



Stanford PACS  
Center on Philanthropy  
and Civil Society

—  
Digital Civil Society Lab

# DIGITAL SURVEILLANCE, CIVIL SOCIETY AND THE MEDIA DURING THE COVID-19 PANDEMIC



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Digital Civil Society Lab  
Stanford Center on Philanthropy and Civil Society (PACS)  
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## ABSTRACT

As the COVID-19 pandemic unfolded, so did many digital technologies promising to improve the public health response. These technologies raised various concerns for civil liberties in the digital age, from infringing on privacy to institutionalizing mass surveillance capacities. This report explores how English-language news organizations worldwide reported on these digital surveillance initiatives over the period of a year. By analyzing news framing, we provide insights into the contours of public debates on digitally driven public health surveillance. The report sheds light on the evolution of coverage over time, its geographic distribution, whose voices were included and excluded from these debates, and the prevalence of mis/disinformation. It also highlights the place of civil society in these narratives; which civil society organizations appeared most often in the media; what roles they played vis-à-vis digital surveillance; and the racial and gender make up of civil society voices appearing in news coverage. We conclude by providing a set of recommendations and resources for civil society groups and journalists working on the intersection of civil liberties, public health, and digital technologies.

**KEYWORDS:** digital surveillance, COVID-19, civil society, privacy, digital rights, media, contact-tracing, misinformation, racial and gender disparities.

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## BACKGROUND

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Governments and corporations around the world have responded to the COVID-19 pandemic with various technological projects and emergency measures. Bluetooth-based contact tracing apps, the use of smartphone location data to enforce quarantine orders, drone surveillance to monitor crowd gatherings, and thermal scanning via digital cameras in the workplace illustrate the sorts of wide-ranging and rapidly spreading digital responses to the pandemic. In October 2020, there were reportedly 493 COVID-19 related iOS Apps across 98 countries (Albright, 2020). These technologies have crucial implications for civil liberties in the digital age: from the right to privacy and equal protection before the law, to freedom of assembly and association. While digital technologies may have an important role to play in response to this public health emergency, their unchecked development and deployment carries risk for the institutionalization of mass surveillance capacities.

This report provides an overview of how English-language news organizations worldwide reported on these digital surveillance initiatives over a period of one year (March 2020 - March 2021). We put a spotlight on the place of civil society in these narratives: which civil society organizations appeared most often, the roles they played vis-à-vis digital surveillance, and the racial

and gender makeup of civil society voices appearing in news coverage. By examining the proposed use of digital technologies in addressing COVID-19 and attending to concerns about the implications of these technologies on privacy, surveillance, and identity, we capture important insights into the nature of digital dependencies and the multiplicity of roles performed within civil society.

*Why a focus on news coverage?* This focus provides a gateway into broader public discourse around public health surveillance through digital means. As such, we do not aim to provide an exhaustive catalogue of instances of digital surveillance (on this, see the **resources section** of this report, which lists several organizations working on compiling this information). Instead, we are interested in understanding key features of how news outlets are framing these issues: how was the issue covered over time? What are the most salient features of this coverage, and its blind spots? Whose expertise is brought to bear on these issues? What costs and benefits of digitally driven, public health surveillance do journalists tend to present to the public? Our approach is grounded in the idea that news framing of social issues informs public knowledge and policy choices. This perspective does not hold that the news determines *what people think*. However, it does recognize the agenda-setting and framing powers of the news (Entman, 2007). News media is particularly influential in setting the agenda and boundaries of public discourse, or, in other words, *what people think about* and *the different frames people can use to interpret an issue*. Therefore, a rigorous understanding of this framing provides insight into the contours of this public knowledge and the range of policy considerations the general public is invited to consider in relation to digitally driven public health surveillance.

*Why a focus on civil society's place and roles?* This choice stems from our wish to be additive with current conversations on these topics rather than redundant with existing efforts. There are important and ongoing efforts contributing to a better understanding of government/industry responses, several of

which are listed in the **resources section** of this report, including the [MIT Covid Tracing Tracker](#), [ICNL's Covid-19 Civic Freedom Tracker](#), the [Electronic Frontier Foundation's Guide to Digital Rights during the Pandemic](#) or [Privacy International effort to track the global response to Covid-19](#). However, there has been less public and scholarly attention to civil society's role specifically. This is despite what our research team witnessed as a breadth of activity across the sector since the pandemic started on digitally enabled public health surveillance. From a scholarly perspective, we aim to assess the prevalence of civil society in news framing and the types of civil society organizations and voices that the news uplifts in reporting on issues of digital surveillance. Our goal is to understand which organizations are deemed gatekeepers of public expertise, which voices may be missing, and where civil society stands on a spectrum that ranges from partnering in developing surveillance technology to advocating for their regulation or opposing them. Our findings should also be of interest to civil society and journalists. Civil society organizations may be interested in finding out how they are featured in news coverage, their media visibility compared to other organizations and areas of advocacy that warrant greater public attention. Journalists, we hope, might use our findings and the resources in this report to identify story topics, countries, and perspectives that warrant follow-up and/or more reporting. Finally, as we discuss further in our findings, both civil society actors and journalists would benefit from understanding the risks of their work being politically co-opted in an ecosystem of mis/dis-information, and how racial and gender biases permeate public discussion these issues.

Before turning to our main findings, a quick note on how we defined two key concepts used throughout the report:

- **Civil society:** Individuals and not-for-profit, nongovernmental associations, both formal and informal, that come together to address shared social challenges. This includes nonprofit organizations and charities, social enterprises, individuals, and collectives, as well as the individuals and private groups that fund them. Our definition of civil society is purposefully inclusive as we seek to capture the range of ways people, community and organizations are involved in shaping public discourse around digital surveillance.
- **Digital surveillance:** The range of hardware and software used, developed, and deployed to monitor people's behaviors, activities, and information in the name of public health. This notion of digital surveillance carries some ambiguity. On the one hand, public health experts largely refer to surveillance to talk about monitoring the virus and its spread; in this sense, it has positive connotations. On the other hand, civil liberties and digital rights advocates generally talk about surveillance to refer to "mass surveillance," i.e., the ability of governments and/or corporations to monitor and control populations. This latter understanding of "surveillance" is related to concerns about human rights and privacy violations, and thus has a rather negative connotation. Instead of trying to remove this ambiguity altogether, we see it as a key feature of public discourse about the technological responses to the pandemic.

# 02

## SUMMARY OF KEY FINDINGS

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- **A global phenomenon unequally covered.** English-language news coverage of digital surveillance primarily focused on the U.S. (39.3%). Other countries to receive substantial attention were China (10.8%), India (7.6%), Israel and the U.K. (7.1% each), and Germany (4.8%). Countries in Africa, South America, and Southeast Asia were crucially underreported, despite these regions - which account for roughly one-third of the world's population - being severely impacted by the pandemic and having seen many governments deploy digital technologies for public health response.
- **3 months of sustained coverage, then a gradual decline.** Issues of digital surveillance received sustained news attention in the early months of the pandemic, then gradually lost newsworthiness, even as the deployment of digital technology in response to the pandemic continued.
- **Civil society organizations as watchdogs of civil liberties and digital privacy.** The civil society organizations most often featured in news coverage played the role of watchdog for digital privacy and civil liberties. This group of organizations illustrates the growing alignment and interactions between digital rights groups - like the Electronic Frontier Foundation, Privacy International and Access Now - and more broad-based civil society organizations, in particular human-rights focused ones, like Amnesty International, Human Rights Watch and the American Civil Liberties Union (ACLU). A smaller proportion of civil society organizations (Red Cross and Gates Foundation) appeared in coverage because they embraced digital responses to the pandemic. Overall, our results demonstrate dominant visibility given to U.S.-based (and to a lesser extent, U.K.-based) organizations.

