Understanding the Complexities of Social Media

by

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Research Abstract

As social media platforms become the center of congregation for society, there are unforeseen problems that arise from its usage. At its advent, many hailed social media for connecting people, raising money for charity and revolutionizing advertising and the industry can be credited for taking the digital economy to new heights and changing the nature of human interaction.

However, the rapid rise of social media has created unanticipated issues from its usage with complaints raised about privacy, spread of fake news and monopolistic tendencies. While these concerns are legitimate and there are policies such platforms could adopt to curb this, the benefits created by these platforms far outweigh the threat they may pose. And these problems are common with all new technologies. After all, there were fundamental issues faced by both the radio and television industries in their nascency and lawmakers had to pass regulation only after they understood the problems and how best to solve them.

Besides, social media is a tool, and the outcome of its usage depends on the users. Politicians can use Facebook data to ensure that their message is reaching the right people, but they can also be used to mislead and influence voter mindset. Twitter can be used to promote the Black Lives Matter movement but can also be used to spread conspiracy theories.

Furthermore, careful analysis reveals that 99.5% of the information on the largest social media platform is legitimate and data breaches are quite uncommon. It seems hasty and naïve to handicap a technology for 0.5% of its content.

Given this, it seems that the conversation around social media has gone to extremes. This can in part, be attributed to its inherent conflict with mainstream media outlets, which it is in intense competition with for advertising revenue and on a deeper level, user attention and
relevance. Regulating social media platforms has become an issue for governments globally, with the EU passing the GDPR and the UK proposing a new set of laws that would fine, block and prosecute senior management of social media companies that fail to protect their users. In the US, social media regulation has found bipartisan support from lawmakers and there are different forms of governance under consideration.

This paper will begin by discussing the rampant rise of social media platforms, the impact it has created, specifically on the benefits created and threats posed by social media platforms, and initiatives undertaken by companies and governments in light of recent events.
The Rapid Rise of Social Media

Introduction

Social networking sites have been rapidly adopted over the past few years. Currently, 49% of the world population (63% of population aged over 13), or 3.6 billion people are active on social media.¹ This number is projected at 4.41 billion in 2025. Since only 4.66 billion people worldwide have internet access, this implies that over 75% of people who have access to internet use social networking sites.² A Nielsen report found that consumption of online content rose by 60% in 2020 after shelter-in-place orders went into effect across the globe, which could presumably accelerate the adoption of social media worldwide.

Figure 1: Number of Social Network Users Worldwide from 2017-2025

Source: Statista

Of the more than 100 social networking sites that exist, six sites dominate the social media landscape. Facebook is the most popular with 2.3 billion users followed by YouTube, WhatsApp, WeChat and TikTok, each of which have over a billion users.

Facebook has enjoyed its position as the largest social media platform since 2004 but newer platforms like TikTok, which have targeted younger audiences, have gained popularity quite rapidly. In fact, platforms like TikTok or ones like WhatsApp and WeChat that dominate large Asian markets like India and China and have seen faster growth than competitors.
Social Media Usage in the US

Given that Silicon Valley was the birthplace of major social networking platforms, it is unsurprising that the US is a key market for the industry. The number of active users as a percentage of population is much higher in America than worldwide with 72% Americans active on at least one such platform.³

Figure 4: Percentage of American adults who use at least one social media site

Source: Pew Research

YouTube and Facebook are the most popular sites in America with 73% and 69% of adults using each respectively.⁴ Instagram, also Facebook-owned, comes next with only 37% of the population using the platform.⁵ Pinterest, Snapchat and Twitter though not as popular globally are major players in the America.⁶

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⁴ Ibid.
⁵ Ibid
⁶ Ibid.
Figure 5: Percentage of American adults active on social media by platform in 2021

Source: Pew Research

Figure 6: Growth in Most Popular Social Media Sites Among American Users

Source: Pew Research

Growth in the number of users across major platforms has plateaued in the US, which could indicate that the market has reached full penetration. Thus, companies are focusing expansion efforts on emerging markets.
Social media has become embedded in the American daily life with 74% of Facebook users and 63% of Instagram checking the platform at least once a day and the vast majority of users visiting each such platform at least once a week.²

Figure 7: Frequency of users visiting the site across platforms

Source: Pew Research

**The Largest Players**

The largest personal social networking companies have been targeted by the anti-big tech movement with headlines like “How 5 Tech Giants Have Become More Like Governments Than Companies” and “Are Big Tech Companies Trying to Control Our Lives?”³⁴⁹ Recently, these companies have been accused of monopolizing the market and slapped with lawsuits from the FTC and state governments. This section will provide an overview of the largest social networking companies, Facebook, Google and Twitter.

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² Ibid.
Facebook

Social media has become embedded in the American daily life with 74% of Facebook users and 63% of Instagram. What started as an idea in a Harvard dorm room has now become the largest and arguably most controversial social media conglomerate globally. Facebook marked the beginning of the social media era. With more than 250 billion photos on the platform (more than 350 million posts/day), Facebook is the third most popular site and second most popular app in the world with the average user spending 58 minutes/day on the platform. It has therefore become a hotbed for digital advertising with an e-Marketer survey finding that 86.3% of marketers use Facebook to market the brand over 2.5 billion potential customers. However, interest in Facebook has been steadily declining in the past few years.

Figure 8: Interest in the search term “Facebook”

Source: Google Trends

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A Google Trends analysis indicates that interest in the search term “Facebook” has decreased from 2016 to 2020. Since the most common queries associated with “Facebook” are related to logging in to Facebook, it can be surmised that the interest in landing on this page has decreased. Some of this is attributable to the popularity of the app experience – 81% of Facebook users access the platform only via a mobile phone. However, it could also be indicative of Facebook losing some users, supported by the fact that its growth in active MAUs has plateaued.

