TRACKING COVID-19:
A BALANCING ACT BETWEEN PUBLIC HEALTH AND DATA PRIVACY

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KENAN INSTITUTE
of Private Enterprise
UNC KENAN-FLAGLER BUSINESS SCHOOL

Watch: Data Privacy in the Era of COVID-19 — Contact Tracing: Privacy vs. Protection

THURSDAY
MAY
28

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Join Part 2 of our webinar on **Thursday, May 28**.
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INTRODUCTION

Historically, public health authorities have used a technique called contact tracing to battle outbreaks of infectious disease.

Apple and Google, whose operating systems power the vast majority of smart phones, have unlocked software protocols to allow their phones — if owners have installed the right apps — to monitor when someone who is infected or possibly infected has contact with someone else.

But digital contact tracing also raises difficult ethical, legal and technical questions.

Rethinc. Labs, based in the Frank Hawkins Kenan Institute of Private Enterprise at UNC's Kenan-Flagler Business School, hosted a webinar to explore the promise of digital contact tracing as well as the implications for data privacy.

Jay Swaminathan, a UNC Kenan-Flagler professor of operations, moderated a discussion among four experts:

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>
> Jim Thomas

Stephan Biller, *Vice President of Offering Management*, IBM Watson Internet of Things

Klon Kitchen, *Director, Center for Technology Policy*, The Heritage Foundation

Jules Polonetsky, *CEO*, Future Privacy Forum

Jim Thomas, *Associate Professor, Department of Epidemiology*, UNC Gillings School of Global Public Health, and *Director, MEASURE Evaluation Project*, Carolina Population Center

ESTABLISHED PUBLIC HEALTH PRACTICES

"The goal is to identify others who may be infected and get to them before they infect others, or to minimize the number of other people they infect," Thomas said.

Contact tracing is usually a labor-intensive manual process. A person who tests positive for a disease public health authorities are tracking is asked to provide information about others they've been in contact with. In turn, those people are contacted, asked about possible symptoms and, if they show signs of having been infected, quizzed about their contacts.

"It's a very time-intensive and person-to-person-intensive effort," Thomas said.

Using apps to support the process is enticing.

"What they're actually doing is allowing that same information to be collected at scale and at a speed that keeps up with the speed of transmission," said Kitchen. "That's the value add."

Public health agencies can deploy apps that could use GPS and Bluetooth data to identify when someone who's tested positive for COVID-19 or has symptoms has been close to someone else who also has a contact tracing app.

That app could later alert the second person that they may have been exposed to the virus. In some countries, such as South Korea and Singapore, these apps also connect with government databases and medical records, allowing public health authorities to more effectively track, and therefore manage, the spread of the disease.

WORKPLACE APPLICATIONS

Biller, of IBM, noted that factories often have people working close together. But proximity can cause COVID-19 to spread, leading to outbreaks and potentially forcing manufacturers to close plants.

"COVID obviously had a huge impact here, and you have all seen this through infections in meatpacking plants," Biller said. "Businesses have to create new business processes ... You have to think about how you redistribute the work in a lean manufacturing company so that you can distance the workers by at least six to eight feet."

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IBM had already developed an app for worker safety. Loaded on an iPhone, it provided alerts to keep workers away from hazardous areas within a manufacturing plant. "Now we are repurposing that and using it that for contact tracing," Biller said.

But he noted that workers may be nervous about an employer collecting that kind of information. "Any employer would do well to talk to the unions, to talk to the employees," he said. "Obviously there are privacy concerns of these employees that have to be addressed."

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Klon Kitchen

PRIVACY AND THE COMMON GOOD

The idea that contact tracing is an automatic violation of someone's personal freedoms is wrong, the panelists said. Rather, they maintained, public health authorities, employers and tech companies must balance individual privacy and the good of the community.

Kitchen pointed out that the government has an interest in pandemic surveillance.

"According to our Constitution, the federal government is charged with providing for the common defense," Kitchen said, which he noted would include pandemic surveillance.

"Our ability to test, track and manage contagions directly impacts critical government capabilities like the provision of basic services, law enforcement and even military readiness," he said. He also noted that, although there's no evidence that COVID-19 was developed in a laboratory, bioweapons do exist that could be even more threatening if they were loosed upon the country.

"What we're learning now in the context of COVID-19 will directly influence how our nation prepares for even worse scenarios in the future," Kitchen said.

None of those considerations, he added, excuse government overreach when it comes to data collection and privacy.

For people to accept smartphone-enabled contact tracing, they must be able to trust that any information collected won't used for other purposes, such as marketing, law enforcement or immigration enforcement, Polonetsky said.