- **Far-right mis/dis-information and conspiracy theories.** Far-right news sources pushing conspiracy theories were significant producers of content on pandemic-related digital surveillance. The prevalence of these sources in our corpus is a cause of concern for civil liberties and digital rights advocacy groups. Concerns about protecting digital privacy and opposing mass surveillance may be diluted in, or co-opted by, far-right conspiracy theories.
- **A civil society-led debate.** Our analysis of the most widely shared stories on Facebook shows that more than half of these stories (55.7%) included quotes of voices from *civil society*, followed by voices from the world of *politics* (49.2%), *industry* (37.7%) and *academia* (25.4%). The least quoted voices were those of end-users impacted by these technologies (13.9%).
- **Racial and gender biases in sourcing civil society voices.** Looking at our sample of most widely shared stories on Facebook, 77.2% of the *civil society* voices quoted were those of individuals racialized as White and 68% were male. These findings show that broader patterns of structural racism and gender inequalities appear to shape the sourcing practices of journalists, and consequently, public debates on digital surveillance. They also likely point to structural inequalities within the field of digital rights advocacy.
- **Unequal harmful impact of digital surveillance.** Roughly ¼ of the articles we manually reviewed included an explicit reference to how digital surveillance technologies can disproportionately harm institutionally marginalized communities such as undocumented immigrants, Black people, political dissidents, and members of the LGBTQ+ community. Most of these articles generally mentioned this issue in passing rather than providing a sustained focus on it. The most often mentioned marginalized group was the Uyghur community in China, even as most articles focused on the U.S. and rarely voiced marginalized communities themselves.



# 03

## METHOD

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The articles analyzed for this study were collected using the [Media Cloud platform](#), an open-source platform for studying media ecosystems (Hal et al., 2021) developed in collaboration by the University of Massachusetts Amherst, Northeastern University, and the Berkman Klein Center for Internet & Society at Harvard University. We drew our observations by analyzing one year of news coverage, from March 2020 to March 2021.

Specifically, we looked for relevant articles published across some 1630 English-language news sources. We selected this collection of sources (titled “Global English Language Sources” in Media Cloud) because the outlets represent a wide variety of geographical contexts (where digital surveillance responses to the pandemic unfolded), political leanings, and types of publications. It includes all sources in English listed as “national” for every country in the [ABYZ directory of online news sources](#)<sup>1</sup>. Our goal was to cast a wide net to capture a range of cases, contexts, and framing.

While globally inclusive, this collection of sources is still shaped by biases. For instance,

the collection excludes discussions of these issues in non-anglophone news sources. It also does not fully account for the circulation of these articles across social media platforms, or for social media content itself as key sites for shaping public understanding of these issues. As such, we do not claim our findings to be fully representative of news coverage around the world, but they do provide rigorous insights into English-language news coverage. We encourage future studies to contribute to addressing these gaps, for instance assessing how digital surveillance issues are discussed in other online spaces and reported in news media in other languages widely spoken

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<sup>1</sup> People with a Media Cloud account can access the full list [here](#).

around the world, such as Mandarin, Hindi, Spanish, Arabic or Swahili.

To create a systematic corpus of relevant articles, we did a targeted search through the Topic Mapper function of Media Cloud for articles that included a combination of words related to three topics: surveillance, the pandemic and digital technologies.<sup>2</sup> Our search time covered a period of a year, starting on March 1, 2020, shortly before the WHO characterized COVID-19 as a global pandemic. This search process resulted in a dataset of 3735 stories published in 692 news sources. This overall dataset was then subsequently analyzed through various functionalities provided by the Media Cloud tool and discussed in more details in our analysis.

We also conducted manual content analysis of a sample of stories from these 3735 stories to assess three specific aspects: the sourcing practices of journalists; racial and gender biases in sourcing of civil society voices; and discussions of an unequal harmful impact of digital technologies on different communities. In our analysis section, we discuss the rationale for focusing on these aspects and how we assessed them in journalistic language.

Our team opted for manual content analysis of articles to assess these issues. We created a smaller yet purposeful corpus of articles for more fine-grained manual analysis. We selected articles based on the number of Facebook shares the article received, as calculated through Media Cloud. Our goal here was to analyze “influential stories” which likely received the most circulation and readership online. Facebook is an important source of news and information, which is why we decided to use the number of shares on the platform to gauge which content could be considered salient.<sup>3</sup> Although this selection process is imperfect,<sup>4</sup> it is an indicative measure of readership, and it provides a quantifiable way of assessing online porosity of coverage. We selected the first 160 most popular stories in terms of Facebook share; taken together, these stories added up to 1,167,690 Facebook shares compared to the 1,468,037 Facebook share for all the 3735 stories taken together. In other words, these 160 stories accounted for approximately 79% of all Facebook shares in our entire corpus, which signals their online porosity. Once we removed duplicate stories, the number of stories for this sample dropped to 122. Our manual analysis provides rigorous insights into these news stories that received most attention on Facebook.

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<sup>2</sup> Full search query keywords: surveillance AND privacy AND coronavirus AND (Digital OR App OR Biometric OR "Facial recognition" OR Geolocation OR Camera OR Software OR Tech OR Technologies OR Data)

<sup>3</sup> According to a survey conducted by Pew Research Center in January 2021 (Shearer and Mitchell, 2021), 36% of American adults “regularly” got their news from Facebook, and about half of Americans “sometimes” or “regularly” got news from social media platforms.

<sup>4</sup> This measure is limited in several ways. It only records online popularity for one social media platform (although the leading one around the world in terms of users). In addition, Media Cloud collects the facebook\_share\_count the first time a topic including the story is run. In the past, the Media Cloud research team found that about 90% of social media shares happen within 3 days (and 98% within 30 days) of publication of a given story, meaning that “as long as the topic ends more than 3 days in the past, the facebook shares should be a good representation (see this [discussion](#) on the Media Cloud research forum). As a quality check, our team compared the Facebook shares recorded in Media Cloud for all stories in this smaller sample with the Facebook Shares provided by CrowdTangle, which provides more recent Facebook Shares analytics, and we found that the numbers were generally consistent (only varying in certain cases by less than a couple of hundreds).

# 04

## RESULTS

### OVERALL COVERAGE

#### GEOGRAPHY OF COVERAGE

News coverage was overwhelmingly focused on the United States (39.3%) (figure 1). The next countries to receive the most attention were China (excluding Hong Kong: 5.4%) (10.8%), India (7.6%), Israel (7.1%), the United Kingdom (7.1%), Germany (4.8%), Singapore (4.2%), South Korea (3.5), and France (3.3%). This dominant

focus on the United States., and to a lesser extent on China, reflects not only the global spread of the pandemic but also a broader, long-standing pattern identified in the literature on international news flows, i.e., that a country's economic power is a key determinant of its newsworthiness, and that "international news in almost every nation centers on the powerful" (Wu, 2000, p. 126).

