

Trust Fall: COVID-19, Ethical Experimentation, & the Governance of Pandemic Tech

Sean McDonald



Digital
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**What has COVID taught
us about deploying public
technology?**



Joan Wong

Briefing

Mar 26th 2020 edition >

Creating the coronopticon

Countries are using apps and data networks to keep tabs on the pandemic

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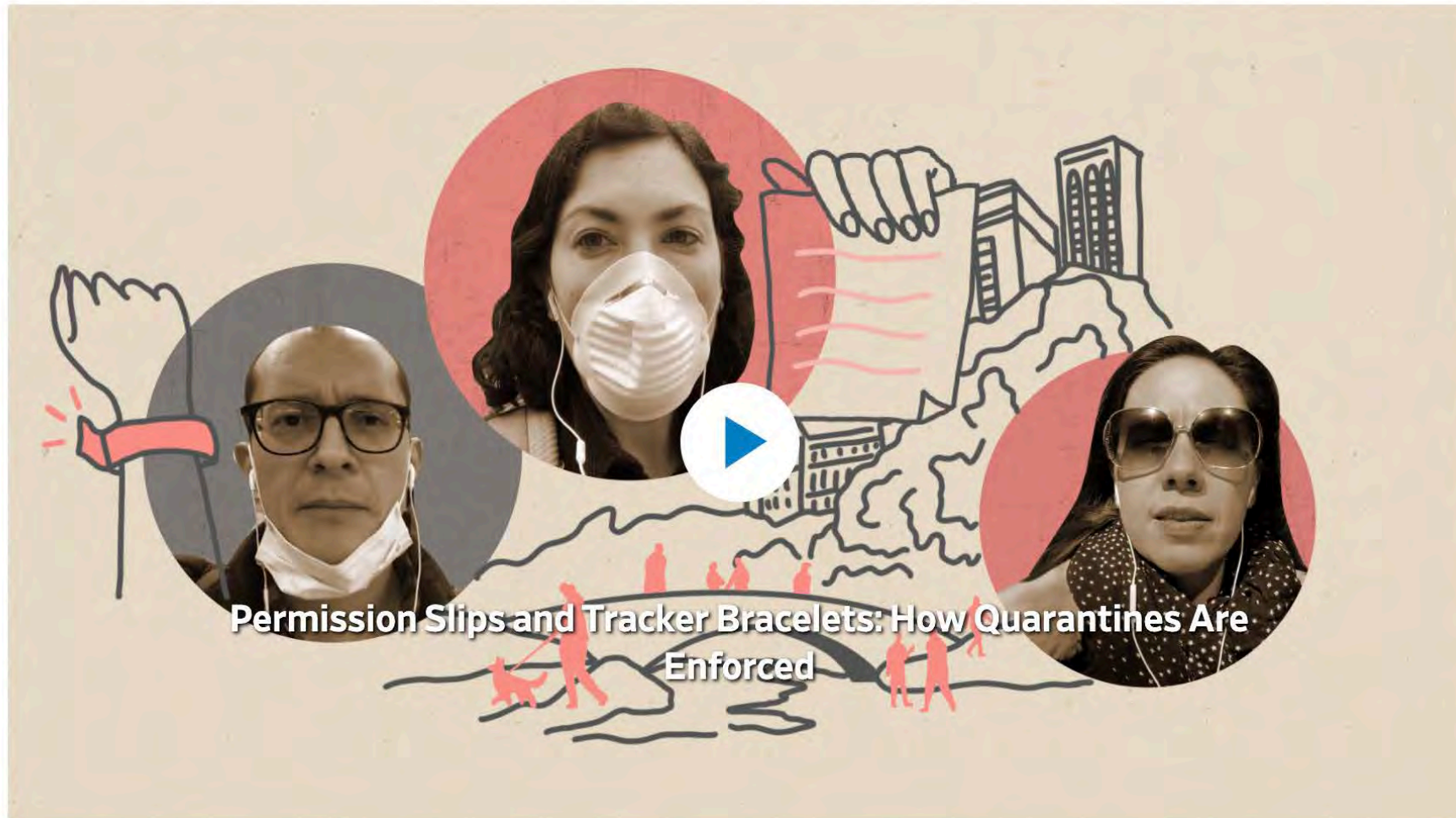
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WORLD | ASIA