"We can balance the disclosures of information with the right restrictions, the right regulations, the right technical limits," he said.

DATA PRIVACY REGULATIONS

Apple and Google, who have opened the door to make tracing applications possible, are balancing privacy and data security restrictions in the United States and around the world. Europe, for example, has a comprehensive privacy protection law that governs how such pandemic-surveillance data might be used by both private entities and government agencies.

Other countries have their own approaches to data privacy.

"If Apple and Google make these changes to allow greater access, they're not making it just for democratic countries," Polonetsky said. "We are doing it globally."

In countries with repressive governments, the tech giants have to consider whether the pandemic surveillance apps they allow on their platforms could be used for human rights abuses.

One challenge for public health agencies, employers and others in the United States is the lack of a single, unifying federal data privacy law. Data privacy is regulated on the state level. Some states, like California, have rigorous, wide-ranging rules; others have few or none.

Some European countries have been able to move faster on adopting the technology because they had a comprehensive data privacy framework already in place.

"The Germans moved very quickly, and they've got workplace guidance today," Polonetsky said. "Employers in the U.S., on the other hand, worry that they're going to be sued if someone comes back to work and gets sick, but the options are not clear to them. Can they do thermal scanning? Can they administer tests? It's complete chaos, because we don't have clear federal guidelines that say this is the proper practice."

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Discussion moderated by **Jay Swaminathan**, *GlaxoSmithKline Distinguished Professor of Operations* and *Faculty Director of the Kenan Institute Rethinc Value Chain Lab*
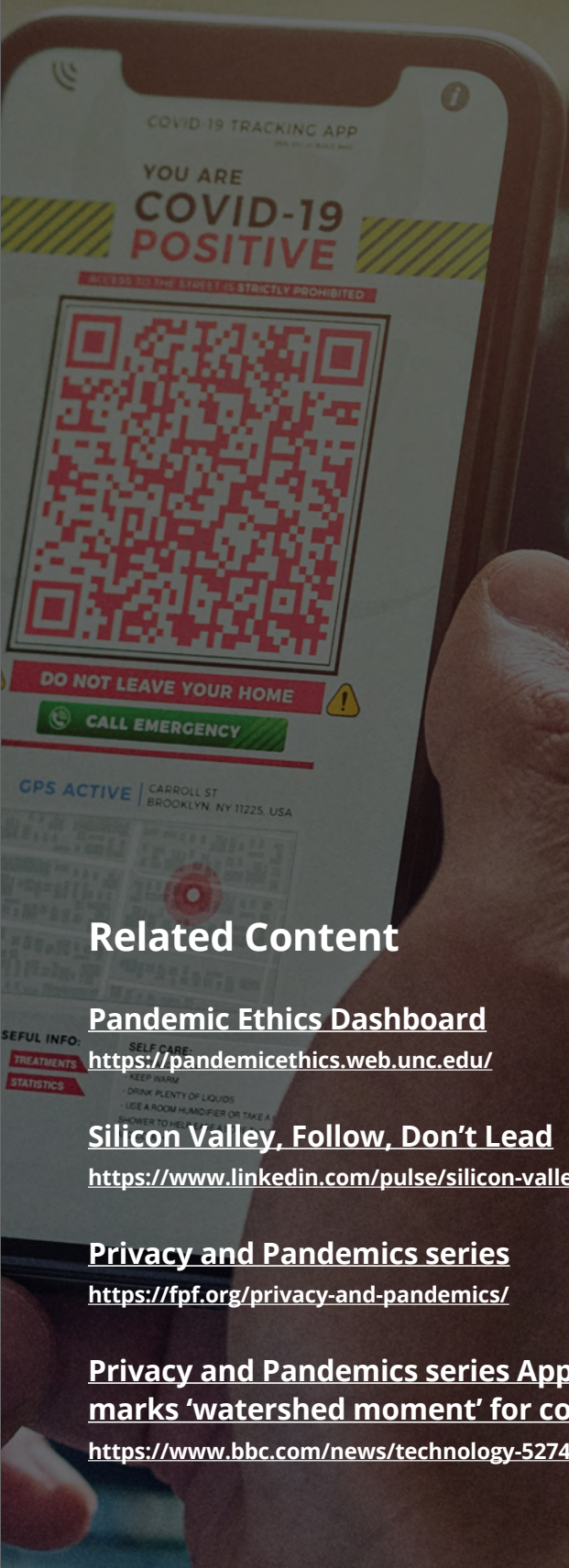
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