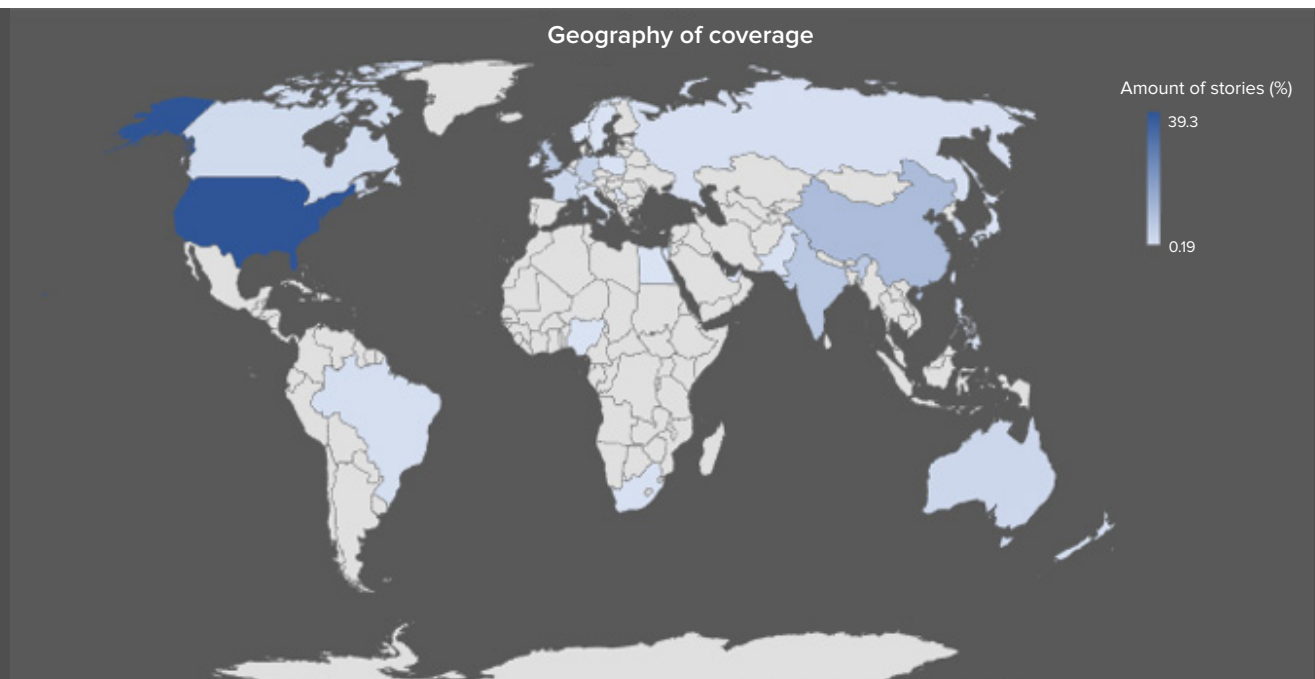


Figure 1 – Geographical focus of news stories  
(Source: Media Cloud, Global English Language News Source)

In general, the stories about the U.S. discussed possible industry/government partnerships to use digital data for contact tracing (Romm, Dwoskin and Timberg, 2020), the risks and benefits associated with any particular digital solution, and the trade-offs between privacy and monitoring the virus. For its part, stories about China routinely discussed the country's existing surveillance system (and its role in human rights violation) and how the combination of many types of data points (e.g., geolocation, health, biometric, and financial) was used as part of the public health response (Mozur, Zhong and Krolik, 2020). Articles about Israel largely concerned the role of Shin Bet - the country's security agency usually responsible for counter-terrorism efforts and monitoring Palestinians in the occupied territories - which was called upon to monitor people's movement through mobile phone location data (Altshuler and Hershkowitz, 2020). Stories about India and the United Kingdom focused on the development and introduction of digital contact tracing apps; Aarogya Setu in India and the NHS COVID-19 contact tracing app developed by scholars at Oxford University's Big Data Institute in the United Kingdom (O'Neill, 2020; Kelion, 2020).

Africa, South America and Southeast Asia are crucially underreported. This is despite these regions of the world, which account for about a third of the world's population, having seen their governments deploy digital technologies for public health response. For instance, **Singapore, Indonesia, Malaysia, the Philippines, Vietnam, Thailand, Tunisia, Colombia, Kenya and Ghana** have all developed contact-tracing apps, while **the government in Ecuador authorized satellite tracking of cell phones**. The "spotlight" section below provides further detail about contact tracing

applications and their deployment in Southeast Asia.

This finding is partly explained by the fact that our sample pulled from sources written in English. But this does not explain the lack of coverage of dozens of countries that do have English as an official language, like Singapore, the Philippines, Kenya, Ghana, or Nigeria. In addition, considering that many anglophone news sources included here brand themselves as international/global in scope, our finding is a testament to the fact that the experience of only a handful of countries come to dominate the framing of a global social issue. This finding also points at possible information gaps within the local (English-language) media ecosystems of these countries. It is important here to note that not all regions of the world perceive data privacy in the same way or consider digital technologies that could infringe upon privacy rights as threats, especially when the stated goal of the technology is for the betterment of the public good (Sambasivan et al., 2018; Chen et al., 2018). As a result, the lack of coverage of digital surveillance and its dangers in certain parts of the world could be from a genuine lack of conversation about these issues amongst the general public. The combination of disregard for these parts of the world and lack of local, robust anglophone news coverage of these issues has important implications for journalists and civil society, which we discuss in the **recommendation section** of this report.

## SPOTLIGHT ON SOUTHEAST ASIA

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Home to almost 9% of the world's population, most Southeast Asian nations have struggled to contain the spread of COVID-19. As of May 2021, Indonesia, the world's largest island nation, has more than **1.5 million** reported COVID-19 cases with a mortality rate of 1.6%, while Philippines has **nearly 1 million** COVID-19 cases and a mortality rate of almost 1.5%. Coupled with a poor health infrastructure, decentralized and haphazard coordination between the local and national governments, and a weak information campaign, Southeast Asian countries are in a race against time to distribute vaccines and mitigate the spread of the virus. Each country has deployed various tactics to contain the spread of COVID-19, one of which has been contact tracing apps, to varying degrees of success: Singapore has been the clear leader in implementing a widely-used contact tracing app by integrating its adoption into its reopening plan, while countries such as Indonesia have had less success in encouraging their app's adoption. Nevertheless, each country has faced scrutiny over privacy concerns and the app's effectiveness in mitigating the virus' spread.

Six of the 10 Association of Southeast Asian Nations' countries have employed contact tracing applications to assist governments in curbing the spread of COVID-19. However, only Singapore's TraceTogether application has managed to gain both traction amongst the population and approval from experts to meet safe privacy standards. Singapore's

TraceTogether application, which released a mobile application on **March 20, 2020** and corresponding token on June 28, 2020, is considered to be the **least intrusive** contact tracing application in Southeast Asia and is the most widely-used in the region. At the end of February 2021, **almost 90%** of Singaporean residents had downloaded the TraceTogether app or collected the TraceTogether token. Widespread adoption of the app and token was achieved by the government's **distribution of 450,000 tokens** to migrant and local workers in October and integration of the app in **digital check-ins at public places** as part of Phase 3 of Singapore's reopening process.

Developed by the Ministry of Health and Government Technology Agency, the app exchanges anonymised proximity information through Bluetooth signals. If a user tests positive for COVID-19, that information is used to contact others who could have interacted with the infected citizen. The app has rotating encrypted IDs that are **controlled by the government's server** so that it can decrypt IDs to notify exposed individuals. The app has proven effective in reducing the amount of time it takes the government to identify and quarantine close contacts of COVID-19 cases **from 4 days to less than 2 days**. Although the app **does not comply** with all nine parts of Singapore's Personal Data Protection Act or 6 processing principles under the General Data Protection Regulation (GDPR), it was considered to be "generally consistent." According to a study conducted by **MIT Technology Review Covid Tracing Tracker**, Singapore's TraceTogether application satisfies a set of technology

principles **guided by those put forth by the ACLU**, including the amount of time the data on apps should last for and the amount of data collected.