Figure 8: Facebook – Number of Active MAUs and Growth Rate

Source: Statista

Moreover, some of the more recently added related queries include “how to delete facebook account” and “how to deactivate facebook” which implies a critical mass of users have considered leaving the platform, as part of the #DeleteFacebook movement.

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Facebook also owns Instagram (acquired for $1 billion in 2012) and WhatsApp (acquired for $19 billion in 2014). Interest in both remained fairly constant in the same period, with a slight spike over WhatsApp’s new privacy policy.

Figure 9: Interest in the search term “Instagram”

![Figure 9: Interest in the search term “Instagram”](source)

*Source: Google Trends*

Figure 10: Interest in the search term “WhatsApp”

![Figure 10: Interest in the search term “WhatsApp”](source)

*Source: Google Trends*

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17 Ibid.
Facebook has been at the center of the anti-big tech movement after the Cambridge Analytica data breach was exposed. Despite settling suits with the U.K. Information Commissioner’s Office, US Federal Trade Commission (FTC) and US Securities and Exchange Commission (SEC), it was the subject of investigation by the FTC and multiple State Attorneys General as well as the US Attorney General for the District of Columbia.\(^\text{18}\) \(^\text{19}\) On December 9, 2020 the FTC sued Facebook alleging that the company is illegally maintaining its monopoly through years-long anticompetitive conduct, conduct which has allowed it to generate staggering profits of $18.5 billion in 2019 alone.\(^\text{20}\) In a public statement, Ian Conner, Director of the FTC’s Bureau of Competition said, “Facebook’s actions to entrench and maintain its monopoly deny consumers the benefits of competition. Our aim is to roll back Facebook’s anticompetitive conduct and restore competition so that innovation and free competition can thrive”.\(^\text{21}\) According to the complaint, Facebook acquired Instagram and WhatsApp because they were considered existential threats to Facebook’s dominance in the personal social networking sector and that these anti-competitive acquisitions not only neutralized the threat posed by these platforms but also made it harder for other players to scale.\(^\text{22}\) The complaint also alleges that Facebook imposes anti-competitive conditions third-party software developers’ by restricting their access to interconnections to its platform, such as APIs. The suit argues that Facebook making APIs available to third-party applications on the condition that “they refrain from developing competing functionalities, and from connecting with or promoting other social networking


\(^{19}\) https://www.washingtonpost.com/technology/2019/06/01/dc-attorney-generals-lawsuit-against-facebook-can-proceed-judge-rules/


\(^{21}\) Ibid.

\(^{22}\) Ibid.
services”, cuts off API access to any perceived competitors. The Attorneys General from 46 states joined the FTC in filing this suit.23 In response, Facebook argued that the government failed to show that Facebook had a monopoly in a clearly defined market or that it had hurt consumers and dismissed emails cited in the lawsuit written by Zuckerberg and other executives discussing competitive threats from Instagram and WhatsApp.24 The lawsuit is still pending litigation, but Congressional provisions uphold its validity, making a dismissal unlikely.25

Facebook also faced legal trouble after the Cambridge Analytica data breach. In settling the case, it paid 500,000 GBP to the U.K. Information Commissioner’s Office as a fine, another $5 billion to the FTC to settle the investigation and $100 million to the SEC for misleading investors on the risks it faced over data breaches.26 27 28

**Google**

Although not traditionally considered a player in the social media arena, Google has two services, YouTube and Google+ that operate in this space. Launched in 2011, Google+ was an invite-only platform before launching publicly a year later. Despite never gaining a critical mass of users, Google kept the platform active till 2018, when it was shut down after an internal audit

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23 Ibid.
discovered a data breach that gave app developers improper data access for 52.5 million users over a period of 6 days.\textsuperscript{29, 30}

However, YouTube has been a raging success story, with 2.1 billion users worldwide and more than 500 hours of video were uploaded to the platform every minute. YouTube is particularly popular with younger audiences who access the platform several times a day, making it the second-most searched site in the world.\textsuperscript{31, 32} A Google Trends analysis indicates that there has been a slight decrease in interest in the search term “YouTube” but that could be attributed to the increasing popularity of the mobile app since Think with Google found that 75\% of adults watch YouTube at home on their mobile devices.\textsuperscript{33}

Figure 11: Interest in the search term “YouTube”

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{interest-youtube.png}
\caption{Interest in the search term “YouTube”}
\end{figure}

\textit{Source: Google Trends}

YouTube has generally been well-received by the public and has done especially well with younger audiences, being unanimously voted as the favorite website of kids aged 2-12. However, in April 2018, a coalition of more than 20 advocacy, consumer and privacy groups claimed that YouTube violated US child protection laws by collecting personal data on users younger than 13 years old. According to the complaint, Google was harvesting personal information including phone numbers and location, tracking children’s activities across multiple websites and targeting ads without gaining parental consent (a legal requirement according to the Children’s Online Privacy Protection Act), thereby profiting off of children’s viewing. Google settled this suit in September 2019 by agreeing to a record fine of $170 million ($136 million to the FTC and $34 million to New York).

**Twitter**

Although Twitter is considered one of the largest social media platforms, it actually has only 330 million active MAUs. Of the 1.3 billion accounts that were created only 550 million ever tweeted, creating a platform where the top 10% of users account for 80% of the tweets. With over 500 million tweets shared each day (6,000 tweets/second), Twitter has become a forum for news and debate. In January 2021, Twitter acquired Revue, entering the newsletter

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38 Ibid.
business. While Revue may not be fully adjacent to Twitter’s current business, Kayvon Beykpour, Product Lead and Mike Park, Vice President of Publisher Products, suggested that the acquisition would serve writers and publishers who have built a strong following on Twitter.

