

A Better Approach to Platform Governance

by

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Introduction

We are more connected now than ever before. Platforms such as Facebook, YouTube, Google, and Twitter have become a daily part of life for billions of people around the world.¹ And for good reason, these platforms have, in a way, reduced the distance between us and provided an outlet for us to share, organize, connect, learn, and express ourselves in ways we could not before. However, especially in recent years, we have seen the potential for these platforms to be abused – used to spread misinformation and invade our privacy. Both the Russian interference and Cambridge Analytica scandal that occurred during the 2016 U.S. election are examples of these harms. As a result of these controversies, the United States government has taken a more active role in trying to police platforms through stricter regulations and fines. Two main areas they have tried to address in particular are content moderation and data privacy. However, current efforts target platforms as a whole as opposed to specifically addressing bad actors, leading to the detriment of both users and society. A better way to approach the problem is through the use of technology and standardization to create a more robust outcome, reducing the amount of abuse from bad actors without sacrificing the benefits of the broader platform. This paper will be broken down into two main sections:

In the first section, I will be analyzing how the proposed repeal of section 230 of the Communications Decency Act (CDA 230), which puts greater pressure on platforms to moderate content, will harm free speech and decrease the efficiency of platforms. An alternative solution to this problem would be to increase investments into content moderation algorithms and boost

¹ "Social Media Statistics 2020: Top Networks by the Numbers." *DustinStout*, dustinstout.com/social-media-statistics/.

collaboration between platform companies, fact checking organizations, and the United States Government to set unambiguous standards.

The second section will look at data privacy and how a move towards restricting data collection will negatively impact society. Although there is currently no federal proposal restricting data collection, state laws like California's CCPA and Washington's Privacy Act (Senate Bill 6281) show that we are heading towards more stringent regulation. Data has played a key role in improving our lives from retail to research. This paper will analyze the Covid-19 pandemic to see how data from these platforms have helped many places in Southeast Asia contain the spread of the virus. Whether the existence of data is good or bad depends on how it is used. The focus of regulators should be to target bad actors and ensure data security and transparency, not to limit the collection and use of data.

The goal of this paper is to show how broad regulation will have significant negative consequences and how a more targeted approach to negate bad actors will reduce harms while maintaining the benefits of platforms. I will outlay general solutions and technologies that can help target bad actors and act as more precise levers to manage tradeoffs, but I will refrain from going into the finer details as the correct balance is very subjective.

Before jumping into our analysis, I think it is important to understand what a platform is. NYU Professor Arun Sundararajan in his book, *The Sharing Economy*, provides a succinct definition:

“Platforms are the digital ‘marketplaces’ which facilitate the exchange of goods and services. **Providers** are the individuals or small businesses that supply goods and services in these marketplaces. **Consumers** are the individuals who generate the demand for (by buying, renting or otherwise consuming) what the providers provide.”²

² Sundararajan, Arun. *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. MIT Press, 2016.

This definition makes an important distinction between a platform and its parent company. A platform is simply a marketplace for the exchange of goods and services – what happens within the platform is up to the consumers and providers. It’s a bit of a nuanced point, but fake news was not created by these platforms, but rather by individuals, bad actors, on these platforms that want to mislead. While these platforms can, and should, be improved to ensure better protections against abuse, the main issue is not the platforms themselves, but bad actors on these platforms.

It is also important to quantify the benefits that these platforms provide. Regardless of how they are used, platforms are exceptionally popular and useful in our lives. The following examples show the extent of their popularity: Every night, the platform Airbnb is used to house more guests than the world’s top two hotel chains combined (Marriott and Hilton)³; in the United States taxi market, over 70% of all revenue goes to Uber and Lyft⁴; Facebook gets more daily views than TV’s most watched event in history—Superbowl XLIX (247 million vs. 114.5 million)⁵⁶. More in depth examples will be given in the body of the paper, but this serves as a quick way to show the convenience and efficiency that platforms bring to our lives.

Issues regarding data privacy and content moderation are important, but we should not implement broad policies that detract from the overall value of these platforms unnecessarily.

While this paper will mainly focus on social media and information sharing platforms like

³ Sundararajan, Arun. *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. MIT Press, 2016.

⁴ "Uber and Lyft are gaining even more market share over taxis and rentals." *Business Insider*, www.businessinsider.com/uber-lyft-are-gaining-even-more-market-share-over-taxis-and-rentals-2018-7.

⁵ *Nielsen*. www.nielsen.com/us/en/top-ten/?gclid=Cj0KCQjwpLfzBRCRARIsAHuj6qVrFIanbcaBN7FS7kRWCR-Wk7zI1qpY39S7__2NWxcJd7-wgKpr80aAnroEALw_weB.

⁶ *Nielsen*. www.nielsen.com/us/en/press-releases/2020/super-bowl-liv-draws-nearly-100-million-tv-viewers-44-million-social-media-interactions/.

Facebook, Google, and Twitter, the concepts also apply broadly to all platforms. In summary, platforms are marketplaces; the actors within these marketplaces cause them to be seen as good or bad. Blaming the marketplaces, not the actors, hinders the overall effectiveness of the platform. Thus, the goal should be to target these bad actors and not the platform as a whole.