Despite this previous praise of its privacy policy, the Minister of State for Home Affairs Desmond Tan **backtracked** his earlier statement in stating during a parliamentary session in January 2021 that data collected through TraceTogether, **SafeEntry** (Singapore's national digital check-in system), and **BluePass** (a contact tracing device for migrant workers) could be used by the police in criminal investigations unrelated to COVID-19. In June 2020, the parliament had **assured** citizens that the data would only be used for COVID-19 contact tracing. The subsequent legislation that the Singaporean parliament passed on February 1, 2021 to specify the cases in which data from the systems could be used under the Criminal Procedure Code **failed to clarify an end-date** for when this data could stop being used. Although many Singaporean citizens were unsurprised by the amount of data collected, this change in policy sparked outrage because citizens felt **"baited and switched."** Even before the clarification of TraceTogether's data privacy policy in January, some **people worried** that the widespread usage of the contact tracing technology would enable Singapore to become a police state, enact further surveillance laws, or set a precedent for the government to **install bluetooth sensors in public spaces** to control civilian movement in the future. Civil society members also note that this policy change disproportionately impacts migrant workers.

Only TraceTogether users who have **not tested positive** for COVID-19 can request the government to delete all of the data collected in its servers. However, **47 percent** of migrant workers tested positive for COVID-19 as of December 15 and made up almost 93 percent of the COVID-19 cases in Singapore, making a significant proportion of migrant workers ineligible to "opt-out." The inconsistency of the information provided by the government might impact the efficacy of future government programs, such as Singapore's **"Smart Nation" initiative**, which is being spearheaded by Balakrishnan to make digital innovation a centerpiece of Singapore's economy.

Singapore's regression of privacy policy could also **set a bad precedent** for other Southeast Asian countries as they attempt to increase the adoption of contact tracing apps to mitigate new waves of COVID-19. Already, the applications developed in the 5 other ASEAN countries have been criticized for their ambiguous or non-existent policies regarding data destruction, transparency, and data minimization. Indonesia has employed three contact tracing applications since March 2020, although **PeduliLindungi** is the most popular application. With about **6,000,000 users**, the application, which was developed by the Ministry of Communication and Information Technology (Kominfo) and the Ministry of SOEs, uses Bluetooth signals to track the location of app and cross-references this information with telecommunications provider data to alert other contacts in an individual's PeduliLindungi history if they test positive for COVID-19. The application **requires**

an individual's name, phone number, and device information, and was modeled to work similarly to the TraceTogether application. Although using the application is voluntary, the app does not meet the standards for data (not limited, data is not destroyed, minimized, and services are not transparent) and has only been adopted by 5% of smartphone users in Indonesia. The application has received criticism for not providing information that is beneficial to the user, and the lack of government initiatives accompanying the application's roll-out to spur greater engagement, such as cash handouts for residents to buy data packages in order to use the application. In addition, cybersecurity experts warn that users not using the most updated version of Bluetooth are at an increased risk of being sent malware while using the app — which would compromise sensitive personal information — despite the government's assurances of the app's safety from hackers. PeduliLindungi is now being used to help Indonesians download their digital vaccine certificate after receiving the COVID-19 vaccine.

Vietnam has developed two contact-tracing applications since the beginning of the pandemic: Bluezone and NCOVI. After a wave of COVID-19 cases in Vietnam in early February, Bluezone contact tracing app averaged 32,000 to 40,000 downloads per hour and has already reached more than 27 million downloads. Almost 8 million people had also downloaded the NCOVI application, the official domestic health reporting app released by the Ministry of Health and the Ministry of Information and Communications that allows users to

update their daily health status and receive information about COVID-19 cases in their area. Deputy Prime Minister Vũ Đức Đam encouraged people living in areas with a high concentration of COVID-19 cases to use the app. Passengers on international flights to Vietnam and all short-term visitors are now required to download and use Bluezone.

The Philippine government announced in mid-March 2021 that StaySafe would be fully implemented by the end of the month. The Philippines' StaySafe.ph application was developed and previously managed by Multisys Technologies Corp (a private company), while the National Task Force against COVID-19 is the data controller and is composed of multiple government agencies, raising accountability concerns over data usage and storage. However, as the Philippine government began fully implementing StaySafe, the Department of the Interior and Local Government (DILG) became the end-user of the application on March 29, 2021, since it is the agency in charge of contact tracing. The implementation of the app was supported with Resolution 102, which mandated local government units to trace and quarantine all close contacts of COVID-19 patients. In early April 2021, SafeStay became the only platform in the Philippines to use the Google Apple Exposure Notification (GAEN) system, which uses bluetooth to alert other users of potential exposure to COVID-19 while protecting users' identity by changing the ID on users' phone every 10-20 minutes. The GAEN System is also only accessible by public health authorities, and government agencies using the system are expected



to meet certain privacy, security, and data usage criteria. The shift to using the GAEN system also resulted in citizens' ability to delete their data from the government system, and manual contact tracing data will be destroyed after 60 days. In **November 2020**, the Inter-Agency Task Force for the Management of Emerging Infectious Diseases made StaySafe usage mandatory in all national and local government agencies. The application was also criticized for not having clear accountability mechanisms over the data collected through the app, as well as not clearly explaining the data collection practices and the **purpose** for the data collected. While the government stated that it intended to **fully implement StaySafe** by the end of March 2021 — the first attempt for the Philippines to have a national contact tracing effort — an **uncoordinated contact tracing effort** from regional governments has reduced the number of close contacts who were traced from 7 to 3 from the beginning to the end of March, undermining the usefulness of StaySafe.

Overall, contact tracing applications in Southeast Asia will require more widespread usage to be effective. However, the public's trust depends largely on the worthwhileness of having the app, which will require governments to employ larger-scale media campaigns or integrate app usage into daily life, as Singapore has proposed.



## EVOLUTION OF COVERAGE OVER TIME.

Our project started as we noticed an uptick in news coverage on the intersection of technology, surveillance, privacy, and the pandemic. Inspired by Chris Gilliard, Professor of English at Macomb Community College who started to compile a crowdsourced list on a [Twitter thread](#) on March 11, we started gathering news articles. We soon realized, however, that the volume of relevant stories seemed to exceed what could be compiled manually. At this point, we turned to Media Cloud to gather articles more systematically and exhaustively. We hypothesized that we would see a significant uptick in the publication of news stories on digital surveillance in March as the

pandemic spread across the world, but we were interested in finding out how this public attention would evolve.

Looking at the number of stories over time (figure 2), we note a significant increase starting in mid-March. News coverage of digital surveillance was sustained for nearly 3 months, reaching its peak on May 5th (with 65 stories that day), and then started decreasing significantly. In other words, issues of digital surveillance received sustained news attention in the early months of the pandemic, but appeared to gradually lose their newsworthiness, even as the deployment of digital technologies in response to the pandemic continued.

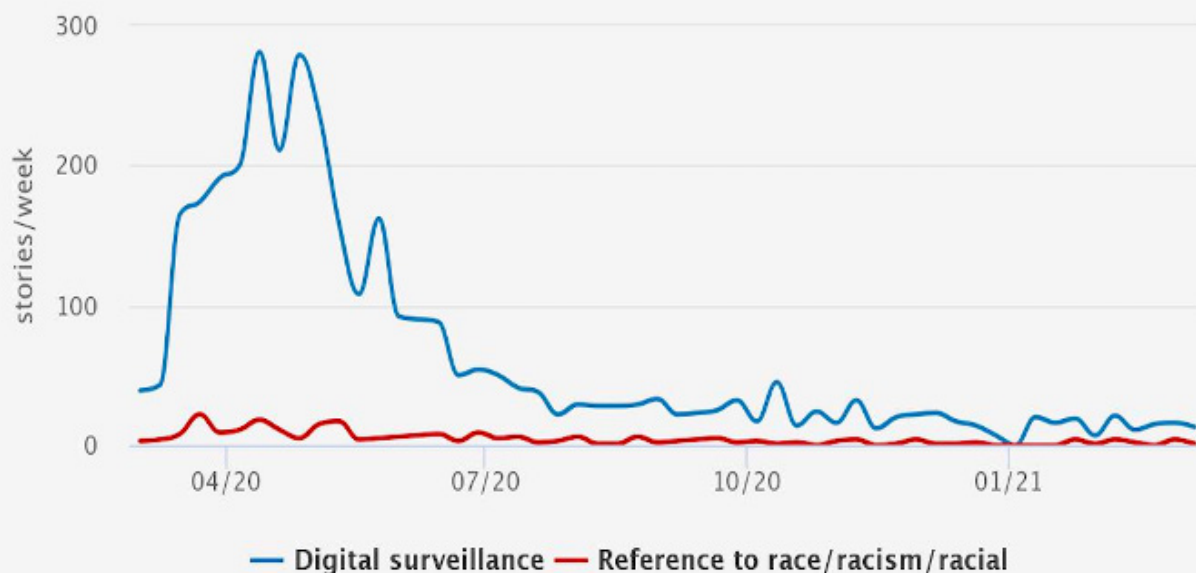


**Figure 2 – Amount of stories/day on covid-related digital surveillance**  
(Source: Media Cloud, Global English Language News Source)