A Google Trends analysis indicates that interest in the search term “Twitter” has been fairly constant, except for brief spikes during the Black Lives Matter protests in May 2020, the US Presidential elections in November and Capitol riots in 2021, events during which the platform paid a prominent role in disseminating information and sharing views. Some of the related queries associated with the search term “Twitter” include “qanon twitter”, “trump twitter today” and “Donald trump jr”. In the past year, related queries are more politically focused with related topics including Sidney Powell, Donald Trump and Rudy Giuliani. This combined with queries like “trump account suspended” and “antifa America twitter” is indicative of the politically-charged content on the platform.

Figure 11: Interest in the search term “Twitter”

Source: Google Trends

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40 Ibid.
42 Ibid.
43 Ibid.
44 Ibid.
Despite the politically controversial content on the platform, Twitter has not been sued or subject to any litigation. There was some legal action arising from the events that followed the 2021 Capitol riots that will be discussed in a further case study. There haven’t been any significant data breaches on the platform either, except one in July 2020 where the accounts of influential personalities like Jeff Bezos, Joe Biden, Barack Obama and Elon Musk were hacked in what was called “a coordinated social engineering attack by people who successfully targeted some of our employees with access to internal systems and tools”.

The Impact of Social Media

Benefits Created

While there have been legitimate concerns raised about personal social networking platforms, they were created as a force for good and despite the recent controversies and concerns surrounding the industry, they provide five core benefits which have positively impacted society.

1. Forging Connections

At its core, the entire purpose of social media is to connect users to their family and friends. A Pew Research survey found that 67% of social media users said that keeping in touch with current friends and family is a major reason they use social networking sites. In the same survey, 50% of users said they use these sites to reconnect with old friends.

Figure 12: Motivations for using social networking sites

Source: Pew Research

With over 3.6 billion users worldwide, personal social networking platforms have undoubtedly made it easier to maintain relationships across the world, thereby fostering a sense

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47 Ibid.
of global community. The impact of this benefit has been expanded by platforms like LinkedIn and Venmo, which allow users to find employment or transfer money more conveniently.

Indeed, there have been instances of users finding organ donors on Facebook. The average person has about 338 Friends on Facebook, 150 followers on Instagram and 930 connections on LinkedIn, connections that users would be unable to maintain without such platforms.

In fact, a study found that if social media is used to enhance existing relationships or forge meaningful new connections, it can be a useful tool for reducing loneliness. This is especially helpful for younger generations. A 2015 Pew Research Center poll found that social media makes 70% of teenagers feel more connected to their friends’ feelings and 83% of teenagers feel more connected to information on their friends’ lives because of social platforms that help them stay in touch. Another study published in 2014 by researchers from two Australian schools, Griffith University and the University of Queensland found that college and high school students reported feeling less lonely in recent years than they did in past decades.

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52 “69 LinkedIn Statistics To Astonish You [Updated in 2021].” TechJury. March 18, 2021. Accessed May 06, 2021. https://techjury.net/blog/linkedin-statistics/#:~:text=The average number of connections on LinkedIn is 930.&text=The average number of connections,have over 100 million connections.
Surprisingly, younger generations of students had weaker interpersonal social networks than their predecessors but still felt more secure in their friendships and experienced less desire to form new ones. The research surmised that advances in technology actually helped young users become more socially adept and strengthened their existing friendships. Thus, social media has truly created a sense of broader community and one cannot dispute its role in maintaining connections across the world.

2. Heralded Crowdfunding

A Harvard Business Review article titled “Why Successful Crowdfunding Requires a Social-Media Mind-Set” argued that in the new social media culture, people want to feel close to the brands they like and social media helps present a human face of the company to investors and consumers. The practice of crowdfunding or “the use of small amounts of capital from a large number of individuals to finance a new business venture” is reliant on access to the large social media networks offered by social media platforms. Today, social media has become an effective tool to raise awareness and generate contributions for non-profits, political campaigns and personal needs alike, with 35% of all donations impacted by social media.

Facebook, which has been used to raise over $2 billion from over 45 million donors for various causes since its inception, plays a role in 93% of direct donations. Interestingly,

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56 Ibid.
57 Ibid.
61 Ibid.
nearly 50% of Facebook donations were raised from birthday fundraisers, a feature unique to Facebook. On YouTube, nonprofit videos receive c.6 billion views/year and 57% of viewers go on to make a donation and 55% of people who engage with nonprofits on Twitter end up taking some sort of action. Thus, social media is becoming indispensable for grassroots campaigns and is especially crucial for non-profits.

For organizations, raising money on social media is more convenient with a higher chance of success. A study found that companies using social media to raise funds were 30% more successful in getting donations. This is especially applicable to non-profits since 55% of users who engage with such organizations on social media end up taking some sort of action – 59% of those donate money, 53% volunteer, 52% donate personal items such as food and clothing, 43% attend or participate in charitable events, 40% purchase a product that benefits that charity, 25% contact their political representatives after engaging with a cause and 15% organize events in their own community afterward.

