, suggested videos on YouTube’s platform grow directly from the user’s unique interests and previously watched videos. For many, this is a great feature; if a user is interested in cooking tutorials, YouTube will provide easy access to a host of other cooking tutorials while hiding videos that may not be of interest to that user. However, algorithms come under more scrutiny when they move away from goods and services and toward politics, ethics, or a society at-large.

For example, a simple search on Youtube “Did the United States win the Vietnam war?” may offer a couple of standard, **objective** videos from reputable sources explaining the historical context of the Vietnam war, and may provide general information on the battles,





casualties, and objective outcomes. However, other suggested videos may include information that relies on **subjective** opinion, or may come from less reputable sources. Viewing a suggested video providing subjective opinion on the Vietnam War, may lead to other videos providing subjective opinions or biased content.

Fundamentally, algorithms are used as a means of providing users an enjoyable experience that will keep them engaged and concentrated on that platform. While the algorithms may not immediately seem destructive, they can lead to two potentially damaging phenomena documented by researchers and academics. **The Bubble Effect** or the **Filter Bubble** occurs when, based on user data, algorithms provide information that only acts to reinforce the user’s previously held beliefs. Using the example above, the user may be provided videos that only reference the United States winning the Vietnam War, or vice versa. While not immediately destructive, algorithms can create systems where people are only being exposed to one particular point of view, or one that reinforces their previously held beliefs. The second adverse phenomenon associated with big tech and social media is the **Algorithmic Extremism** principle. The idea of this principle is that, psychologically, humans are predisposed toward more extreme situations and content rather than the mundane. Writer Zeynep Tufekci explored this principle in a New York Times column by watching Youtube ‘autoplay’ videos and found that: “Videos about vegetarianism led to videos about veganism. Videos about jogging led to videos about running ultramarathons. It seems as if you are never ‘hard core’ enough for YouTube’s recommendation algorithm.”<sup>2</sup>

The implications associated with the Bubble Effect and Algorithmic Extremism have significant consequences for viewers, and Big Tech companies. Controlling the user experience and then recommending content that reinforces previously held beliefs or offer substantially more extreme content could have devastating impacts, especially when considering controversial political topics. In a country becoming more polarized by the day, do these types of content suggestions improve political discourse in the United States?

**Section 230 - “The 26 words that made the Internet”**

Social media platforms have created new forums for opinion, debate, and discussion, the founding principles of a Democracy. Millions of people around the country, and around the world, use social media as a method of outreach, coalition-building, and advocacy. In some ways social media has removed **gatekeepers** from the flow of information, allowing for the democratization of ideas, where anyone with access to the internet has an equal platform to present their thoughts. However, social media has also become a haven for the mass dissemination of misinformation, hate speech, harassment, and other unwanted or illegal content.

**"No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider"**  
~Section 230

<sup>2</sup>[YouTube, the Great Radicalizer](#). (New York Times, 2018).  
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With such a vast array of potential uses, including ones that can directly impact the growth and development of a democracy, the regulation of social media content has become a critical inflection point in the debate over internet free speech. Additionally, the emergence of algorithms as content filters demands attention, especially when considering issues regarding first amendment rights, censorship, and political bias.

In 1996, Congress passed the **Communications Decency Act**, one of it’s first attempts to monitor and regulate content and free speech on the internet. While much of the Communications Decency Act was ultimately struck down by the Supreme Court, one small piece of the legislation, **Section 230**, which promotes protected speech on the internet, has been routinely upheld in courts. Section 230 explicitly states: “No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider”.<sup>3</sup> This statement allows social media companies and other Big Tech platforms to avoid legal liability for the posts, comments, or speech of their users. Some exceptions to this rule exist, particularly around copyright infringement, and some federal and state criminal laws. However, Section 230 ultimately removes legal liability from social media and big tech companies, allowing protected speech to flourish on their sites.