Given the large US focus of the stories in our dataset, our team decided to explore if the Black Lives Matter (BLM) protest might have spurred further public discussions of the intersection of racial injustice and pandemic-related digital surveillance. Why ask this question? The BLM protests following the killing of George Floyd raised awareness about the importance of dismantling institutional racism and opposing police violence, all the while data about the disparate impact of the pandemic on the Black community in the United States started to emerge (COVID Racial data tracker, 2020). In addition to the twin threats of police violence and the pandemic, BLM protesters also faced digital surveillance in the form of, notably, facial recognition and stingray technology (Vincent, 2020; Zetter, 2020). While primarily a U.S. news event, many other countries around the world also organized solidarity protests, making

the issue of anti-Black racism newsworthy beyond U.S. borders. In sum, the BLM protests had relevance to both the pandemic and issues of digital surveillance, hence why our team decided to assess if it impacted news coverage of pandemic related digital surveillance.

Despite a clear general uptick in media interest for issues of racial justice and racism, these did not seem to widely pervade discussions of digital surveillance in English language news. We did not observe any significant growth in stories including the words “race”, “racism” or “racial” within our corpus. Instead, the number of stories including these keywords remained very low throughout the timeframe of our study, even as the peak of coverage of pandemic related digital surveillance coincided with the high point of the BLM protests (figure 3).



**Figure 3** – Comparison between the number of stories on covid-related digital surveillance and stories on covid-related digital surveillance that included “race”, “racism” or “racial”.  
 (Source: Media Cloud, Global English Language News Source)

This blind spot in news coverage should not be misconstrued as implying that discussions of the intersection between digital rights and racial justice do not exist elsewhere in society. In the US specifically, there are particularly active and vocal communities of scholars, activists, and policy makers, particularly women of color, who contribute to raising public awareness of this intersection (Noble, 2018; Benjamin, 2019; Buolamwini, 2020; Petty, 2020). Our finding, however, suggests that conversations discussing the relationship between digital surveillance, the pandemic and racial justice seemed marginal in comparison to general news coverage of covid-related digital surveillance.

## **CIVIL SOCIETY ORGANIZATIONS MOST FREQUENTLY MENTIONED.**

To understand the place and roles of civil society in news coverage, we look at which civil society organizations most often appeared in the news. Using Media Cloud's CLIFF-CLAVIN engine (D'Ignazio et al. 2014), itself relying on Stanford's Named Entity Recognizer (Finkel, Grenager and Manning, 2005), we identified 11 civil society organizations that journalists most often mentioned in their coverage:

- American Civil Liberties Union (ACLU) (n=180 stories)
- Human Rights Watch (HRW) (n=138)
- Amnesty International (n=136)
- Electronic Frontier Foundation (EFF) (n=111)
- Privacy International (n=81)
- Internet Freedom Foundation (IFF) (n=59)
- Surveillance Technology Oversight Project (S.T.O.P.) (n=43)

- Red Cross / IFRC (n=39)
- Bill and Melinda Gates Foundation (n=38)
- Electronic Privacy Information Center (EPIC) (n=37)
- Access Now (n=36)

These organizations fall into three broad categories, reflecting a diversity of perspectives within civil society about digitally enabled public health responses:

1. Watchdog role - civil liberties advocacy
2. Watchdog role - digital policy advocacy
3. Data-driven civil society activities.

## **Watchdog role - civil liberties (1) and digital policy advocacy (2)**

Most of these organizations appeared in news coverage to advocate for strong data privacy and protection in the collection and use of health data; to call for the emergency surveillance measures to be transparent, necessary, and proportionate; and to raise concerns about the broader risk of institutionalizing digital surveillance tools that could, down the line, erode civil liberties. A closer look at these specific organizations point to the growing alignment and interactions between digital rights groups - like EFF, Privacy International and Access Now - and more broad-based civil society organizations, in particular human-rights focused ones, like Amnesty International, Human Rights Watch and the ACLU. A prior report from the Digital Civil Society Lab described this as the “core” of digital civil society: “existing alliances and organizations where expertise cuts across digital policy and social issues” (Bernholz, Ozer, Wainscott, and Elhai, 2020, p. 21).

### (3) Data-driven civil society response to the pandemic

Out of these 11 organizations, two (the Red Cross and the Bill and Melinda Gates Foundation) appeared in the coverage because they used digital technologies as part of their response to the public health crisis. The Red Cross was featured because it launched in Austria (and on behalf of the Federal Ministry of Health) the first contact tracing app (Stopp Corona) in Europe (Busvine, 2020). The Bill and Melinda Gates Foundation, for its part, appeared in connection to several of its initiatives including a partnership with the State of New York to use technology to improve education (Camera, 2020); a research collaboration with the Institute for Disease Modeling which used Facebook data to assess the relationship between mobility patterns and COVID-19 transmission in King County, WA (Burstein et al., 2020); and the GAVI vaccine alliance (in which the Bill and Melinda Gates Foundation is a core partner) announcing several efforts to digitize immunization data (GAVI, 2020).

Whether they conduct digital privacy advocacy or use digital technologies as part of their social mission, our results demonstrate a dominant visibility given to U.S.-based, and to a lesser extent U.K.-based, organizations. While many of these organizations have a global remit and conduct work and advocacy in different parts of the world, only one is entirely based outside of Euro-America (Internet Freedom Foundation, in India).

U.K.-based, organizations. While many of these organizations have a global remit and conduct work and advocacy in different parts of the world, only one is entirely based outside of Euro-America (Internet Freedom Foundation, in India).

### FAR-RIGHT MIS/DIS-INFORMATION AND CONSPIRATORIAL RHETORIC.

A significant trend we noticed was the presence of far-right news sources amplifying conspiracy theories. One of the most productive outlets in terms of number of stories published was Zero Hedge. In our corpus of 3735 stories, it was the fourth most productive media source (n=74) behind the *Washington Post* (n=144), *Politico* (n=105), and *Forbes* (n=94), and ahead of CNN (n=61), the *Guardian* (n=56) and the *New York Times* (n=54). It also registered relatively high in terms of Facebook shares as the 19th source, with 16751 shares (as recorded by Media Cloud). Zero Hedge was created in 2009 by Daniel Ivandjiski, a Bulgarian-born, U.S.-based financial blogger. In *Network Propaganda* (2018), Benkler, Farris and Roberts describe Zero Hedge as a major node in the right-wing media ecosystem alongside Breitbart and Infowars. For instance, they show that Zero Hedge played an important role in uplifting several conspiracy theories, including that Hillary Clinton admitted to funding and arming ISIS (Benkler, Farris and Roberts, 2018, p.141), or that DNC staffer Seth Rich was killed by the Clintons (p. 247).