3. **Impact on Economy**

The social media industry, because of its sheer size (sized at $61.4 billion) and expected annual growth rate of 16% expected in 2021, significantly impacts the American economy. Besides its employees, the industry supports entrepreneurs, small businesses and grassroots industries amplifying its role in the economic system. The advent of social media created digital

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marketing and analytics teams across companies and increased the size of the programmatic ad buying industry (including demand and supply side platforms and ad exchanges). It has an especially important lever for economic growth in developing countries, which is why a study found that the sentiment towards social media is generally positive in these markets.68

Figure 13: Percentage of adults who say social media have mostly been a ____ thing for society

Source: Pew Research

A Facebook-sponsored Deloitte report found that Facebook created 1.1 million jobs and added $100 billion to the US economy in 2020 claiming that the company has created "significant global economic activity by helping to unlock new opportunities through connecting people and businesses, lowering barriers to marketing and stimulating innovation".69 Globally,

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it’s said to have created 4.5 million jobs and added $227 billion to the global economy in the same period.\textsuperscript{70} It further found that in 2019, Facebook’s marketing platform amounted to $148 billion, the company’s app makers bought software developer tools worth $29 billion, and consumers purchases of smartphones and modems motivated by Facebook for $50 billion, all contributing to the global economy.\textsuperscript{71} While it is believed that Facebook commissioned this study to lobby for tax relief, the company has still undeniably contributed to the global economy. Besides, an independent study by MIT and Stanford concluded that Facebook generates $370 billion annually in consumer benefits to the US and that users would have to be paid a high value to give up using the platform.\textsuperscript{72}

Furthermore, social media platforms provide support to small businesses with tools like \textit{Google for Small Businesses, Small Business Resources} by Twitter for Business and \textit{Facebook for Business} which help encourage entrepreneurship and make the process of setting up a business and connecting with consumers easier. Therefore, it can be concluded that social media platforms have supercharged the global economy toward its full potential.

4. \textit{Revolutionized Advertising}

While the benefits of social media advertising are widely debated, such platforms have brought brands closer to their consumers and to an extent streamlined marketing and made businesses more transparent. Unlike the bygone days of writing letters to companies, today’s consumers tweet their comments and complaints and receive a response at an average time of 1 hour and 24 minutes, supporting the fact that 81\% of consumers believe that social media has

\textsuperscript{70} Ibid.
\textsuperscript{71} Ibid.
increased accountability for businesses. This is especially valuable in a world where consumers expect brands to not just be responsive but also stand up for causes and values they believe in since social media provides brands with the ability to engage in the conversation.

In 2018, big brands an estimated $117.4 billion in total online media spend. Although normally consumers complain about ads, the phenomenon not as black and white. As Professor Anindya Ghose outlines in his book *TAP*, “good advertising, like good advice can save us time and energy in making decisions or even provide tangible benefits like saving money”. A Millennial Media survey involving consumers from France, Germany, U.K., and US found that 63% of consumers believe that ads on mobile devices in exchange for free content to be fair, with negligible differences across markets. Further, a Rubicon survey found the 73% of consumers are more likely to engage with an ad if they found it personally relevant.

Thus, if brands can get their targeting right, they are more likely to have consumers engage with the brand. With the progress in mobile technology, social media platforms can track users’ interests and activities both on and off the platform, collecting millions of data points that help segment consumers. While predatory advertising and improper data use are valid risks, when used correctly, it can serve consumers with relevant ads that may save them time and money and increase the effectiveness of brands’ advertisements. This has greatly advantaged big brands but

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77 Ibid.
78 Ibid.
has specially helped SMEs (Facebook claims to support 90 million small business and 75% of such businesses, in a survey, reported an increase in traffic after advertising on social media) to efficiently spend their limited ad dollars.\(^79\)\(^80\)

5. **Democratized Information**

As a tool, social media can be used to amplify information and spread it across the world, and it has been key to raising awareness for the Black Lives Matter movement last summer and the current COVID-driven devastation in India. Social media platforms have made it possible for people worldwide to share their opinions and with 6,000 new tweets, 1,000 new Instagram posts and 4,100 new Facebook posts every second, social media has for the first-time democratized information, thereby upholding the highest values of democracy.\(^81\)\(^82\)\(^83\)

Today, citizens are better able to hold their elected leaders and companies responsible for their failures, because smartphones and social media allow them to easily capture such incidences and spread the information to a large set of people. Unfortunately, giving everyone a voice means some unhelpful or even hateful voices finding a platform, and society needs to stem the spread of such opinions but the personalities who lead the spread such information online can also do it on traditional media channels. Overall, with everything weighed in balance, it can be argued that social media provides a net benefit to society.

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Main Threats

Not even social media companies had anticipated the rapid rise of their platforms. In creating and governing new technologies, there’s bound to be a few blind spots. As social media grows, new issues and threats will emerge that neither companies, lawmakers nor users anticipated. Interestingly enough, this was the case for radio (groups of sound waves would be interrupted by other groups as they were broadcasted) and television (on regulating obscene content) when they first emerged as new technologies with no governance.84 85

1. Content Moderation

While fake news was created by social media platforms, their prevalence and spread has been supercharged by how easily information is spread on social media. The possibility of bad actors misusing social media platforms to launch targeted disinformation campaigns (as it did when Russian entities set up and promoted fake pages on Facebook that created 80,000 posts and reached around 126 million people in the US over a two-year period in the run-up to the 2016 Presidential election) has raised alarms over social media becoming a propaganda tool.86

These fears were further validated by spread of “The Big Lie” on the results of the Presidential election (77% of Trump supporters believed in widespread voter fraud) and around the coronavirus pandemic (1,500 tweets relating to 1,274 false and 226 partially false claims

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between January and July last year). Indeed, a MIT study found that misinformation on Twitter is likely to spread 6 times as fast as proven facts.

Unfortunately, the conundrum lies in the fact that the very features that help social media democratize information and create connections between people are the ones that allow misinformation to spread as rapidly as it does. After all, social media is a tool and just as, responsible citizens can use it for good, bad actors can use it for nefarious activities.