While Section 230 explicitly allows many different forms of protected speech, it implicitly pushes the responsibility of content moderation (including the moderation of user’s speech) onto the platform itself. Therefore, companies like Facebook, Reddit, or Twitter become responsible for the content on their own platform. For the vast majority of companies and individuals, content moderation is a relatively benign issue area. Companies set rules that users must follow, and any deviation from the rules will lead to moderation of users speech.

While individuals may have the right to protected speech under the First Amendment, content hosts like Facebook, Amazon, or Google also have the right to remove content at their discretion. Societal norms dictate that the vast majority of people want to live in communities, both physically and digitally, free from abusive language and hate speech. Platforms are likewise incentivised to create communities free from harmful conduct so as to appeal to the broadest range of users. However, limits to free speech and the mixing of diverse content and political content make the content moderation processes an

<sup>3</sup>[“47 U.S. Code § 230 - Protection for private blocking and screening of offensive material.”](#) (Legal Information Institute).



increasingly difficult prospect for social media companies. Free speech and content removal are increasingly significant policy challenges for tech companies, and represent some of the most difficult internal debates for these companies. The legacy of Section 230 is twofold; it has been critical to the growth and development of both Internet free speech and Big Tech companies, while also pushing them to the forefront of content moderation issues and intense political discourse.

### Critiques of Section 230

Even more than two decades after its conception, Section 230 remains at the forefront in issues of protected free speech on the Internet. In recent years, Section 230 has garnered a number of critics from across the political spectrum. With the role of tech companies as content moderators, and the opacity of algorithms in controlling the user experience, significant critiques have been made on issues of bias and censorship. Some Republicans have argued that proprietary algorithms unfairly target conservative viewpoints, causing conservative content to be deemphasized or hidden. Some Republicans have alleged **shadow banning** by Big Tech and social media companies, resulting in repressed accessibility to their content. Republican politicians have also labelled many tech companies as liberal or left-leaning, advancing claims of bias or political motivations in content decisions, especially in regards to their content removal policies.

Interestingly, Democrats also argue that Section 230 fails, but for different reasons than their Republican colleagues. In recent years Democrats have called for greater regulation to address pervasive misinformation, online harassment, and hate speech. Democrats contend that Big Tech and social media companies fail to adequately police their forums, allowing for persistent violations of company conduct policies.<sup>4</sup> Democrats argue that tech and social media companies have the capacity to monitor their platforms for these persistent issues but fail to adequately police their platforms. In response, tech companies cite the number of users, interactions, and videos as too great for their tracking systems to monitor.

In the partisan reality of today's political world, there is often little agreement between Republican and Democratic politicians. However, politicians from both sides of the aisle have expressed concern over the power and influence that tech leaders have over their platforms. For many tech companies, content regulation policy and decisions are made by a few individuals with little oversight or explanation of their decisions. Ultimately, social media and tech companies are businesses with their primary responsibility to their shareholders, and thus incentivized toward policies and procedures that maximize engagement and content sharing on their platforms.

### Subcommittee Charge

The United States Senate is tasked with the oversight, regulation, appropriations and lawmaking of nearly all aspects of life in the United States. From food safety, to military contracts, and space

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<sup>4</sup>["Facebook and Twitter under fire after England soccer players face racial abuse online."](#) (CNBC, 2021)

exploration, the United States Senate is tasked with ensuring that U.S. policy is aligned to their, and their constitutions, policy preferences. In order to distribute this massive responsibility, the Senate is split into distinct Committees with broad responsibilities and then subcommittees with more specific jurisdiction. Each of the 100 members of the United States Senate are assigned to one or more committees where the majority of legislative debate, discussion and review occur. For a bill to become a law, it must be approved in its respective committee before being elevated to the Senate floor.

The regulation of social media and Big Tech companies is under the jurisdiction of the **Committee on Commerce, Science and Transportation**, and more specifically, **the Subcommittee on Consumer Protection, Product Safety and Data Security**. The subcommittee has a number of policy avenues to explore in relation to the regulation and oversight of Big Tech and Social Media companies. Committee members can focus on legislative changes to Section 230, regulating the collection and use of user data, or investigating the use of algorithms among other topics. Committee members can also explore issues around misinformation, bias, and censorship on social media platforms.