Content Moderation

Misinformation is not a new phenomenon created by platforms, but they have provided a new vector for misinformation to spread at a rapid rate. Headlines such as “The Pope Endorses Trump”⁷ or doctored videos of political figures, “deepfakes”⁸, have garnered millions of views and potentially skewed public perception. Even today, as we are making our way through the Covid-19 crisis, fake news of “Impending National Lockdowns”⁹ or that “Cocaine Cures Coronavirus”¹⁰ have rapidly spread across people’s timelines, messaging applications, and news feeds, causing panic and confusion. The difficulty that governments and tech companies face in managing misinformation is that, for all of the aforementioned reasons that make these platforms useful, is also what allows misinformation to spread quickly: the large user base, ease of access, and relative anonymity in interacting online.¹¹

Some politicians and lawmakers propose repealing section 230 of the Communications Decency Act (CDA 230) to reduce misinformation on platforms. CDA 230, which specifies that “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”¹², was originally

⁷ “Read all about it: The biggest fake news stories of 2016.” *CNBC*, www.cnn.com/2016/12/30/read-all-about-it-the-biggest-fake-news-stories-of-2016.html.

⁸ “Doctored Nancy Pelosi video highlights threat of ‘deepfake’ tech.” *CBS*, www.cbsnews.com/news/doctored-nancy-pelosi-video-highlights-threat-of-deepfake-tech-2019-05-25/.

⁹ “There’s a viral coronavirus rumor about Trump issuing a national lockdown — it’s fake.” *The Verge*, www.theverge.com/2020/3/16/21181506/coronavirus-rumor-viral-trump-stafford-act-national-quarantine-misinformation.

¹⁰ “France had to tell citizens that cocaine won’t cure coronavirus.” *New York Post*, nypost.com/2020/03/10/france-had-to-tell-citizens-that-cocaine-wont-cure-coronavirus/.

¹¹ Persily, Nathaniel and Joshua A. Tucker, eds. Forthcoming 2020. *Social Media and Democracy: The State of the Field*. Cambridge University Press.

¹² “Section 230 of the Communications Decency Act.” *Electronic Frontier Foundation*, www.eff.org/issues/cda230.

created to promote the growth of the internet and protect freedom of speech. But many, including presidential candidate Joe Biden, now claim that CDA 230 unfairly protects tech companies from liability:¹³ In his interview with the *New York Times*, Biden likens the responsibility of platform companies to those of traditional news companies, like CNN and the *New York Times*.¹⁴ News companies can be held accountable for the content they publish and actions that result from that content.

The repeal of CDA 230 will reduce misinformation, but it will also reduce freedom of speech. European GDPR regulations, which also place greater responsibility on platforms to monitor content¹⁵, have led to many instances of suppressed journalism and restriction of speech. Most notably, Romanian officials used the stricter regulations to suppress journalism highlighting unethical behavior by government officials.¹⁶ Other bad actors have also taken advantage and set up bots to report and remove factual content that contradict their beliefs.¹⁷ The quantity of fake news on Facebook measured, on average, at 2.3 Million posts per day¹⁸, compared to 500 Million posts that flow through the platform every day.¹⁹ Looking at the

¹³ "Joe Biden." *New York Times*, www.nytimes.com/interactive/2020/01/17/opinion/joe-biden-nytimes-interview.html?smid=nytcare-ios-share.

¹⁴ "Joe Biden." *New York Times*, www.nytimes.com/interactive/2020/01/17/opinion/joe-biden-nytimes-interview.html?smid=nytcare-ios-share.

¹⁵ *European Union*. gdpr-info.eu/.

¹⁶ "Online-Privacy Laws Come With a Downside." *The Atlantic*, www.theatlantic.com/ideas/archive/2019/06/europes-gdpr-elevated-privacy-over-press-freedom/590845/.

¹⁷ Bayer, Judit. "Between Anarchy and Censorship Public discourse and the duties of social media." *CEPS*, aei.pitt.edu/98662/1/LSE2019-03_Between-Anarchy-and-Censorship.pdf.

¹⁸ Crawford, Krysten. "Study suggests Facebook's war on fake news is gaining ground." *Stanford SIEPR*, siepr.stanford.edu/news/facebook-fake-news-war.

¹⁹ *Social Pilot*. www.socialpilot.co/blog/social-media-statistics#fb-usage-stats.

numbers, it certainly seems like an expensive tradeoff to reduce misinformation, which accounts for less than 0.5% of all news, by hindering the other 99% of information flowing through the platform.

Another casualty of broad regulation will be politics. While issues of misinformation during the 2016 U.S. election created the need for greater regulation, platforms are also an efficient vector for many smaller political candidates to spread their message. Digital platforms help to connect smaller candidates with their constituents at a much lower cost than traditional channels, which allows them to compete effectively against larger, more well-funded, candidates.²⁰ Recent decisions to ban political advertisements on Twitter for the upcoming 2020 election²¹ will certainly reduce political misinformation on the platform, but it will harm voters and smaller players. Further, this idea is not just limited to politics, but can be generalized – platforms give everyone a public voice. Reducing misinformation by reducing ALL information is not an effective solution.

²⁰ Yaraghi, Niam. "Twitter's ban on political advertisements hurts our democracy." *Brookings*, www.brookings.edu/blog/techtank/2020/01/08/twitters-ban-on-political-advertisements-hurts-our-democracy/.

²¹ "Twitter Will Ban All Political Ads, C.E.O. Jack Dorsey Says." *New York Times*, www.nytimes.com/2019/10/30/technology/twitter-political-ads-ban.html.