Content moderation has become a central topic of debate for lawmakers with Congress summoning Google CEO Sundar Pichai, Twitter chief Jack Dorsey and Facebook founder Mark Zuckerberg to testify about events that led to the 2021 Capitol riots. During their testimonies, only Twitter chief Dorsey explicitly accepted some responsibility for the riots whereas Pichai and Zuckerberg maintained that the prime responsibility lay with those who stormed the Capitol and with those who spread the misinformation.

Dorsey once said Twitter is not an “arbiter of the truth” and reality is that policing content could very easily violate the freedom of speech. Generally, only 2.3 million out of the c.500 million posts on Facebook per day are misinformation and attempts police content could hinder

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the spread of the 497.7 million factual posts every day.\textsuperscript{92} \textsuperscript{93} In a society that places a premium on free speech, 42\% of respondents in a survey said they would protect freedom of information even if it means false information can be published.\textsuperscript{94}

This is not to say that social media companies should not tighten their content moderation practices. Companies have updated their community policies, especially after the 2021 Capitol riots and have made significant investments in developing AI that can root out and reduce engagement with misinformation. These practices have already gained ground, Facebook user interactions with content from sites flagged as producers of false stories fell 65 percent from December 2016 to July 2018.\textsuperscript{95} These platforms must continue investing in AI technology and human moderators while tightening community guidelines for posting content, but users must also be cognizant of their role in spreading misinformation. A MIT study found that sharing misinformation by unsuspecting users is responsible for over 70\% of the engagement with fake news.\textsuperscript{96} Thus, users must take responsibility for fact-checking content before sharing it with their networks and amplifying its impact.

2. Data Privacy

The amount of data that social media companies have on its users had been a topic of concern for nearly a decade. At its best, user data can be used to serve them with relevant

advertisements that may save them time and money but at its worst, it can be misused to build psychological profiles that can be leveraged to influence users’ behavior.

The EU implemented the GDPR in 2018 to give consumers more control over their data and states like California and Washington implemented similar regulation with the CCPA and the Washington Privacy Act respectively.\(^{97}\) A survey found that 70% of users were willing to trade some personal information in exchange for access to elevated service.\(^{98}\) Further, a Mobile Marketer survey found 32% of respondents saying “they’re not concerned that companies will use their personal online data in a way that could harm them” and 38% wanting online ads to be “relevant to their browsing history or the kinds of the entertainment they prefer.”\(^{99}\)

However, this data collection serves a broader purpose by connecting businesses with potential consumers and allowing users to access free content and be served with relevant ads.

While the actions of bad actors like Cambridge Analytica, who used Facebook data to modify the behavior of certain groups in the run-up to the 2016 Presidential election is often cited as a danger of social media, consumers forget that the Obama campaign used similar data sets to target their message to specific audiences.\(^{100}\)\(^{101}\) Moreover, countries like South Korea, and Singapore partnered with social media platforms to create a robust contact tracing program that helped control the spread of COVID in those countries. While the prospect of governments being able to track citizens’, movements is vaguely reminiscent of a police state, it has provided

significant benefits during the pandemic.\textsuperscript{102} If governments implemented laws to ensure that the data would be securely stored, its use restricted and only be tracked temporarily, it could be effectively used to serve the common good across the world.

Stricter regulations on data sharing could also harm researchers. The implementation of the GDPR and fear of liability made social media platforms reluctant to share data with researchers; revoking researcher access to the largest, most detailed and robust data set in the world would surely reduce the pace and efficacy of crucial research, which would ultimately harm society.\textsuperscript{103}

Again, this is not to say that consumers’ interests should not be protected. Governments must implement regulation that would require platforms to clearly explain to their users what data is being collected and how it’s being used and also allow them to opt-out of such collection.

3. **Potential Monopoly Power**

A 2020 report by the House Judiciary Committee’s antitrust panel said that the big tech companies using user data to gain monopoly power is a threat to the digital economy.\textsuperscript{104} Following that, in December 2020, the FTC and Attorneys General from 47 states filed antitrust lawsuits against Facebook alleging that the company’s acquisitions of Instagram and WhatsApp gave it monopoly power and asked that Facebook be ordered to divest some of its business to restore competition and be required to gain regulatory approval for future acquisitions.\textsuperscript{105}


However, it is unlikely that the introduction of competition will force large tech companies to fix problems of data privacy and misinformation. This is because the social media industry, by nature, tends to be monopolistic because of network effects. Users are pulled to a platform by virtue of the number of users who are already on it. As summarized by author Sinan Aral, “the value of a networked platform is a function of the number of people connecting to it. As more people use the product, its value to everyone increases. The greater the number of people on a network, the greater its gravitational pull. The greater its gravitational pull, the greater the grip it has on current customers.”

Breaking up large tech companies may temporarily create a competitive environment, but the market will ultimately return to a near monopoly.

Moreover, antitrust litigation takes time, and the burden of proof will be on the FTC to prove Facebook is a monopoly, which legally means “a company with lasting, unchecked power to raise prices or exclude competitors.” This maybe hard depending on how one defines Facebook’s audience and business as it has 20% of digital advertising spend and faces fierce competition in the messaging sector. In spirit, the Sherman Act was created to protect consumers by giving them access to low-cost and high-quality products and services and Facebook is technically a free service. Thus, the case will be hard to prosecute and even, if the FTC wins, breaking up big-tech platforms will not be a permanent solution.

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109 Ibid.
Case Study: Role of Social Media in 2020

A Pew Research survey conducted in October 2020 found that 64% of Americans believed that social media had “a mostly negative effect on the way things are going in the US today.”

