

## The Story of the U.K.'s COVID App, and Other Pandemic Failures

Emily Taylor | Tuesday, March 30, 2021

There were grim anniversaries last week, a year since the first coronavirus lockdown in the United Kingdom. This time last year, I had developed a strange, breathless cough that didn't go away



A sign asks people to stay 2 meters apart to reduce the spread of COVID-19, London, June 22, 2020 (AP photo by Matt Dunham).

for eight weeks. But I was one of the lucky ones. More than 127,000 people in the U.K. didn't make it. The U.K. may have been overtaken more recently by other European countries, like the Czech Republic and Hungary, for the unhappy distinction of having the highest COVID-19 death rate per capita in the world, but it's still close to the top spot, as is the United States.

And Easter Sunday will mark the first anniversary of my uncle's admission to the Queen Elizabeth Hospital in Birmingham, just around the corner from the religious community where he lived in Harborne. He never returned home. He lived a life of service to others, but died alone two weeks later, apart from the nurses who paused amid the chaos of the COVID ward, and gathered around his bedside as he faded. Five hundred of us attended his funeral—on Zoom.

As the U.K. prepares to take its first steps out of a five-month lockdown this week, Britons are proud of the country's vaccination program. With nearly half of the adult population vaccinated (https://coronavirus.data.gov.uk/details/vaccinations), many hope that life could return to something like normal by the summer. Public health experts, however, warn that even with a vaccinated population, testing, tracking and contact tracing will become "more important than ever." (https://inews.co.uk/news/politics/what-happened-world-beating-test-trace-system-covid-pandemic-england-822767)

Before the vaccine, there was the app. In those early days of the pandemic, last March, the British government announced that it was going to build its own contract-tracing app, which it promised would be "world beating." (https://www.reuters.com/article/us-health-coronavirus-britain-track-idUSKBN22W1MW) Like many other aspects of its pandemic policies, it is a claim that didn't age well. Despite fashioning its own app, the National Health Service was forced to withdraw it shortly after it launched last May. The app was then recrafted to adopt technology provided by Google and Apple—more on that later—and relaunched in September.

## The Story of the U.K.'s Track and Trace App, and Other Pandemic Failures

A year on from the first lockdown, the U.K.'s Public Accounts Committee was recently scathing about the effectiveness of the government's testing, tracking and contact tracing program. Despite allocating 37 billion pounds, or some \$51 billion, over a two-year period, "there is still no clear evidence to judge [the program's] overall effectiveness (https://publications.parliament.uk/pa/cm5801/cmselect/cmpubacc/932/93203.htm)." A curious aspect of the committee's report that was released earlier this month is that the app seems to have vanished. No one is talking about it. It's like trying to find some aging 70s pop star who has disappeared from public life.

Why doesn't anyone want to talk anymore about the app that was supposed to be "world beating"? On one level, it makes sense that a population that has been largely sitting at home for five months might not be thinking about a track-and-trace app. But last year, it was everywhere. It was the great hope that was "going to prevent a second lockdown"—it didn't. Now, there are only tumbleweeds. It's not just the news reporting on the app that has vanished; speaking privately to friends in public health and cybersecurity, they had also lost track of what happened to the app.

That's a pity, because the app story is an object lesson in the awesome soft power of two companies, Google and Apple, which were able to impose their own preferred policy solution on democratically elected governments. I covered the app in a recent collection of papers on trends in technology for Chatham House, where I'm an associate fellow. "In essence," the paper concludes (https://www.chathamhouse.org/sites/default/files/2021-02/2021-02-16-covid-19-trends-technology-hakmeh-et-al.pdf), "Apple and Google withheld access to essential technologies until the UK agreed to align its data storage model with that advocated by the tech companies."

"The app is a terrible story," an individual who was involved in the U.K. app told me, on condition of anonymity. "Unless I've missed something, contact-tracing apps have been a failure worldwide. I've never seen any analysis on the impact of apps on the spread." Perhaps the app is an example of misplaced techsolutionism, rather than a rational policy response to a well-documented need.