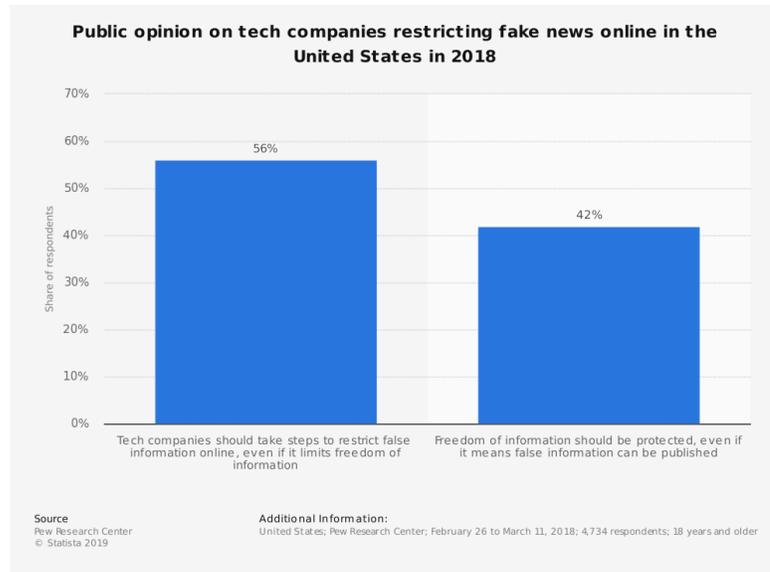


Figure 1: Survey on Freedom of Speech on Digital Platforms²²

When asked whether they would accept misinformation for greater freedom of speech, 42% of Americans said they would. While this is not a majority, it is a sizable proportion and shows the importance of free speech within our society. Luckily, this is not a zero-sum game. Alternative solutions that specifically target bad actors can help reduce misinformation while maintaining freedom of speech on platforms.

In recent years, AI detection algorithms have made great strides at reducing engagement with fake content: at its peak in 2016, engagement with fake news articles and websites in the United States numbered over 200 million per month. That number has steadily declined ever since and engagement with fake news today has fallen below 70 million per month.²³

Partnerships with fact checking companies²⁴ and the creation of dedicated teams to tackle the

²² Statista. www-statista-com.proxy.library.nyu.edu/statistics/829260/tech-company-intervention-fake-news/.

²³ Crawford, Krysten. "Study suggests Facebook's war on fake news is gaining ground." *Stanford SIEPR*, siepr.stanford.edu/news/facebook-fake-news-war.

²⁴ *TechCrunch*. techcrunch.com/2020/02/12/reuters-facebook-fact-checker/.

issue internally have also aided this cause.²⁵ Greater focus in the development of these technologies and partnerships will be essential in the battle against misinformation.

However, improved technology is not the only way to achieve this. Currently, companies all have their own rules and standards as to what constitutes misinformation and what type of content is removed.²⁶²⁷ An example of this can be seen in the current Covid-19 crisis: Facebook removes posts that defy government stay at home guidelines, citing them as misinformation.²⁸ Twitter, on the other hand, claim that these posts have not violated any of their guidelines.²⁹ These differences make policing misinformation, as a whole, difficult because detection algorithms are trained off of “labeled data” and, with varying standards on how that data is labeled, what may be flagged and removed from one site may still be available on another. In order to maximize the reduction of fake news exposure to the public, it will be essential to build greater collaboration between tech companies, fact checking organizations, and the government to set and abide by a single standard. This standard is subjective, but it offers a more controlled and objective metric to target misinformation. This solution will give governments more control over the issue and reduce the pressure on platforms to make controversial decisions.

Lastly, content moderation is not just the responsibility of our larger institutions, but us, as users, must also be cognizant of our behavior. Due to the continually evolving nature of fake

²⁵ *Bloomberg*. www.bloomberg.com/news/articles/2019-07-08/how-facebook-fought-fake-news-about-facebook.

²⁶ *Facebook*. www.facebook.com/business/help/182222309230722.

²⁷ *UNESCO*. en.unesco.org/fightfakenews.

²⁸ *Yahoo*. finance.yahoo.com/news/facebook-tries-draw-line-misinformation-173755816.html.

²⁹ *Reuters*. www.reuters.com/article/us-health-coronavirus-usa-facebook/facebook-removes-anti-quarantine-protest-events-in-some-u-s-states-idUSKBN2222QK.

news, it is impossible to completely remove bad actors from these platforms. However, we can play a greater role in limiting the spread of misinformation. Research by Guess and Lyons show that fake news articles gain traction because of what they call the “cascade effect.” The cascade effect is a vicious cycle where one user will share the fake news to their network which will then prompt other users to share to their network and so on.³⁰ Research by the MIT Media Lab concurs with this, citing that re-shares by unsuspecting users attribute to over 70% of engagement with fake news.³¹ It is important that we, as users, do our part to solve this issue as well.

As stated in the beginning, platforms, themselves, are not intrinsically good or bad – they are simply a marketplace, an exchange, for goods, services, and information. It would make no sense to limit the effectiveness of this marketplace in order to stop a few bad actors. Rather, it’s more important to come together to help identify these bad actors and increase the overall efficiency of the marketplace.

³⁰ Persily, Nathaniel and Joshua A. Tucker, eds. Forthcoming 2020. *Social Media and Democracy: The State of the Field*. Cambridge University Press.