In February 2020, Zero Hedge was banned from Twitter for violating its rules against abuse and harassment (Datoo, 2020). The website listed the name, email address and phone number of a scientist at the Wuhan Institute of Virology, claiming without evidence that he created the COVID-19 virus (Broderick, 2020). Despite the ban, Yang, Torres-Lugo and Menczer (2020, p.4) found that Zero Hedge content was still among the most widely shared low-credibility information sources on Twitter. Its stories often mixed fears of digitally driven state surveillance with anti-vaccine rhetoric.

These stories would often quote content from mainstream media and civil liberties organizations, while adding commentary defending conspiratorial ideas. A recurring target in these stories was Bill Gates and his foundation; Zero Hedge went as far as publishing on its site the email and passwords of employees of the Foundation, which had been leaked on 4chan.

In our sample of stories which received the most Facebook shares, we noted several similar far-right sources including Government Slaves, Summit.news, TheLastAmericanVagabond.com and WorldNetDaily - several of which have been found to play a role in what the WHO called the coronavirus infodemic (Ball and Maxmen, 2020; Donovan and Wardle, 2020; Gregory, 2020). Their presence here points to the active role of this media ecosystem in shaping public discourse about digital surveillance. Indeed, a growing number of studies show that various right leaning and far-right sources are spreading COVID disinformation, and that consumption of this content correlates with less compliance with public health guidelines, such as physical distancing. (Gollwitzer et al., 2020; Simonov et al., 2020).

Worryingly, even when these sources are banned from having an official page or channel on mainstream platforms like YouTube or Facebook, they find other ways to circulate their content widely online. For instance, a report by researchers at the Oxford Internet Institute exploring junk news distribution on the Telegram messaging platform found that Summit.news received more attention on Telegram than the *Guardian*, the BBC or CNN (Knuutila, 2020). The prevalence of these sources in our corpus is worrisome: they undermine public trust in science and,

as such, fundamentally worsen our collective ability to solve the public health crisis. They also represent a pressing challenge for civil liberties and digital rights advocacy groups who may see far-right conspiracy theories dilute or co-opt their message and concerns about protecting digital privacy and opposing mass surveillance.

## **MOST WIDELY SHARED STORIES ON FACEBOOK**

The following section presents results from a content analysis of stories most widely shared on Facebook. The core questions driving this analysis are: who has a voice in these stories? Are their gender and racial biases in the sourcing of civil society voice? And did news coverage of pandemic-related digital news surveillance include discussions of an unequal harmful impact of digital surveillance?

### **SOURCING PRACTICES: OVERVIEW.**

The voices included in each story bring various takes on a topic and are given the opportunity to mainstream their perspectives. Each stakeholder not only brings different expertise but also highlights the relevancy of an issue to their field. As Brennen et al. (2019, p.1) explain: “the people who populate news content as sources and story subjects give shape to reporting and commentary by providing examples and anecdotes, giving testimony, providing context, and evaluating claims.” As such, understanding the types of perspectives included in news coverage provides a better understanding of the framing of public discourses on COVID-19-related digital surveillance. Our team thus decided to assess how different types of voices are or are not given space in news coverage.

Of the 122 stories that we manually coded, 55.7% included voices from *civil society*, such as digital rights advocates or NGO workers; 49.2% included voices from the world of *politics*, such as politicians, elected officials, or State representatives; 37.7% included voices from representatives from the *industry*, such as tech executives and engineers; 25.4% included voices from *scholars*, and 13.9% were from *end users*, i.e. people impacted by a technology, such as the user of a contact-tracing app.

These results challenged some of our research assumptions. One of the few studies of news sourcing in coverage of digital technologies found that *industry* sources largely dominated the coverage of AI topics (60%), followed by *government* (18%), *scholars* (16%), and *civil society* (4%) (Brennen et al., 2018, p. 3). With the exception of the sourcing of scholars, our results paint a different picture, one where civil society leads the coverage. This finding highlights the important role played by civil society in public discourses around digital surveillance; it suggests that civil society plays an important role in setting the agenda on issues of digital civil liberties issues.

While an encouraging sign, this prominence can probably be explained by our specific focus on “surveillance” and “privacy”, keywords likely to surface stories particularly relevant to digital rights and civil liberties advocate. As such, it is possible that civil society voices were not as prominent in the broader news coverage related to the pandemic and digital technologies. Future studies could help shed light on this by assessing systematically how widespread privacy concerns were in broader news coverage, especially in comparison to references to

the positive aspects of digital response to the pandemic.

The smallest voices category represented was end-users, who we defined as people impacted by digital surveillance measures. Another way to describe this category is to think of it as a form of *vox pop*, a news segment where a reporter asks the public's opinion. End-user voices often provide insight into how the public perceives these projects, both before and after implementation. Most of the end-user voices that we encountered in our study lived in China – a country often held up as the example of digitally-enabled authoritarian control - and South Korea – one of the first countries to rely extensively on digital surveillance to combat the virus.

Although our study focused on the types of voices quoted within the articles, we did not systematically count how long these quotes were. A qualitative assessment of the stories suggests that politicians and business leaders were routinely quoted several times throughout the article, thus giving greater attention to their perspectives. End users, in contrast, seemed to be often only mentioned with a few words, therefore creating a dramatic imbalance in the salience and amount of content for different types of voices. Future studies could quantitatively analyze the length of quotes within the articles to gauge these discrepancies systematically.

## **GENDER AND RACIAL BIASES IN SOURCING CIVIL SOCIETY VOICES.**

As we analyzed the voices represented in news stories, we sought to assess any gender and racial biases in the sourcing of civil society voices. We focused exclusively



on members of civil society because this was the most prominent category of voices in our sample. Studies assessing racial and gender biases are important tools to face the state of various social inequalities. It provides a baseline of information that can point to areas where disparities are particularly dire or reveal positive trends that can serve as examples. However, this process is also fraught with methodological challenges and limitations. Human identities are always complex, diverse, multiple social formations. Statistically assessing racial and gender biases, on the contrary, often involves fixing individuals in categories that do not necessarily reflect their identities. As Chakravarty et al. write, “scholars trying to conduct varying forms of disparity analyses are left to either abandon the analysis altogether or find reliable ways to infer individual race/ethnicity” (2018, p.258).

To do so for racial disparities, we follow the lead of Chakravarty et al. (2018), we replicated their use of a mix of surname, visual data and publicly available biographical information to infer the likely race of individuals, collapsed into categories of “racialized as White” and “racialized as non-White”.<sup>5</sup> To assess gender disparities, we used a mix of first name, pronouns and publicly available biographical information. Undoubtedly, this process has limitations and masks the fluidity and multiplicity of self-identification. It is useful to think of this

process as one that infers “social/structural positionality” more than “identity” to use a distinction made by [Arrianna Planey](#). We see it as an imperfect but necessary way to statistically assess the extent of racial and gender disparities in news coverage.

From our assessment, we observed the following: of the *civil society* voices that were quoted, 77.2% were “racialized as White”<sup>6</sup> and 19.1% were “racialized as non-White”, while 68% were male and 32% female.<sup>7</sup> The female voices cited were often White, such that the space for voices of women of color seemed particularly small. Civil society voices racialized as non-White were mainly quoted in articles focusing on countries outside of the United States, such as in East Asia and Africa. As a result, there were very few Asian-American or African-American voices quoted, in spite of the large U.S.-focus on the articles under study here (both in our overall dataset and in this smaller corpus).