Whether or not you agree with the Google-Apple policy of decentralizing app data, their imposition of a policy outcome on democratic governments raises questions of legitimacy.

Originally a homegrown enterprise, the U.K. app had a centralized data storage model to enable epidemiological analysis about the virus's spread. Shortly after launch last spring, there were reports that the app was failing to discover iPhones when the devices were locked (https://github.com/nihp-public/COVID-19-app-iOS-BETA/issues/2). Several tricky technical problems need to be solved to make a track-and-trace app work.

Bluetooth is not designed for the level of sensitivity required to evaluate the risk of virus transmission—how close, for how long? Will the app drain the battery? Will it work when the phone is locked? Will it be made available in app stores?

It wasn't going to be possible to solve all these problems without cooperation from Google and Apple. The two tech giants together control 99.75 percent of the global market for mobile operating systems (https://judiciary.house.gov/uploadedfiles/competition\_in\_digital\_markets.pdf?utm\_campaign=4493-519), through Google's Android and Apple's iOS. Each has an app store for their operating system and, to some extent, acts as gatekeeper in determining what apps can appear there.

An added complication is that Google and Apple themselves entered the COVID app market in April 2020 after several governments had already deployed their own apps for tracking and tracing the virus. Yet neither company would permit government apps to centrally collect epidemiological data, on the basis that it would set an undesirable precedent. "If [public authorities] create an app, it must meet specific criteria around privacy, security and data control," Apple declared last September (https://covid19-static.cdn-apple.com/applications/covid19/current/static/contact-tracing/pdf/ExposureNotification-FAQv1.2.pdf). Teaming up with privacy campaigners, the companies "played hardball with politicians (https://www.politico.eu/article/google-apple-coronavirus-app-privacy-uk-france-germany/)," eventually forcing a U-turn in the U.K., France and Germany.

The preferred policy from Google and Apple is not without its merits. Human rights and privacy experts warn of the potential dangers of centralized data storage, preferring a decentralized model instead (https://github.com/DP-3T/documents/blob/master/DP3T%20White%20Paper.pdf). In contrast, though, the public health professionals that I spoke to for my Chatham House paper were unanimous in their view that *only* a centralized model would serve epidemiological purposes during a pandemic.

At the heart of this decentralized/centralized argument is a profound ideological difference: Should your public health policies prioritize individual liberty or the collective good? Even if you exclude strictly authoritarian states like China from the calculation, it is uncomfortable to reflect that death rates in the U.K. and U.S., both with their individualistic cultures, are far higher per capita than in countries that prioritize the collective good. Japan has twice the population of the U.K. but has reported only 9,000 deaths from COVID-19, to the U.K.'s 127,000. Thailand, a population similar to the U.K., has had fewer than 100 deaths; South Korea, just over 1,700.

Of course, people in many Asian countries have a far greater tolerance for government surveillance against a virus than, say, most Americans would put up with. South Korea's initial superspreader event (https://www.ibtimes.com/south-korea-coronavirus-cases-spike-following-outbreak-itaewon-bars-nightclubs-2973823) Was not identified by a contact-tracing app, but "a vast surveillance architecture," (https://www.newyorker.com/news/news-desk/seouls-radical-experiment-in-digital-contact-tracing) including mobile GPS tracking and payment data. The New Yorker reported that South Korean officials expected a backlash against such intrusive powers, but "public outrage has been nearly nonexistent." The article concludes that many South Koreans trusted their government's promise to limit intrusions solely for the purpose of combating the virus.

Human rights experts will tell you that the real dangers occur when intrusive powers put in place during an emergency outlive their sell-by date and continue even after public health conditions return to normal. That's how you end up with the Patriot Act and, more than a decade after 9/11, Edward Snowden.

Whether or not you agree with the Google-Apple policy of decentralizing app data, their imposition of a policy outcome on democratic governments raises important questions of legitimacy. There is a troubling power imbalance between technology firms and elected governments. The COVID app story shows how those companies were prepared to withhold access to essential technologies unless their preferred policy solutions were adopted. Governments had no option but to comply.

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