³¹ *MIT Media Labs*. news.mit.edu/2018/study-twitter-false-news-travels-faster-true-stories-0308.

Data Privacy

“How Target Figured Out A Teen Girl was Pregnant Before her Father Did”³² was the title of a Forbes article in 2012. It may sound like click bait, but it’s the reality of how much digital marketers know about us. Utilizing a consumer’s past purchase history, demographics, online search history, and multiple other sources of data, Target built an algorithm that predicts the probability that their customers are pregnant. A target employee explains how it works in a New York Times interview: “Take a fictional Target shopper named Jenny Ward, who is 23, lives in Atlanta and in March bought cocoa-butter lotion, a purse large enough to double as a diaper bag, zinc and magnesium supplements and a bright blue rug. There’s, say, an 87 percent chance that she’s pregnant and that her delivery date is sometime in late August.” Using this model, Target sent promotional coupons for baby items to a high schooler in Minneapolis. An enraged father saw the coupons in the mail and accused Target of encouraging his daughter to get pregnant – little did he know, she already was.³³

That was eight years ago. Since then, the advent of digital platforms have increased the depth and specificity of data that advertisers have on us. This data has been used in retail to recreate an individual’s life and determine the best time to send them promotional ads.³⁴ It’s been used by politicians to build psychological profiles on voters.³⁵ And it’s been used by

³² "How Target Figured Out A Teen Girl Was Pregnant Before Her Father Did." *Forbes*, www.forbes.com/sites/kashmirhill/2012/02/16/how-target-figured-out-a-teen-girl-was-pregnant-before-her-father-did/#718d2b3e6668.

³³ "How Companies Learn Your Secrets." *New York Times*, www.nytimes.com/2012/02/19/magazine/shopping-habits.html?pagewanted=6&_r=1&hp.

³⁴ Ghose, Anindya. *Tap: Unlocking the Mobile Economy*. MIT Press, 2017.

³⁵ *Quartz*. qz.com/1232873/what-can-politicians-learn-from-tracking-your-psychology-pretty-much-everything/.

governments to monitor citizen’s movements during the Covid-19 pandemic.³⁶ These all sound scary and intrusive, but, again, it’s how the data is used that ultimately determines its impact.

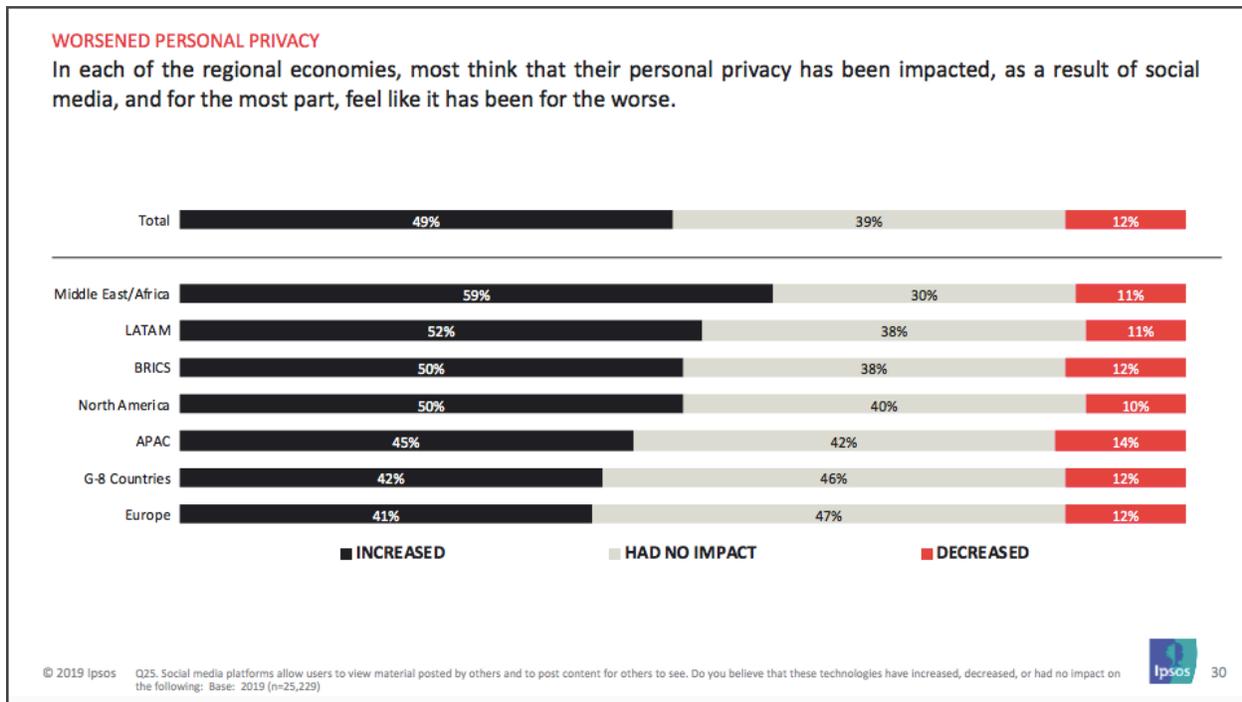


Figure 2: Survey on the Impact of Social Media on Data Privacy³⁷

As we can see in the above chart, roughly 50% of people view their personal privacy has been worsened by social media and digital platforms. Although There is currently no pending federal action regarding data privacy, states have passed their own legislation (California’s CCPA, and Washington’s Privacy Act) which point to the direction in which we are headed. The stricter guidelines in these acts are, again, modeled closely after European GDPR regulations, which restrict the amount of data that can be collected, how it can be used, and allows users to

³⁶ *Business Insider*. www.businessinsider.com/countries-tracking-citizens-phones-coronavirus-2020-3.