The year 2020 had three defining events – the COVID-19 pandemic, the murder of George Floyd leading to the Black Lives Matter (BLM) movement and the 2020 Presidential elections, the reaction to which culminated with the Capitol riots in January 2021. This section will take a closer look at the role of social media in those historical moments.

The COVID-19 pandemic

When the pandemic first hit, stay-at-home orders were imposed worldwide, dramatically altering everyone’s lives across the globe. Since people were deprived of seeing their near and dear ones physically, social media became a lifeline to maintain connections.

Figure 14: Social Media Users’ Views on Importance of Social Media During COVID-19

Source: Gallup

By April 2020, 25% of Americans had increased their usage of social media due to the onset of the pandemic. As Pamela Rutledge, Director of the Media Psychology Research Center said, “The ability to connect via so many different platforms not only helps alleviate feelings of isolation but increases the sense of psychological comfort. It makes people feel less lonely and less fearful to know they aren’t dealing with this alone.” Thus, social media was essential to creating a sense of normalcy and allowing people to cope with a year in lockdown.

However, social media was also responsible for influencing users to believe in conspiracy theories and engage in careless behavior. The infamous Toilet Licking Challenge which gained popularity on TikTok at the onset of the pandemic infected not only the influencer who popularized the challenge but several others who tested positive mere days after completing it.

Furthermore, a study published in the journal Psychological Medicine concluded that people who get their news from social media sources are more likely to break lockdown rules, which can probably be attributed to the 90 million pieces of misinformation that was posted across social media sites between March and April 2020. According to the study, “There was a strong positive relationship between use of social media platforms as sources of knowledge about Covid-19 and holding one or more conspiracy beliefs.” It found that 56% of people who believed that there was no hard evidence that coronavirus exists got a lot of their information from Facebook, compared with 20% of those who rejected the theory, 60% of those who believe

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114 Ibid.
there is a link between 5G and COVID-19 got a fair amount or great deal of their information on the virus from YouTube and 45% of people who believed COVID-19 deaths were being exaggerated by the authorities got a lot of their news on the virus from Facebook, compared to 19% of non-believers who say the same.  

However, platforms eventually took action to reduce the spread of misinformation. Facebook removed more than 1 million posts that defy government stay at home guidelines or contain other misinformation and in December 2020, Twitter announced its decision to begin labelling and removing COVID misinformation posts.  

**Black Lives Matter movement**

The Black Lives Matter movement originated after a Facebook post entitled "Black Lives Matter" captured a mood and sparked action after George Zimmerman, who shot and killed Trayvon Martin in Florida was acquitted in 2013.  

However, this movement gained new fervor after the murder of George Floyd in Minneapolis on May 25, 2020. The video of a police officer kneeling on the neck of a man for 9 minutes and 29 seconds quickly went viral not just in the US but around the globe and actually seeing someone die galvanized protests across the world. Social media was instrumental in people registering their support for the movement with campaigns like #BlackOutTuesday and #ICan’tBreathe becoming massively popular as well as organize in-person protests.

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115 Ibid.
The #BlackLivesMatter hashtag was used almost 50 million times on Twitter in the week following Floyd’s murder, increasing to 80 million in across platforms in 30 days; George Floyd’s name received 42 million mentions in the same period. Social media helped the drive the subsequent conversation on race relations and was key to buying broader support for the movement. Videos posted to such platforms were also key to establishing the peaceful nature of the protests, something the prevailing administration wished to challenge and refute. It also raised awareness for other cases like that of Breonna Taylor, who was mentioned 15 million times on social media with chants like “say her name”. In fact, a survey found that 23% of social media users said that the content on these platforms led them to change views on a political/social issue.

Figure 15: Social Media Users Who Have Changed Their Views on Social Issues

Source: Pew Research

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122 Ibid.

The far-ranging protests were also instrumental in police investigation into the incident, pressuring the department to charge Mr. Chauvin with second-degree murder. The video which went of Mr. Floyd’s tragic death that went viral, is also speculated to have been a driving factor behind Mr. Chauvin’s conviction earlier this year. This supports the long-standing belief that social media can be used to scale social movement and drive social change because of the ease with which people can share content with others.

2020 Presidential Elections

In the runup to the election, Twitter banned political ads, “A political message earns reach when people decide to follow an account or retweet. Paying for reach removes that decision, forcing highly optimized and targeted political messages on people. We believe this decision should not be compromised by money.”124 While this decision lowered misinformation on the platform, but probably inhibited local candidates’ ability to spread their message with limited financial resources and instead favored incumbents with higher followings.125

This was probably exacerbated by the fact that the pandemic pushing societal interaction online perhaps gave it more importance in the 2020 elections than it ever had before. Both campaigns mobilized extensively on social media with “Get out the vote” communications on social media nearly impossible to miss when scrolling through social media. Experts believe that these platforms positively impacted overall civic engagement, registration, and early voting figures. Early voting broke records at 99.7 million early votes cast (more than two-thirds of the

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total votes cast in 2016 elections) and many states reported record-breaking new voter registration numbers.\textsuperscript{126} Thus, social media was responsible for getting voters out and in doing so, responsible for the outcome of the election.