These findings point to broader patterns of systematic racism and gender inequalities shaping the sourcing practices of journalists, and consequently public debates on digital surveillance.<sup>8</sup> However, the lack of representation in civil society voices quoted, coupled with the prominence of U.S. and U.K. civil society organizations (see [earlier findings](#)), likely illustrates inequalities specific to the realm of digital privacy advocacy too. This media bias seems to reflect a structural lack of adequate racial

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<sup>5</sup> The process consists in matching surnames of people quoted against the list of frequently occurring surname in the 2010 US census: “Those whose surnames are identified with a specific racial/ethnic group 90% or more of the time were coded as belonging to that group. Those that fell in the 80–89% range were categorized based on a surname match and human-coded categorization, based on visual and other author data. Finally, those authors whose surname matches fell below 80% or whose surname ID and visual coding did not match were coded individually based on all available information, including biographical data” (Chakravarty et al., 2018, p.258).

<sup>6</sup> We were unable to make a determination for 3.7% of voices.

<sup>7</sup> None of the articles cited voices which were explicitly non-binary or gender non-conforming.

<sup>8</sup> It is worth noting another – and non-mutually exclusive - hypothesis to explain biases in news sourcing. The corpus under study here consists of articles widely shared on Facebook. As such, one possibility could be that Facebook’s algorithmic affordances play a role here. This role might be negative or positive, depending on the baseline. A content analysis of all the 3735 stories would help shed light on whether Facebook’s popularity affordances encourage or reduce the spread of content more likely to feature gender and racial biases in sourcing civil society voices.

and gender representation within this sphere of civil society, especially in the high-level organizational positions that lead to greater media visibility.

## **UNEQUAL HARMFUL IMPACT OF DIGITAL SURVEILLANCE.**

Lastly, we coded explicit references to how the harmful consequences of digital surveillance have a greater impact on institutionally marginalized communities (O’Neil, 2016; Noble, 2018, Buolamwini and Gebru, 2018). For instance, in the United States, there is growing scholarly evidence that surveillance technologies such as facial recognition are used by law enforcement to target Black communities, even as the technology is not working accurately and can result in wrongful arrests (Hill, 2020). Our goal here was to assess the extent to which these perspectives are being mainstreamed in news coverage.

Roughly ¼ of the articles we reviewed (n=30) included an explicit reference to how different digital surveillance technologies could disproportionately harm variously disadvantaged and marginalized communities. Most of these articles generally mentioned this issue only in passing rather than providing a sustained focus on it. The marginalized group most often mentioned was the Uyghur community in China, even as most articles focused on the US. Civil society voices featured routinely in news stories (n=24) referring to the unequal harmful impact of digital surveillance. In contrast, only four of these stories included voices from end-users. In other words, when the news coverage addressed the unequal impact of surveillance technologies, it predominantly featured civil society voices, largely racialized as White and male, even as it rarely gave a voice to marginalized communities. The lack

of end-user voices, coupled with the lack of diversity in civil society voices quoted, raises several questions for journalists and civil society alike, which we address in more detail in our **recommendations section**.



# 05

## RECOMMENDATIONS

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By highlighting salient points and blind spots of media narratives, our findings have implications for news organizations reporting on digital surveillance, as well as civil society organizations and scholars working on related issues.

Despite the global nature of coronavirus-related digital surveillance initiatives, there is a stark geographical imbalance in news coverage. The disregard for Southeast Asia, Africa and Latin America is characteristic of international news coverage more generally. It also likely points to a lack of local and sustained anglophone news coverage emerging from these regions as well as different public perceptions of data privacy. These issues are structural and thus challenging to tackle, but well-resourced news organizations can contribute to addressing them when reporting on digital surveillance by intentionally:

- pursuing more reporting about these parts of the world, where data protection and privacy laws are often nonexistent or in draft process, hereby heightening the need for public accountability and vigilance.

- investing time and resources to create links to local civil society organizations and collaborations with news organizations/journalists working in non-anglophone media ecosystems.

Regarding news sourcing, we find that journalists could do more to include the voices of end-users in reporting on digital surveillance. However imperfect, the *vox pop* tradition in journalism has always been influential in representing everyday people in public debates (Beckers, 2019). In many ways, social media platforms today provide such a space. Still, journalists should not retreat from trying to directly capture the voice of everyday people, particularly because journalism amplifies these perspectives in a way that social media can't always. A documentary like *Coded Bias* (2020) provides a powerful example of how

individual testimonies of people impacted by technology can efficiently ground a broader set of complex technological and regulatory debates. If our societies are to build digital ecosystems designed for the public (Zuckerman, 2020), public discussions of these issues ought to include everyday people impacted by technology, especially those from marginalized and oppressed communities who most often bear the cost of their harmful impact.

Similarly, our finding of the racial and gender disparities in the sourcing of civil society voices highlights the need for journalists to broaden the range of civil society voices they consult and include in their coverage of digital policy issues. This finding also likely points to a lack of diversity in high-level positions in prominent civil society organizations working on digital privacy. Future studies and organizational audits would contribute to assess these disparities more systematically and support the sector's reckoning with how racial and gender inequalities shape it.

Lastly, digital rights and civil liberties advocates should be aware of the presence of far-right misinformation and conspiracy theories espousing anti-surveillance rhetoric. Scholars of online media manipulation, like Joan Donovan, are finding that the coronavirus infodemic is creating some "unusual alliances" (Ball and Maxmen, 2020). An optimistic reading of the anti-surveillance sentiment cutting across political lines would be to see this as an opportunity for privacy-protecting digital policies to attract broad political support. For instance, in the United States, a recent survey by the Pew research center (Auxier, 2020) found that a majority of Americans said the potential risks of data collection outweighed the potential benefits (81% of respondents when asked

about data collected by companies and 66% when collected by governments). A more pessimistic reading would be to see this discursive affinity as undermining the legitimacy of the arguments and concerns of privacy advocates. Civil society organizations should expect to see their media quotes repurposed as part of conspiratorial anti-surveillance rhetoric and might need to prepare to publicly distance themselves from far-right groups. And, as we discussed with the case of the Bill and Melinda Gates foundation, civil society organizations should also prepare for the possibility of becoming themselves targets of mis/dis-information. These two aspects – civil society becoming a target and a part of mis/dis-information – deserve further analysis by scholars and engagement across the sector to develop strategies to mitigate these harms.

We should welcome the initial media attention on privacy and coronavirus-related digital responses in the early months of the pandemic. It is likely to have shaped not only public debates, but also policymaking and technological design of these responses. However, it should not stop here. Given the ongoing nature of the COVID-19 pandemic and the ever-growing digitization of social life, issues of digitally enabled public surveillance are here to stay, and in fact, are likely to become even more pressing. Our report points to several components that would make future public discussions more inclusive, informed, and robust. These include the development of a more global outlook; a greater attention to the voices of everyday people, particularly those from marginalized communities; the inclusion of more diverse civil society voices; and a particular attention to the role played by an ecosystem of mis/dis-information in shaping public debates on these issues.

# 06

## RESOURCES

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Since the beginning of the COVID-19 pandemic, several scholars, journalists, advocates, and civil society organizations have been involved in various efforts to “track the trackers” and to explore digital responses to the pandemic as well as emergency surveillance measures. Below is a list of resources that our team encountered during our research, and which may be useful to others interested in the intersection of technology, surveillance, and the pandemic.

### **Access Now - Digital Rights in the COVID-19 Fight**

Access Now has engaged through various mediums, including long-form reports, podcasts, open-letter submissions, press releases, and conferences, to explore [the implications of COVID-19](#) on privacy, the freedom of expression, and access to information in countries around the world. They have explored both the intentional and unintentional repercussions of contact tracing, reactionary policies to COVID-19 by governments, and ways that public-private partnerships can bring greater transparency to surveillance technologies.

### **CDC - Guide to Global Digital Tools for COVID-19 Response**

The [guide](#) compares the District Health Information Software (DHIS2), the Surveillance, Outbreak Response Management and Analysis System (SORMAS), Go.Data, Open Data Kit (ODK), Epi Info, CommCare, KoboToolbox, Excel, and paper. Each approach has been deployed in various countries for contact tracing, investigations, and/or, in the case of DHIS2 and SORMAS, national surveillance. This guide is not meant to be an all-encompassing guide to all available tools or features. Rather is it focused on the

primary tools that are being reported to CDC and the functions that are commonly asked about.