Singapore Built a Coronavirus App, but It Hasn't Worked So Far

The city-state's experience in digital contact-tracing holds lessons for other countries, including an Apple-Google effort in the U.S.

 slack

**Choose a
better way
to work.**

Nearly 40% of Icelanders are using a covid app—and it hasn't helped much

The country has the highest penetration of any automated contact tracing app in the world, but one senior figure says it “wasn’t a game changer.”

by **Bobbie Johnson**

May 11, 2020

When Iceland got its first case of covid-19 on February 28, an entire apparatus sprang into action.

The country had already been testing some people at high risk of catching the virus, thanks to DeCode genetics, a local biotech company. Once the

VOICE: Countries Rolling Out Coronavirus Tracking Apps Show Why They Can't Work

VOICE

Countries Rolling Out Coronavirus Tracking Apps Show Why They Can't Work

If you think tracking apps will keep people safe as economies reopen, look to South Korea, Singapore, and Australia to see why you're mistaken.

BY **SALVATORE BABONES** | MAY 12, 2020, 5:31 AM



Deployment matters

OLD PHONES —

2 billion phones cannot use Google and Apple contact-tracing tech

System developed by Silicon Valley relies on technology missing from older handsets.

TIM BRADSHAW, FT.COM - 4/20/2020, 12:29 PM



Context matters

POLITICS

Lawmakers warn coronavirus contact-tracing is ripe for abusive surveillance



SECURITY

|<

< PREV

RANDOM

NEXT >

>|

A CRYPTO NERD'S
IMAGINATION:

HIS LAPTOP'S ENCRYPTED.
LET'S BUILD A MILLION-DOLLAR
CLUSTER TO CRACK IT.

BLAST! OUR
EVIL PLAN
IS FOILED!

NO GOOD! IT'S
4096-BIT RSA!



WHAT WOULD
ACTUALLY HAPPEN:

HIS LAPTOP'S ENCRYPTED.
DRUG HIM AND HIT HIM WITH
THIS \$5 WRENCH UNTIL
HE TELLS US THE PASSWORD.

GOT IT.



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RANDOM

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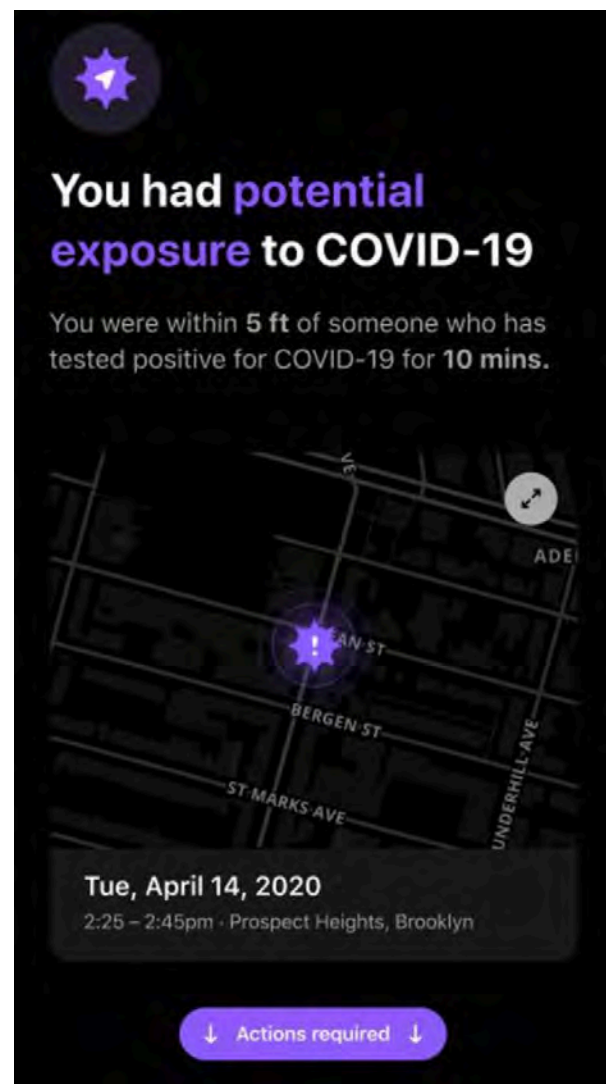
IMAGE URL (FOR HOTLINKING/EMBEDDING): [HTTPS://IMGS.XKCD.COM/COMICS/SECURITY.PNG](https://imgs.xkcd.com/comics/security.png)