³⁷ *IPSOS / UNESCO*. www.cigionline.org/sites/default/files/documents/2019%20CIGI-Ipsos%20Global%20Survey%20-%20Part%203%20Social%20Media%2C%20Fake%20News%20%26%20Algorithm%20ms.pdf.

change, delete, and opt out of data collection.³⁸ Clearly, this is an important issue, but we must also consider the benefits that data provides to us.

It is very easy to overlook the benefits that data provides to us in our daily lives. On a consumer level, platform data is used in digital advertising to increase efficiency and help connect consumers and producers every day, reducing the amount of ads consumers see and increasing conversion rates for producers. When asked in a survey, roughly 70% of people in the United States said they were willing to trade some information for this elevated level of service.³⁹

Taking a look at politics, we, again, see the potential for data to be good or bad, depending on how it is used. The Obama campaign pioneered the use of big data analytics in the 2012 campaign, utilizing platform data to reach the appropriate user groups with their message.⁴⁰ Conversely, in the 2016 election, these platforms and their data were used in a much more combative way by a variety of actors to create controversy and drive people apart. This ties back to the theme that we should be targeting bad actors, not platforms as a whole.

Stricter regulations on data collection and use will also hinder the research community. Due to new European GDPR regulations and fear of liability, companies have become less willing to share data with researchers.⁴¹ Some examples of research that has been made possible

³⁸ *European Union*. gdpr-info.eu/.

³⁹ Ghose, Anindya. *Tap: Unlocking the Mobile Economy*. MIT Press, 2017

⁴⁰ *MIT Technology Review*. www.technologyreview.com/2012/12/19/114510/how-obamas-team-used-big-data-to-rally-voters/.

⁴¹ "Persily, Nathaniel and Joshua A. Tucker, eds. Forthcoming 2020. *Social Media and Democracy: The State of the Field*. Cambridge University Press.

by platform data include insights into hate speech⁴², research on political bubbles⁴³, fake news dissemination patterns⁴⁴, and the social influence of state leaders on its citizens⁴⁵. Further, research is not only limited to politics, topics such as social connectedness, mingling,⁴⁶ how purchasing decisions are influenced, law enforcement, and national security have also benefitted from platform data.⁴⁷ With stricter regulations, researchers risk losing access to one of the most comprehensive and robust datasets, which will negatively impact society and our understanding of it.

Lastly, an excellent example of how data can be used to benefit society is in the current Covid-19 crisis. Many platform companies and governments in Southeast Asia have teamed up to create contact tracing tools from platform data. However, due to restrictions imposed by data privacy laws, many western countries have had difficulty employing the same preventative methods.

⁴² "Trumping Hate on Twitter? Online Hate in the 2016 US Election and its Aftermath." *NYU Social Media and Political Participation Lab*, smappnyu.org/wp-content/uploads/2019/04/US_Election_Hate_Speech_2019_03_website.pdf.

⁴³ "How Many People Live in Political Bubbles on Social Media? Evidence From Linked Survey and Twitter Data ." *NYU Social Media and Political Participation Lab*, smappnyu.org/wp-content/uploads/2019/04/US_Election_Hate_Speech_2019_03_website.pdf.

⁴⁴ "Less than you think: Prevalence and predictors of fake news dissemination on Facebook." *NYU Social Media and Political Participation Lab*, smappnyu.org/wp-content/uploads/2019/04/US_Election_Hate_Speech_2019_03_website.pdf.

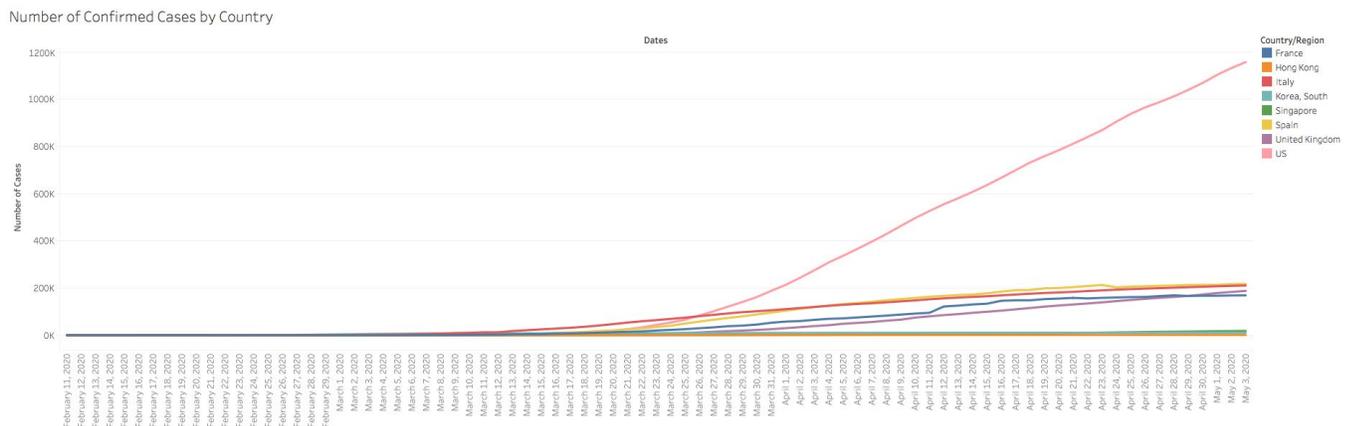
⁴⁵ "Who Leads? Who Follows? Measuring Issue Attention and Agenda Setting by Legislators and the Mass Public Using Social Media Data." *Cambridge*, www.cambridge.org/core/services/aop-cambridge-core/content/view/D855849CE288A241529E9EC2E4FBD3A8/S0003055419000352a.pdf/who_leads_who_follows_measuring_issue_attention_and_agenda_setting_by_legislators_and_the_mass_public_using_social_media_data.pdf.