Expert Witnesses will provide opening testimony for the committee, and then will be available for questioning from the Senators. Through the testimony and questioning of expert witnesses, along with speeches and debate between Senators, the committee is charged with crafting a policy proposal aimed at solving persistent issues plaguing Big Tech and Social Media.

### Questions to Consider

1. What is user data? How do tech companies and social media companies **monetize** user data?
2. Explain how algorithms can lead to issues in censorship and bias?
3. What are democratic and republican critiques of Section 230? Name at least one Democratic and one Republican policy change with Section 230.
4. What are gatekeepers, specifically thinking in terms of **legacy media**? What are some benefits and drawbacks of gatekeepers and legacy media organizations?
5. In your opinion, what is the greatest issue with Section 230? Why is it an issue and what are some potential solutions to that issue?

### Additional Research

- Go to the Council's [2021 Model Senate Resource Guide](#) for additional recommended resources to continue your research after you are finished reading this briefing paper and answering the Questions to Consider above.



- *Bonus research task:* Try to find out how this issue affects other countries. A global context of the topic will help you have a more nuanced understanding of the topic and might help you craft recommended policy solutions for the U.S. Senate based on some actions other countries may be taking already to remedy some of the issues outlined in the briefing paper above.

## Glossary of Terms

Term	Description
<b>Algorithmic Extremism</b>	Drives users toward progressively more extreme content over time, leading to their becoming radicalized and desensitized to extremist political views.
<b>Algorithms</b>	A process or set of rules to be followed in calculations or problem solving operations, especially by a computer. In a general sense, it is a series of instructions telling a computer how to transform a set of facts about the world into useful information. Algorithms use the data that users freely provide to create an experience that is unique to that user in order to maximize engagement
<b>Artificial Intelligence (AI)</b>	The theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.
<b>Big Tech</b>	Big Tech, also known as the Tech Giants, Big Four, or Big Five is a name given to the four or five largest and most dominant companies in the information technology industry of the United States—namely Amazon, Apple, Google, Facebook, and Microsoft.
<b>Bubble Effect</b>	A state of intellectual isolation that can result from personalized searches when a website algorithm selectively guesses what information a user would like to see based on information about the user, such as location, past click-behavior and search history. Occurs when, based on user data, algorithms provide information that only reinforces the user’s previously held beliefs
<b>Communications Decency Act</b>	The Communications Decency Act of 1996 (CDA) was the United States Congress's first notable attempt to regulate pornographic material on the Internet. Contains <b>Section 230</b> .
<b>Gatekeepers</b>	A process by which information is filtered to the public by the media. Gatekeeping in <b>Legacy Media</b> occurs at all levels of the media structure.
<b>Legacy Media</b>	The mass media institutions that predominated prior to the Information Age; particularly print media, film studios, music studios, advertising agencies, radio broadcasting, and television.
<b>Machine Learning</b>	The use and development of computer systems that are able to learn and adapt without following explicit instructions, by using algorithms and statistical models to analyze and draw inferences from patterns in data.
<b>Objective</b>	Information based on verifiable facts, observations, and measurements. Opposite of subjective.



<b>Section 230</b>	Section 230 generally provides immunity for website platforms with respect to third-party content: "No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider"
<b>Senate Commerce Committee</b>	The United States Senate Committee on Commerce, Science, and Transportation is a standing committee of the United States Senate.
<b>Shadow Banning</b>	Shadow banning, also called stealth banning, ghost banning or comment ghosting, is the practice of blocking or partially blocking a user or their content from an online community so that it will not be readily apparent to the user that they have been banned.
<b>Subjective</b>	Information based on or influenced by personal feelings, tastes, or opinions. Opposite of objective.
<b>Ubiquitous</b>	Existing or being everywhere, especially at the same time.
<b>User Data</b>	Any data the user creates or owns. This data can be in any format.