However, social media also played a role post the elections being decided. After the election results were announced in November 2020, the sitting President refused to accept defeat and spread false claims of his victory on social media. The Big Lie by the incumbent Trump administration, two Republican Senators and over a hundred Republican House members, galvanized the public, who believed that the election had been stolen from them to action.\textsuperscript{127} Then President Trump used social media to engage with his followers and his tweet “Big protest in DC on January 6th. Be there, will be wild!” summoned a crowd of thousands who were later riled into storming the Capitol.\textsuperscript{128}

While Congress summoned big-tech CEOs to testify on how such misinformation could be spread on social media, it is important to note that some of the content was coming from the official account of POTUS and other Cabinet members and their accounts are generally governed by the public-interest exceptions, which gives them a wider breadth than other accounts.\textsuperscript{129} The exception stipulates that posts that would ordinarily be taken down may remain on the platform if it directly contributes to understanding or discussion of a matter of public concern.\textsuperscript{130} Thus,


\textsuperscript{130} Ibid.
Twitter could not ban Trump for repeatedly glorifying violence and had to wait, unfortunately, until his messages caused real harm.

While social media undeniably played a role in supercharging the insurrectionists, all platforms took action to prevent such events from occurring ever again by banning accounts associated with far-right groups and government executives who could have posed a threat to the Inauguration. Moreover, the rioters captured their activities on video and posted it to social media which made it easier to identify and prosecute them.

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The Conflict of Interest with Mainstream Media

Despite clear benefits and nuanced problems relating to social media, mainstream media outlets have relentlessly attacked the industry, repeatedly calling for it to be regulated or broken up. While some of their claims may be valid, mainstream media outlets have a vested interest in writing negative articles for social media. This is primarily because of three reasons.

On the surface social media scandals are sensational, news-worthy items that generate readership and draw attention to the media outlets that publish such articles. However, on a deeper level, mainstream media outlets have lost revenues to social media and thus could be trying to draw advertisers away from social channels. Advertising spend on print media has reduced by c.40% from $44.76 billion in 2006 to just $26.16 billion in 2019. Analysis of advertising revenues of social v. print media show that as social networks earn more advertising dollars, print media has fewer advertising revenues. In fact, the data has a near perfect negative correlation of -0.989. While causality cannot be confirmed, it is surmisable that the ad dollars have been diverted from mainstream media to social media outlets.

Figure 15: Advertising revenues of print and social media from 2013 to 2019

Further, news outlets typically have paywall to access their digital content but are forced to allow social media users to bypass this paywall or risk losing popularity and engagement with the platform. Thus, they also have to sacrifice some revenue in order to gain likes and shares which takes away what little revenue they have left.

Lastly, at its core, mainstream media is losing consumer attention to social media. The average person spends 2 hours and 24 minutes on social media, 1 hour and 51 minutes of which is on Facebook’s social media platforms. Every second 11 new users join social media, and it is estimated that browsing social media is the third most time-consuming activity for the average human, beaten only by sleeping and watching TV.

Figure 16: Daily Social Media Usage Worldwide

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Meanwhile the newspaper industry is in decline with 2018 seeing the lowest level of newspaper circulation in the U.S. since the 1940s.\(^{138}\) People increasingly prefer getting their news from digital sources including social media and this threatens the very existence of mainstream media outlets.

This is not to say that mainstream media is wrong in its criticism of social media. News outlets have a right and duty to report data breaches and correct misinformation. However, being aware of their conflict of interest might change readers’ perceptions of the value of social media.

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Social Media Regulation

Regulation always takes time to catch up with the advent of a new industry. It was true for radio and television and is especially true for social media, given its rapid growth. Currently, the US applies Section 230 of the Communications Decency Act of 1996 to govern social media platforms. However, there have been calls to reform and strengthen this regulation. Many including tech CEOs Tim Cook, who when discussing the GDPR with EU leaders said, “It is time for the rest of the world, including my home country, to follow your lead” and Mark Zuckerberg who wrote, “People around the world have called for comprehensive privacy regulation in line with the GDPR, and I agree.” Then presumptive Presidential candidate, Joe Biden also said that the U.S. should be “setting standards not unlike the Europeans are doing relative to privacy.” Since he is now in office, it is presumable that he will reform social media regulation to increase the platforms accountability for the content posted on it. While the GDPR was globally lauded, there have been issues created by its implementation that should be examined in further detail before calling for similar regulation in the US.

Case Study: GDPR and Its Impact in the EU

On May 25, 2018, the EU adopted the mutually agreed upon General Data Protection Regulation (GDPR) to give consumers more control over their personal data and harmonize the data protection laws across member counties. The regulation, widely considered the strongest

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data protection regulation, places greater responsibility on platforms to monitor content. The GDPR calls for personal data to be:

"(a) processed lawfully, fairly and in a transparent manner in relation to individuals (‘lawfulness, fairness and transparency’),

(b) collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes shall not be considered to be incompatible with the initial purposes (‘purpose limitation’),

(c) adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed (‘data minimization’),

(d) accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay (‘accuracy’),

(e) kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed; personal data may be stored for longer periods insofar as the personal data will be processed solely for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes subject to implementation of the appropriate technical and organizational measures required by the GDPR in order to safeguard the rights and freedoms of individuals (‘storage limitation’);

(f) processed in a manner that ensures appropriate security of the personal data, including protection against unauthorized or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organizational measures (‘integrity and confidentiality’)."

Monumental as it was, this regulation also left much to interpretation, it said companies must offer “reasonable” protections for personal data, but didn’t define reasonable, making it harder to identify what non-compliance would be.