L.A. COUNTY AND CITY LEADERS JOIN FORCES WITH CITIZEN TO LAUNCH SAFEPASS PARTNERSHIP

SafePass will support the Department of Public Health's contact tracing program

LOS ANGELES — Los Angeles County Supervisor Kathryn Barger, County Department of Public Health Director Dr. Barbara Ferrer, Los Angeles Mayor Eric Garcetti, Long Beach Mayor Robert Garcia, Pasadena Mayor Terry Tornek, and Citizen CEO Andrew Frame appeared at a press conference at L.A. City Hall today to announce a partnership with SafePass, a mobile app that provides contact tracing capabilities for individuals throughout Los Angeles County.

SafePass will allow users to self-report their symptoms for COVID-19 and receive notifications and alerts directly from the Los Angeles County Department of Public Health. All contact tracing data is anonymous, private, encrypted, and deleted after 30 days by Citizen. Officials encouraged residents to download the app to expand local efforts to track COVID-19 for L.A. County's 10 million residents.

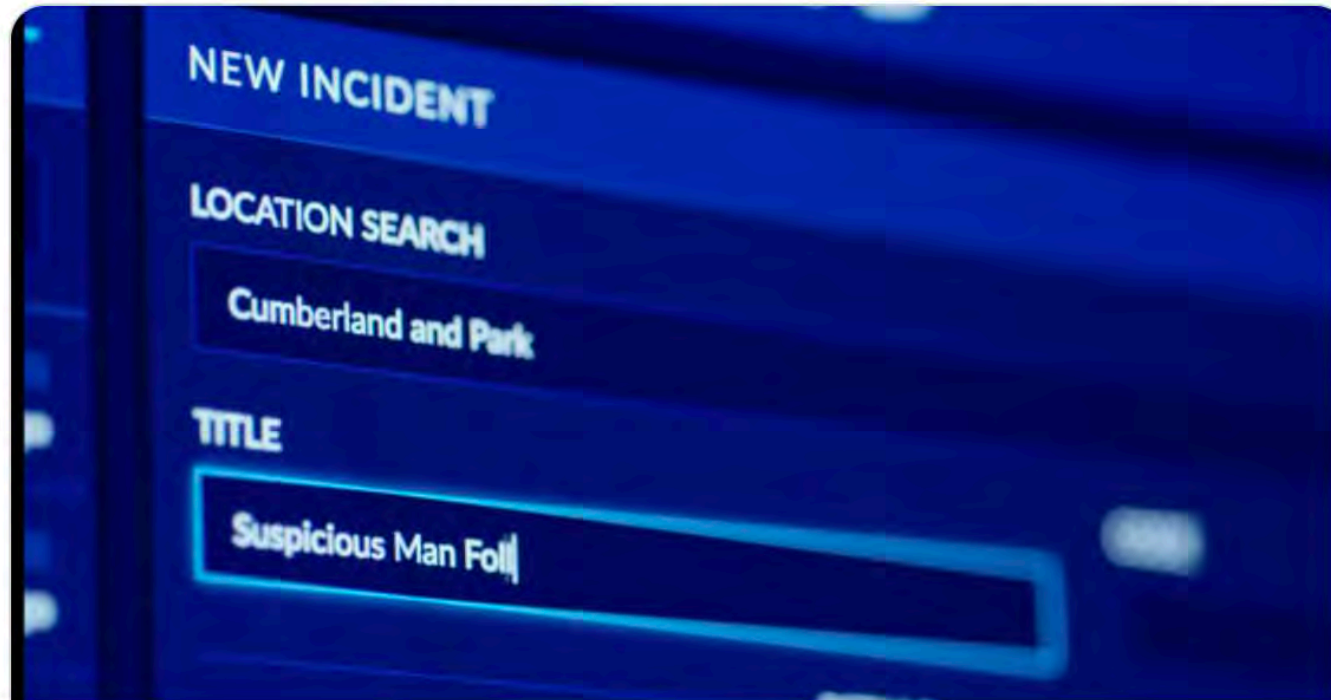




Alissa Walker ✓
@awalkerinLA