### **Center for Democracy and Technology - Webinar series on COVID-19.**

The Center for Democracy and Technology held a webinar series related to COVID-19 Contact Tracing Apps in the US, EU, and Asia, and published reports on the topics of government surveillance, student privacy, and election security. They are working directly with stakeholders around the world through trainings to address these issues.

### **Chris Gilliard - Thread on the intersection of privacy / tech / surveillance / coronavirus.**

Chris Gilliard, Professor of English at Macomb Community College (@hypervisible on Twitter) compiled on a [Twitter thread](#) a crowdsourced list of articles and opinion pieces at the intersection of privacy, technology, surveillance and the pandemic.

### **CIPESA - resources on covid-19 and data privacy in Africa.**

The Collaboration on International ICT Policy in East and Southern Africa (CIPESA) works to advance rights-respecting Internet policies in East and Southern Africa through research and advocacy. Since the beginning of the pandemic, they have compiled several useful [resources related to data privacy and the pandemic across Africa here](#).

### **Covid Governance Group - Covid Governance and Data Protection Explorer Tool**

This [website](#) contains information on what data countries are collecting in relation to the global Covid-19 pandemic, and how this

information can be kept and used according to data protection laws in that country. The explorer tool aims to help people understand and analyze data protection issues in relation to the covid-19 pandemic and the measures put in place all over the world to address it.

### **Derechos Digitales - resources on digital rights and covid in Latin America.**

Derechos Digitales is a civil society organization based in Chile which documents the digital rights impacts of legal and regulatory frameworks throughout Latin America. Since the beginning of the pandemic, they have compiled several useful [resources related to data privacy and the pandemic across Latin America here](#).

### **EFF - Guide to Digital Rights During the Pandemic.**

The Electronic Frontier Foundation (EFF) put together a free, Creative Commons-licensed [collection of articles on the intersections between COVID-19 and technology](#). This book was written by their teams of lawyers, technologists, activists, and experts in the first few weeks of the United States' COVID-19 shut-down, building on years of preparative work.

### **ICNL - COVID-19 Civic Freedom Tracker**

The International Center for Not-for-Profit Law (ICNL) has launched a “[COVID-19 Civic Freedom Tracker](#)” to monitor different governments’ responses to COVID-19, as well as the ways that these responses, and specifically emergency laws, impact civil freedoms and human rights. In addition, they publish reports and op-eds in news outlets on topics related to emergency declarations made by governments around the world and the impact of these measures

on the freedom of expression, freedom of assembly, and privacy rights, as well as collate regional resources.

### **Jinbonet - Covid-19 and the Right to Privacy in South Korea report**

Jinbonet is a South Korean non-governmental organization that provides network services for civil society and that advocates for human rights in the information society, especially the rights to communication, free speech and privacy, through various activities responding to the threats of government and market powers. In addition to ongoing monitoring of trends in digital responses to COVID-19, they released a **report summarizing the cases and issues of digital rights violations that have been controversial during the response to COVID-19 in South Korea.**

### **Jonathan Albright - The Pandemic App Ecosystem: Investigating 493 Covid-related iOS Apps across 98 Countries**

Jonathan Albright created a database of Covid-19 applications (from state-sponsored official “track and trace” and quarantine monitoring apps to Covid-related apps offering everything from curated information, clinical care guidelines, and workplace/ campus outbreak monitoring). The database includes extensive metadata for each app including requested permissions, seller/ developer location, the embedded SDKs. The data can be interactively explored and filtered in almost any browser via the **Tableau visualization:** [https://public.tableau.com/profile/d1gi#!/vizhome/CViOS\\_493/iOSSDKsbyAppandCountry](https://public.tableau.com/profile/d1gi#!/vizhome/CViOS_493/iOSSDKsbyAppandCountry)

### **MIT Technology Review - COVID Tracing Tracker**

Patrick Howell O'Neill, Tate Ryan-Mosley and Bobbie Johnson at the MIT Technology Review published a COVID-19 **Tracing Tracker**—“a database to capture details of every significant automated contact tracing effort around the world.” They are using crowd-sourced information to add data to the tracker in order to make it more accurate and reflective of global governments.

### **Nature - COVID-19 and Digital Privacy**

The journal Nature published in August 2020 a **special section dedicated to COVID-19 and Digital Privacy.** This focus of Reviews, Perspectives and comments considers the myriad ways in which digital applications have been applied in the pandemic and the spectrum of privacy concerns for health data

### **One Zero - Mapping Coronavirus-related New Surveillance Programs Around the World**

Dave Gershgorn at OneZero **mapped** how the coronavirus is driving new surveillance programs around the world. This effort examines how 34 countries have enacted new surveillance measures to combat coronavirus and tries to understand the relationship between tracing COVID-19 and data privacy risks.

### **Paradigm Initiative - Covid-19 and digital surveillance report and policy brief.**

Paradigm Initiative is a social enterprise with offices in six African countries working to connect underserved young Africans with digital opportunities and ensures protection of their rights. Since the beginning of the pandemic, it has released a **report on health surveillance in Africa** and a policy brief

on [Mobile Data for Covid-19 surveillance in Nigeria](#).

## Privacy International - Tracking the Global Response to COVID-19.

Privacy International is currently tracking four privacy concerns related to COVID-19: the implications of [immunity passports](#), [quarantine enforcement procedures](#), [smartphone applications](#), and [telecommunications](#). They are tracking news articles related to these topics and are focused on both the public and private sectors' response in tracking COVID-19 by preemptively tracking the trackers' new partnerships and their violations.

## S.T.O.P - COVID-19 and Privacy

The Surveillance Technology Oversight Project (S.T.O.P) has a [page dedicated to monitoring developments related to digital privacy and COVID-19](#), as well as a list of recommendations. The page is updated with information about relevant federal, State, and Local Emergency Responses, reports, op-eds, press releases, sign-on letters, and media coverage.

## Steven Song - Country responses regarding Internet access during the COVID-19 Pandemic

[This list](#) is an initiative led by Steve Song, a Fellow at the Mozilla Foundation. It tracks country responses to changes in internet access during the COVID-19 pandemic. The authors point out that making up for the digital divide is critical when everything is remote and emphasize the importance of affordability of technology, especially phones.

## Top 10 VPN - COVID-19 Digital Rights Tracker

Top 10 VPN has worked on a [COVID-19 Digital Rights Tracker](#) that looks at how many countries have COVID-19 surveillance apps, what types of apps or surveillance measures they are and how widely used they are. They publish a country-by-country breakdown of COVID-19 tracker apps, surveillance measures and censorship.

## Uta Meier-Hahn - Digital policy responses to the coronavirus pandemic

[This document](#) is a crowdsourced list by Uta Meier-Hahn with resources pertaining to digital policy responses and current policy issues pertaining to COVID-19 to interrogate how governments and other key stakeholders are handling the challenges imposed by the pandemic. Specifically, the document compiles different countries' responses to the following topics: liberation of data caps, zero-rating, and emergency data allowances; internet interconnection policies; fees on money transfers; location-based monitoring; and disinformation and fake news.

# 07

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## ABOUT THE DIGITAL CIVIL SOCIETY LAB

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The Digital Civil Society Lab (DCSL) at Stanford University aims to understand and inform civil society in a digitally dependent world. We engage scholars, practitioners, policy makers and students across four interconnected domains that shape a thriving and independent digital civil society: organizations, technology, policy, and values. Through fellowships, research, events, and teaching, we nurture an emerging generation of scholars, community advocates, technologists, and policymakers shaping the future of digital civil society.

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