⁴⁶ *National Bureau of Economic Research*. www.nber.org/papers/w26029.

⁴⁷ "How our social interactions influence our decision to buy a new home." *London School of Economics*, blogs.lse.ac.uk/businessreview/2019/05/28/how-our-social-interactions-influence-our-decision-to-buy-a-new-home/.

Country	Number of Cases	Cases as % Pop
United States	1,185,718	0.36%
Spain	247,122	0.53%
Italy	210,717	0.35%
S Korea	10,793	0.02%
Hong Kong	1,040	0.01%
Taiwan	432	0.00%

Table 1: Table of Cases and % of Population Infected, By Country⁴⁸



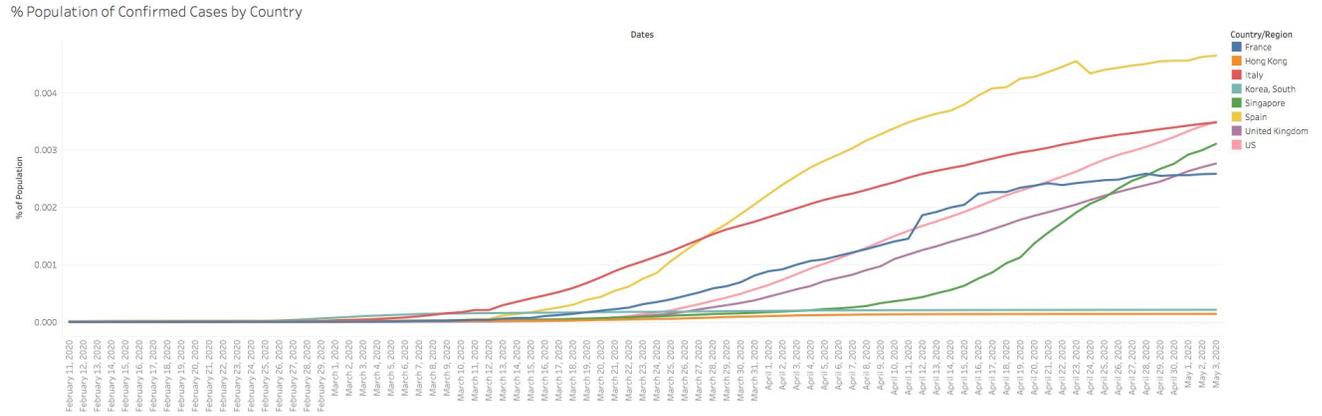
The trend of sum of Number of Cases for Dates (MDY). Color shows details about Country/Region. The view is filtered on Dates (MDY), which keeps 83 of 103 members.

Figure 3: Graph of Covid-19 Cases⁴⁹

Looking at the above graph, we see a significantly higher number of cases in Western countries (US, UK, Italy) compared to places in Southeast Asia (Taiwan, Hong Kong, South Korea).

⁴⁸ "Novel Coronavirus (COVID-19) Cases Data." *Humdata*, data.humdata.org/dataset/novel-coronavirus-2019-ncov-cases.

⁴⁹ "Novel Coronavirus (COVID-19) Cases Data." *Humdata*, data.humdata.org/dataset/novel-coronavirus-2019-ncov-cases.



The trend of sum of % of Population for Dates (MDY). Color shows details about Country/Region. The view is filtered on Dates (MDY), which keeps 83 of 103 members.

Figure 4: Graph of % of Population Infected with Covid-19⁵⁰

Even normalizing the data over the population of each country we see the same result.

Obviously, there are many factors that can contribute to this difference (healthcare infrastructure, population density, quarantine procedures, past history, etc) so we cannot claim any sort of causality here, but there certainly appears to be an association between the use of data and lower number of cases.