Citizen started as a "crime tracker" named Vigilante but it was immediately removed from the app store for "concerns centered around user safety"—namely, that it would encourage, yes, vigilantism.



Controversial crime reporting app Vigilante banned from App Store

A controversial crime-reporting app called Vigilante has been kicked out of the App Store for an app that encouraged, well – vigilantism – and led to the ...

techcrunch.com

CORONAVIRUS

A Company Running An Online Coronavirus Symptom Tracker In Oregon Says It Can Sell Your Data To Advertisers

The privacy policy for Vital's coronavirus symptom tracker for Multnomah, Clackamas, and Washington counties reserves the right to sell residents' personal data.

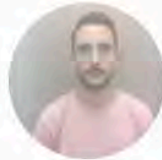
**Caroline Haskins**

BuzzFeed News Reporter

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EDITORS' PICK | 10,828 views | Apr 15, 2020, 11:50pm EDT

Is The Syrian Government Targeting Its People With COVID-19 Android Malware?



Thomas Brewster Forbes Staff

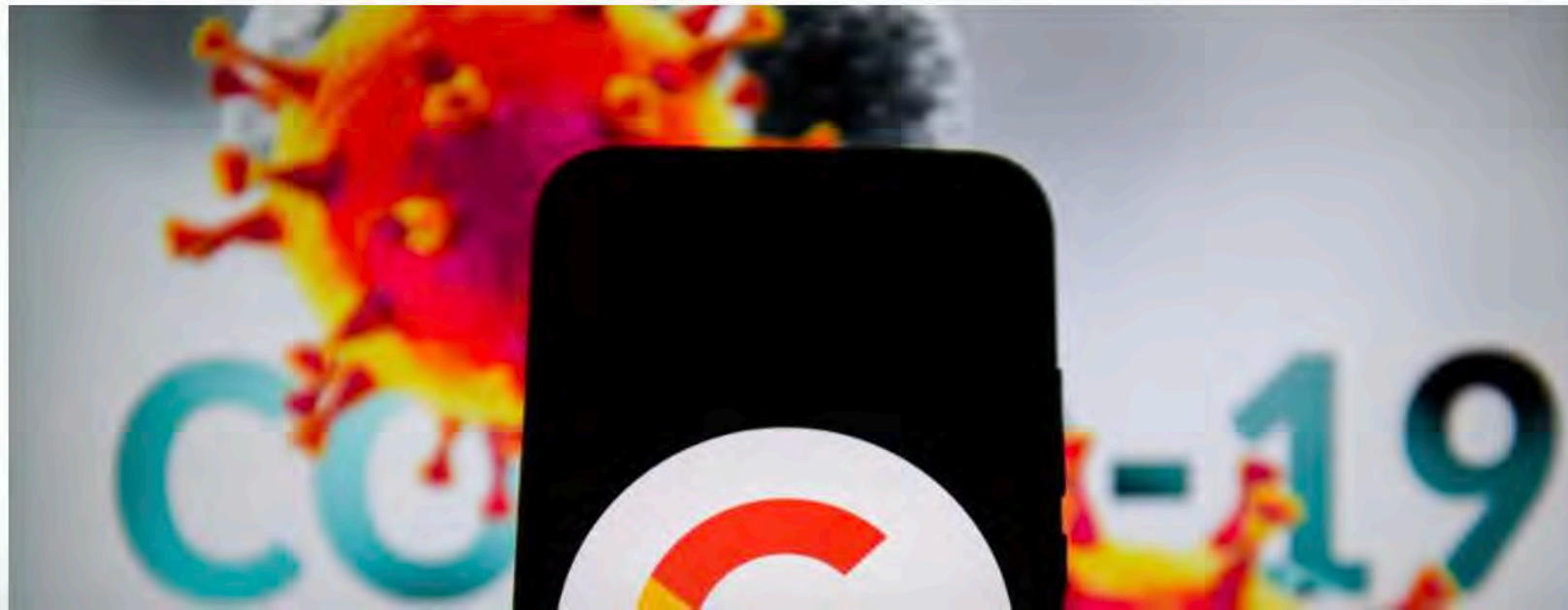
[Cybersecurity](#)