While there have been over 100,000 GDPR complaints filed, with some significant wins, like Uber drivers forcing the company to release the data collected on them to ensure they weren’t

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143 Ibid.
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Many American media outfits including the Chicago Tribune and other publications owned by Tribune Publishing chose to block users coming to their sites from Europe rather than become GDPR-compliant in what became a massive media blackout for Europeans.\footnote{145}{Ibid.}

What’s worse is that the GDPR has been misused to censor journalism and prevent digital unionization in Europe, proving that stringent regulation can have dangerous implications for civil liberties. In Romania, journalists discovered evidence implicating a high-powered politician in a massive fraud. They shared their findings on their Facebook page along with a detailed report (including photos, videos, screenshots of email exchanges and other documents) on the scam.\footnote{146}{Ibid.} The story went viral but within days, Romania’s Data Protection Authority asserted that the journalists had violated the GDPR by publishing the private data of Romanian citizens.\footnote{147}{Ibid.} The journalists were forced to turn over their source, explain how they obtained all the data, disclose any further data they had and, pay a hefty fine of 20 million euros.\footnote{148}{Ibid.}

Further, in March 2020, the EU Trade Commission conducted a survey over member several countries and found that the implementation of the GDPR has created a trend of “employers abusing the law to deny trade unions their right to contact workers at work”.\footnote{149}{"GDPR Being Misused by Employers to Hinder Trade Unions." ETUC. March 19, 2020. Accessed May 09, 2021. https://www.etuc.org/en/pressrelease/gdpr-being-misused-employers-hinder-trade-unions.
} In a statement, EUTC Deputy Secretary Esther Lynch said, “The GDPR laws were put in place to protect people
from the power of corporations but now corporations are misusing them to protect themselves from people power.”

Thus, while demanding accountability from tech companies and calling for regulation may be a popular political tool, it may be worthwhile to better explore the consequences of such broad laws.

**US Regulation – Section 230 and Proposed Changes**

Currently, the US governs social media platforms under Section 230 of the Communications Decency Act of 1996. This regulation, created in the nascency of the internet, was intended to protect online sites from liability for content posted by third parties with limited exceptions. The regulation had a Good Samaritan Clause, under which platforms can, in good faith, block indecent content and restrict access to content that seems objectionable. to protect viewers from being exposed to content like child pornography. However, the regulation didn’t specify exactly what is covered as “indecent”. Thus, when platforms to block or add warnings to content, those parties decry it as a violation of free speech.

Unfortunately, this caveat often aids in the rampant spread of misinformation since platforms could not take down misleading content without being accused of violating free speech. In any case, regulation written before the advent of social media must be updated to suit the modern world and President Biden has said that he would like to hold social media companies more accountable than they currently are. Following misinformation around the

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150 Ibid.
153 Ibid.
pandemic, most platforms did start labelling posts that contained unverified information. Moreover, after the fallout from the 2020 Presidential elections, social media companies strengthened enforcement of internal regulations to fact check posts and step-up hate speech prevention. However, moderating content on such a massive scale requires significant investment in capital and labor and comes at a human cost as moderators who watch gruesome content for long hours often suffer from PTSD themselves.

In the current political climate, social media giants like Twitter, Facebook and Google are facing accusations from both sides of the political aisle – the need for regulation has become political. While Democrats were always worried that social media companies had too much power and need to be held more accountable for their posts, the typically anti-regulation Republicans have also begun calling for regulation after Twitter implemented a policy to fact check its content and added warnings to posts on Trump’s feed. In the recent hearings of the Senate Committee on Commerce, Science, and Transportation, the Republicans accused these platforms of censorship, with Senator Ted Cruz calling them the “single biggest threat to free speech in America and the greatest threat we have to free and fair elections.”

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has accused social media of having an anti-conservative bias with some senators even suggesting that they employed too many liberals resulting in this bias.\textsuperscript{161}

This resulted in Republicans in Congress trying to enforce regulation that would make social media a “neutral public forum.”\textsuperscript{162} In 2019, Congress introduced the Biased Algorithm Deterrence Act that would legally consider any social media company that moderates content with users’ permission or knowledge a publisher, not a platform thus voiding Section 230 protections.\textsuperscript{163} In the same year it also introduced the Ending Support for Internet Censorship Act that would require social media companies to prove to the FTC that their content moderation was politically neutral before being afforded Section 230 protections.\textsuperscript{164} Both bills failed. In 2020, the Senate introduced another bill – the Eliminating Abusive and Rampant Neglect of Interactive Technologies Act (EARN IT Act) that would require companies to follow a set of best practices developed by a newly established commission in order to be eligible for Section 230 protections.\textsuperscript{165} This Act might require social media to provide the Government with access to user data, which raises strong privacy concern.\textsuperscript{166} However, with Democrat cosponsors, the Act...
was approved by the Senate Judiciary Committee in July 2020 and is pending approval by Congress.167

The EARN IT Act is likely to pass, which will compel social media companies to make internal standards more stringent than they already are. While social media cannot be expected to self-regulate, user data must be protected, even from the government, especially in the current political climate.

Conclusion

The future of social media has become a hotly debated and politicized topic. And while there are some dangers to social media and there are things both the companies and lawmakers can do to benefit users and society, the conversation around the industry has gone to extremes.

There are definitely benefits that social media provides, it’s why the industry has been so successful to begin with. And currently, these benefits go unacknowledged and unrecognized. It is also interesting that users’ complaints of these platforms arise from the very features that they appreciate. It’s easy to spread misinformation because it’s easy to spread information – for all the conspiracy theories around COVID, the correct information around the BLM protests also reached the public. And when considered in context, only 0.5% of the news flowing on some of the largest platforms are actually misinformation. There’s no benefit to handicapping the technology when 99.5% of content in it helps society.

While it is easy to play to sensationalize the problems that arise from using platforms, it would be more productive to have a more moderate conversation acknowledging that every new technology, including radio and television has faced similar problems as it’s grown.

Ultimately social media is a tool, and this tool can be used to power good or exploited for harm. The aim of regulation should not be to control or punish platforms or remove the technology entirely but to ensure that platforms are doing their utmost to serve users’ and society’s best interests.

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