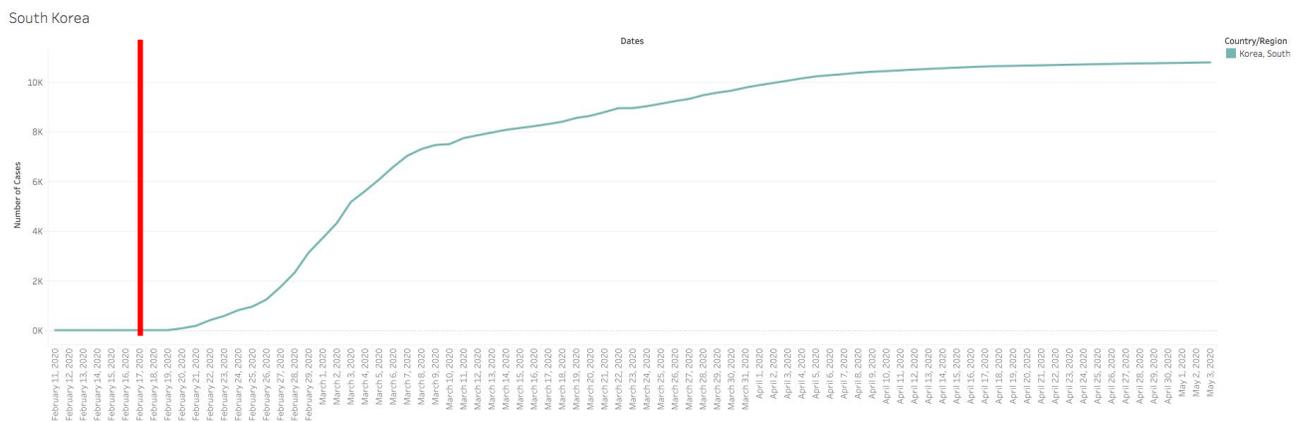
In Singapore, the government partnered with platforms to create an app called TraceTogether, which utilizes location data and Bluetooth signals to track citizen's locations in real time. This technology allows them to effectively enforce quarantines and determine who may have had contact with an infected individual.⁵¹ Taiwan and Hong Kong have utilized similar

⁵⁰ "Novel Coronavirus (COVID-19) Cases Data." *Humdata*, data.humdata.org/dataset/novel-coronavirus-2019-ncov-cases.

⁵¹ "Responding to COVID-19 with Tech." *Singapore*, www.tech.gov.sg/products-and-services/responding-to-covid-19-with-tech/?utm_medium=recommender_1&utm_source=aHR0cHM6Ly93d3cudGVjaC5nb3Yuc2vcvWVkaWEvdGVjaG5ld3MvdHJhY2V0b2dl dGhlcil iZW hpbmQtdGhlLXNjZ W5lcylsb29rLWF0LWl0cy1kZ XZl bG9wbWVudC1wcm9jZ XNz&utm_content=aHR0cHM6Ly93d3cudGVjaC5nb3Yuc2vcvHJvZHVjdHMtYW5kLXNlcnZpY2VzLjJlc3BvbmRpbmctdG8tY292aWQtMTkt d210aC10ZWNoLw==.

technologies to erect a “digital fence”.⁵² Similar to Singapore, this technology utilizes platform data and Bluetooth signals to aid contact tracing and quarantine enforcement.⁵³

South Korea takes it one step further by publicly releasing location data of individuals that have tested positive. Many attribute this extreme method to the success they have seen in preventing a mass outbreak after “patient 31”⁵⁴ infected over a thousand people at various public religious gatherings. Utilizing public location data, individual citizens were able to determine their own exposure, allowing them to voluntarily get tested and quarantine.⁵⁵



The trend of sum of Number of Cases for Dates (MDY). Color shows details about Country/Region. The view is filtered on Dates (MDY) and Country/Region. The Dates (MDY) filter keeps 83 of 103 members. The Country/Region filter keeps Korea, South.

Figure 5: Graph of Number of Covid-19 Cases in South Korea⁵⁶

⁵² "How Taiwan is tracking 55,000 people under home quarantine in real time." *Quartz*, qz.com/1825997/taiwan-phone-tracking-system-monitors-55000-under-coronavirus-quarantine/.

⁵³ "Hong Kong is using tracker wristbands to geofence people under coronavirus quarantine." *Quartz*, qz.com/1822215/hong-kong-uses-tracking-wristbands-for-coronavirus-quarantine/.

⁵⁴ *Bloomberg*. www.bloomberg.com/news/articles/2020-02-26/how-one-patient-turned-korea-s-virus-outbreak-into-an-epidemic.

⁵⁵ *Bloomberg*. www.bloomberg.com/news/articles/2020-02-26/how-one-patient-turned-korea-s-virus-outbreak-into-an-epidemic.

⁵⁶ "Novel Coronavirus (COVID-19) Cases Data." *Humdata*, data.humdata.org/dataset/novel-coronavirus-2019-ncov-cases.

In this graph we can see a spike in confirmed cases after patient 31 tested positive on February 17th 2020, marked by the red line, followed by a quick stabilization. By empowering citizens with information, among many other safety measures, the government of South Korea was able to prevent a mass outbreak. Many also attribute this use of distributed data to South Korea being able to stay “open”, not enforcing nationwide quarantines and allowing most businesses to remain open.⁵⁷

However, this is not to say that the United States and other western countries are not using data, but the richness of that data is hindered by regulations and worries of liability.⁵⁸ An example of what is being done in the U.S. is Google Mobility. Google Mobility tracks macro movement by aggregating user data onto a broader level.⁵⁹ For example, we can see summary statistics of movement in New York City: In April 2020, foot traffic dropped 68% in parks, 78% in transit stations, and 56% in workplaces/business compared to pre-pandemic levels.⁶⁰ While this is informative information, it doesn't offer that same level of contact tracing. Further, it's not due to a lack of capability, many American companies have the technology in place to create similar technologies to those seen in Singapore and Taiwan.⁶¹ Issues with regulatory concern are also seen in Europe due to their GDPR regulations.⁶² In a recent EU meeting, officials have

⁵⁷ *Washington Post*. www.washingtonpost.com/outlook/2020/04/10/south-korea-is-winning-fight-against-covid-19-us-is-failing/.