Associate editor at Forbes, covering cybercrime, privacy, security and surveillance.

f

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in



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**Digital Politics Are
Asymmetrical.**

**Legitimate Data Governance
Requires Earning Trust.**

[Home](#) > [Israel News](#)

Israeli Doctors Warn Shin Bet Surveillance Actually Hindering Efforts to Combat Coronavirus

Physicians' association claims the security service's use of technology to identify people who have come in contact with carriers of the coronavirus is not providing the right information

Refaella Goichman | [✉ Send me email alerts](#)

Mar 26, 2020 8:04 PM



195



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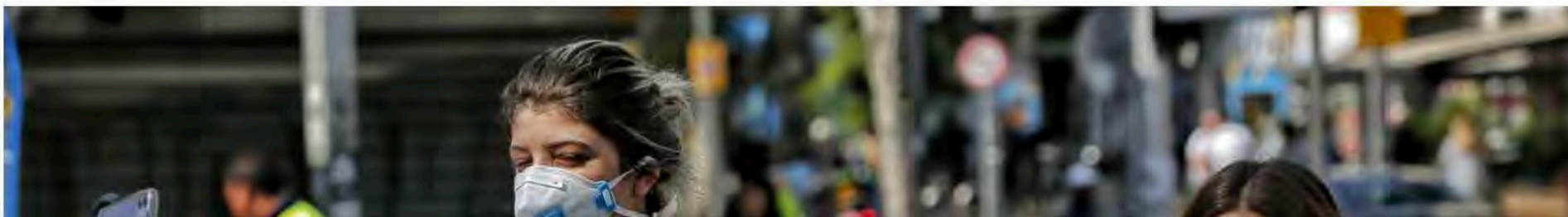


