Mandatory Contact Tracing during COVID

Dhruval Bhatt
May 31st, 2020

Since its early emergence at the end of 2019, novel coronavirus has spread to 213 countries and territories around the world, reported 6,218,386 confirmed case and a death toll of 372,338 till date (Worldometer). This airborne pandemic is quick to spread and given the lack of testing and vaccination, the most effective containment strategy is social distancing. After several months, lockdowns are easing up and more people are interacting with each other, making it imperative to identify infected individuals and caution their network to contain the spread. In the United States, Centers for Disease Control and Prevention (CDC) has provided detailed guidelines to educate and train public health officials for case investigation and contact tracing, "a core disease control measure employed by local and state health department personnel for decades". The basic idea is that public health official confidentially interview an infected person to track every person they have interacted with in the timeframe of infection and then resourcefully locate those people, without sharing any infected person's details, to inform and educate them about their chances of infection. This is a tedious process that would require a large trained workforce and is still susceptible to delays and privacy breach.

In a technology enabled era, automated contact tracing and notification is possible. So, why not use it? CDC highlights that technology can be used to manage databases of records to automate notifications and follow ups, to allow people to electronically self-report their case and contacts and using Bluetooth or GPS to automatically trace exposure. These measures would reduce the routine workload of public health officials so that they can spend more time following up with individual needs of vulnerable populations and long-term measures. In addition, location-based tracing would improve the accuracy of data collected. It is unlikely that people precisely remember everyone they have met in a two-week period and in public spaces, it is impossible to know who they met and how to contact them. The time and effort to locate the everyone in possible contact is drastically reduced as they can be automatically tracked and notified.

While there are many benefits of technology, the consequential invasion of privacy causes apprehension for adoption of digital contact tracing. Globally, many countries have already started using or are pushing for centralized, location surveillance for contact tracing but experts caution

against that. Even if it appears as a temporary emergency measure, "[c]ivil liberties experts warn that the public has little recourse to challenge these digital exercises of state power" (Singer and Sang-Hun). This would seem to cause an outrage in United States, yet experts point to still existing 9/11 measures as an example. Even if the government abides to ethical use, such measures could lead to "consolidation of market power, insecure data accumulation, and surveillance concerns [as] byproducts of AI use" (Engler). The massive, private data could be leaked endangering people or private tech companies could be encouraged to use such data for proposes other than pandemic curb.

As a response to these privacy concerns, Apple and Google have pushed back on centralized data collection and "have designed a system that will work only with contact tracing apps that employ a decentralized model for data storage—meaning that data is held on individual phones" and that strictly adheres to opt in model (Daskal and Perault). This model empowers individuals by giving them the autonomy to participate and mitigates concerns of data misuse through decentralization. However, its effectivity is also reduced as many people may choose to not opt-in, Bluetooth technology is precarious and may not work in a crowded place, people may be notified of possible contact but they do not respond appropriately, and finally, the technological capability is not removed from these devices after the crisis (Engler). Additionally, it is not wise to simply rely on mobile phone driven technology. Demographics, such as, elderly, children, lower income families, technology wary individuals, users of phones not supported by these platforms, may be excluded from this model, further diminishing its benefits.

In these trying times, it is important to weigh out a solution that is maximizes the well-being of society, while considering that "surveillance efforts threaten to alter the precarious balance between public safety and personal privacy on a global scale" (Singer and Sang-Hun). The cost, in terms of lives, time and money, of not using technology to stop the spread, is too high. If there are measures to disable the technology after the crisis and have strict guidelines for its use, making contact tracing mandatory and even using more robust tracking, is reasonable. Routinely, we give up personal information, including location, for usage of free apps and better marketing so prioritizing mitigating health risk over risk of privacy breach seems doable and appropriate. When viewed from Rule Utilitarian framework, "to follow a moral rule because its universal adoption would result in the greatest net increase in happiness" or social contract theory, "that

rational people will agree to accept [rules governing people], for their mutual benefit", this prioritization is justified (Quinn). Just the fear of harms in future, should not stop us from doing what is good for everyone today. The confidence in this act, can come from a Kantian ethical notion, that "a good will is good in and of itself" and Act Utilitarian idea that "an action is good if its benefits exceed its harms" (Quinn). Both these would be true if government and businesses commit to privacy protection guarantees and healthcare workers continue to support everyone with aid of technology to contain the pandemic. When implemented correctly and used by most people, contact tracing can allow many people and businesses to peacefully return to a somewhat normal life without endangering everyone.

Finally, we should remember, that enabling contact tracing during COVID-19 is not giving up our rights as citizens and consumers. We can and should exercise the rights in a democratic nation to hold the government and big businesses accountable, if they do not comply after but right now, let's #staysafe.

References

Case Investigation and Contact Tracing : Part of a Multipronged Approach to Fight the COVID-19 Pandemic. (2020, April 29). Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/php/principles-contact-tracing.html

Countries where COVID-19 has spread. (n.d.). Retrieved from https://www.worldometers.info/coronavirus/countries-where-coronavirus-has-spread/

Daskal, J., & Perault, M. (2020, May 22). The Apple-Google Contact Tracing System Won't Work. It Still Deserves Praise. Retrieved from https://slate.com/technology/2020/05/apple-google-contact-tracing-app-privacy.html

Engler, A. (2020, May 6). A guide to healthy skepticism of artificial intelligence and coronavirus. Retrieved from https://www.brookings.edu/research/a-guide-to-healthy-skepticism-of-artificial-intelligence-and-coronavirus/

Singer, N., & Sang-hun, C. (2020, March 23). As Coronavirus Surveillance Escalates, Personal Privacy Plummets. Retrieved from https://www.nytimes.com/2020/03/23/technology/coronavirus-surveillance-tracking-privacy.html

Quinn, M. (2014). *Ethics for the information age*. Pearson.