⁵⁸ *IEEE Spectrum*. spectrum.ieee.org/tech-talk/telecom/security/how-coronavirus-pandemic-europe-collecting-phone-data.

⁵⁹ "Community Mobility Reports." *Google*, www.google.com/covid19/mobility/.

⁶⁰ "New York." *Google*, www.gstatic.com/covid19/mobility/2020-04-05_US_New_York_Mobility_Report_en.pdf.

⁶¹ "Covid-19 Mobility Insights." *Cuebiq*, www.cuebiq.com/visitation-insights-covid19/?utm_source=nyt&utm_medium=article&utm_campaign=organic.

⁶² *IEEE Spectrum*. spectrum.ieee.org/tech-talk/telecom/security/how-coronavirus-pandemic-europe-collecting-phone-data.

expressed frustration over this problem: “A fragmented and uncoordinated approach risks hampering the effectiveness of measures aimed at combating the Covid-19 crisis, whilst also causing serious harm to the single market and to fundamental rights and freedoms.”⁶³

The upside to using data in this crisis is clear, but it is not without tradeoffs. In South Korea, citizens report being more afraid of the social implications of having the virus than the virus itself.⁶⁴ Even though the publicly provided information is stripped of identifying items (name, home address, etc), this has not stopped people from speculating and picking apart the lives of those with the virus.⁶⁵ Lack of oversight has also resulted in data leaks.⁶⁶ The goal of this section is not to say whether we should or should not use data to track citizens, but to show the usefulness of data and the potential consequences of not having the option to utilize data due to strict regulations.

A better solution to data privacy is to focus on better data security. Tools such as differential privacy⁶⁷, which Google uses in their Google Mobility program, allows data to be analyzed without being seen. Tools like this will allow researchers, marketers, governments, and other officials to harness the power of data without having access to the data. Although these technologies are still in their infancy and have their weaknesses⁶⁸, the development of these

⁶³ "As COVID-19 apps grow rapidly, EU calls for common approach." *Total Telecom*, www.totaltele.com/505501/As-COVID-19-apps-grow-rapidly-EU-calls-for-common-approach.

⁶⁴ "Coronavirus privacy: Are South Korea's alerts too revealing?" *BBC*, www.bbc.com/news/world-asia-51733145.

⁶⁵ "Coronavirus privacy: Are South Korea's alerts too revealing?" *BBC*, www.bbc.com/news/world-asia-51733145.

⁶⁶ *Joins*. news.joins.com/article/23712829.

⁶⁷ "Differential Privacy." *Harvard*, privacytools.seas.harvard.edu/differential-privacy.

⁶⁸ *Wired*. www.wired.com/story/apple-differential-privacy-shortcomings/.

technologies can unlock the potential of data while mitigating the downside. Development of these tools will also increase trust between platforms and users.

However, this is not to say that platforms should have free reign over consumer data. An important element in many current regulations that should be further explored is data transparency. Parts of the aforementioned regulations, Washington Privacy Act and European GDPR, allow users to have access to how their data is being used and by whom. This type of transparency will allow users to make better informed opt in/opt out decisions and it will also incentivize platforms to be responsible. Platforms, like real marketplaces, are built on trust. If a user can trust that the platform is managing their data responsibly and is transparent about its use then they will be happy to continue using that platform. This increase in transparency will create a virtuous cycle: users use the platform more, more data is collected, platform becomes more robust, users receive better benefits.⁶⁹

Data privacy is more difficult to address than content moderation, but the concept remains the same: if we can focus on eliminating bad actors then we will be able to reap the benefits while reducing the risks. The focus should be on improving data security and transparency as opposed to restricting the use and collection of data.

⁶⁹ Ghose, Anindya. *Tap: Unlocking the Mobile Economy*. MIT Press, 2017.

Conclusion

In conclusion, we are faced with many difficult decisions at this time regarding digital platforms. Clearly there are vulnerabilities for them to be abused by bad actors, but there are also great benefits for users and overall society. In light of recent controversies, many government policies have been debated to solve issues with content moderation and data privacy. While these policies will be effective in achieving their goals, they come with numerous unintended consequences. The repeal of CDA 230 can lead to over moderation as seen with Europe and their GDPR regulations, reducing the efficiency of these platforms and negatively impacting free speech. State legislation, like California's CCPA or Washington's Privacy Act, will impact the ability for platforms to collect data that can be used to benefit society. The objectives set out by these policies are good, but, ultimately, they will hold us back.

Once again, it is important to realize that these platforms are simply marketplaces where information, goods, and services can be exchanged. It's bad actors that create misinformation and misuse user data. Before we handicap the entirety of a technology that has brought about great convenience to our lives, it is worth a try to police bad actors on these platforms. For content moderation, this means greater collaboration between tech companies and governments to build out standardization and more robust algorithms. For data privacy, this means greater support for technologies and policies that can secure data, increase trust, and boost transparency. These tools will not only ease consumer worries over data privacy, but will help change the narrative of data from maximizing business objectives to improving society. There is a lot to be gained, both technologically and socially, through a more defined approach that seeks out bad actors rather than targeting platforms as a whole.