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Zen

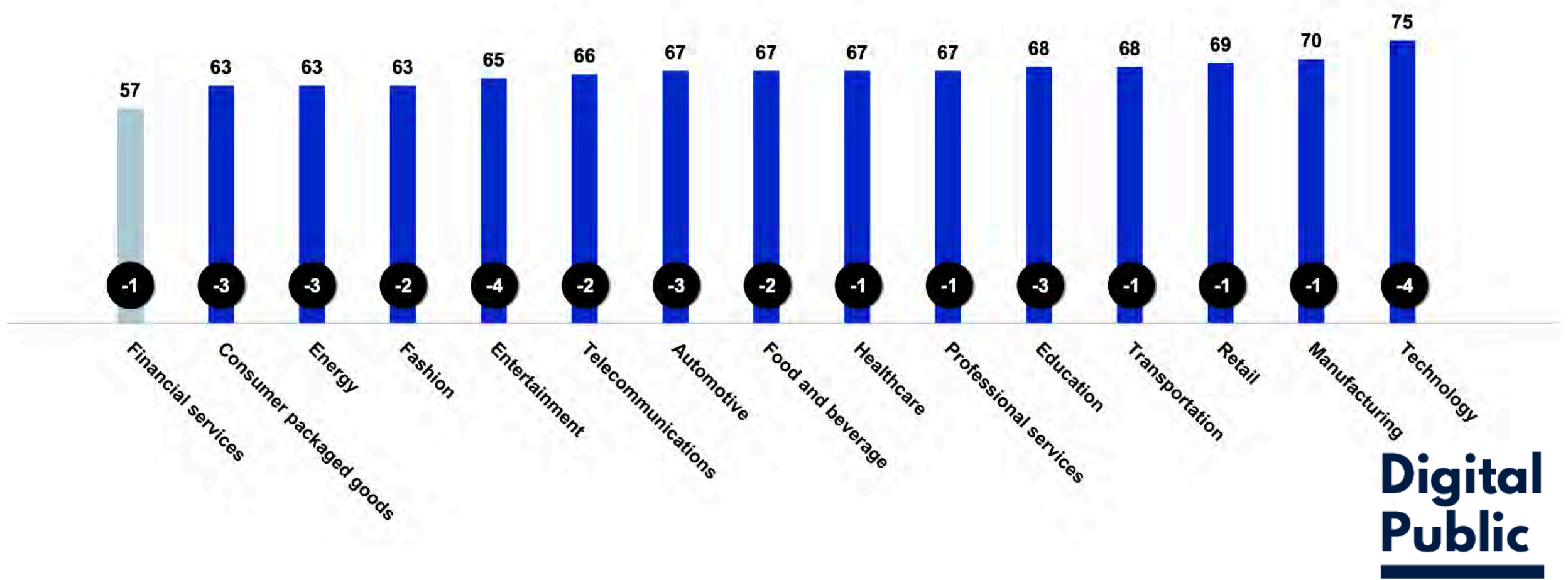
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TRUST DECLINES ACROSS SECTORS, LED BY TECHNOLOGY AND ENTERTAINMENT

Percent trust in each sector



Gov. DeSantis extends COVID emergency as caseload expands; sees youth defiance of contact tracing

By Michael Moline - July 7, 2020



Gov. Ron DeSantis traveled to Miami on July 7, 2020, to open the state's 12th COVID-specific nursing facility. Photo: Jonathan Warren/EyeEm

Florida Atty. Gen. Ashley Moody Warns Of Contact Tracing Scams

June 22, 2020 at 5:45 pm Filed Under: Ashley Moody, Coronavirus, Local TV, Miami News

MIAMI-DADE

Confusion Over Contact Tracing Reigns Over News Conference

At one point this summer, Miami-Dade County wanted to hire 1,000 contact tracers.

Why state lawmaker says his state's contact tracing is a 'joke'

New Day

After testing positive for Covid-19, Florida Democratic state Rep. Shevrin Jones shares his experience with contact tracers in Florida as cases continue to surge. [Source: CNN](#)

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PEER REVIEWED

The Relation between Media Consumption and Misinformation at the Outset of the SARS-CoV-2 Pandemic in the US

A US national probability-based survey during the early days of the SARS-CoV-2 spread in the US showed that, above and beyond respondents' political party, mainstream broadcast media use (e.g., NBC News) correlated with accurate information about the disease's lethality, and mainstream print media use (e.g., the New York Times) correlated with

**Testing for Function
doesn't Factor in Trust,
Context, or Power.**

TECH STREAM

Tomorrow's tech policy conversations today

About TechStream | Stay Informed

Contact-tracing apps are political

May 14, 2020 | [Sean McDonald](#)

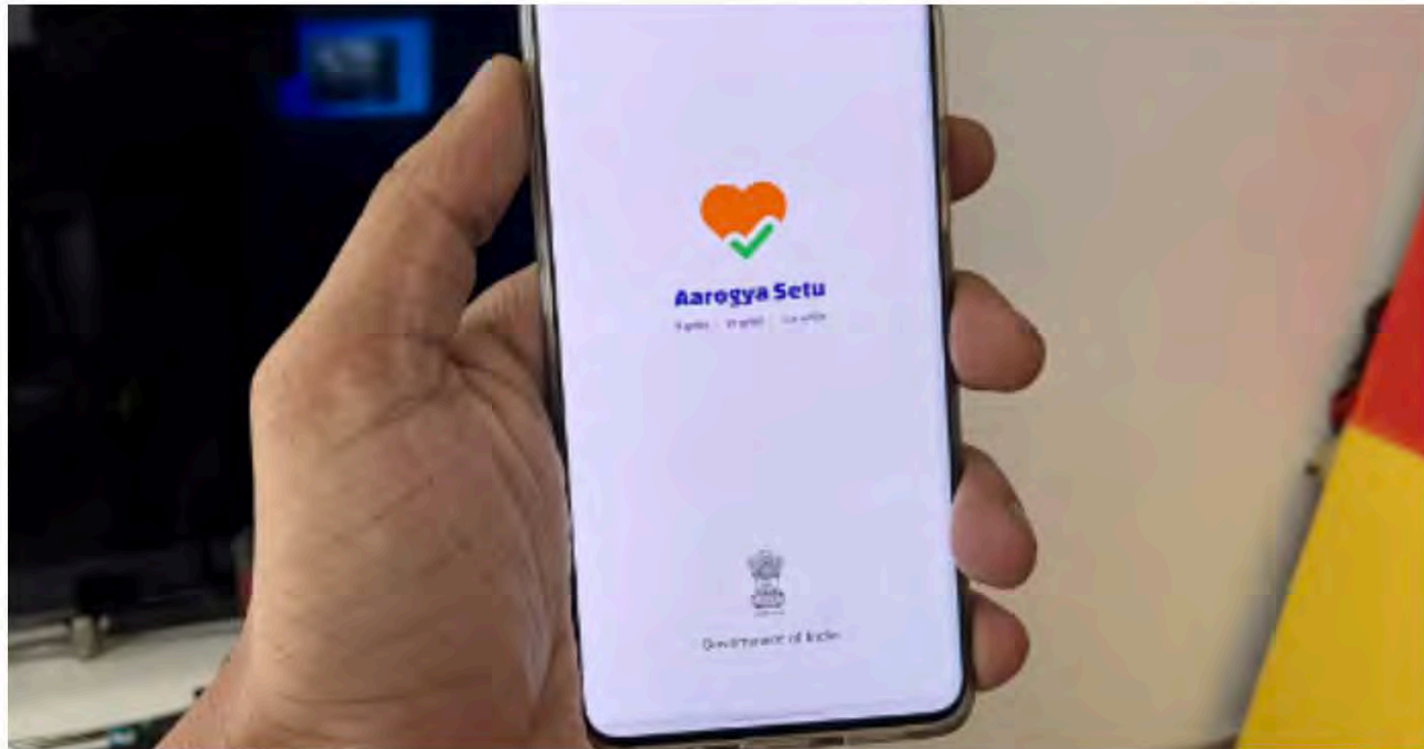


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07 Jul 2020 | 06:34am IST

Arogya Setu App, face mask mandatory in Court premises



Team Herald

PANJIM: Every individual entering the court premises will have to install Arogya Setu App and wear a face mask as all courts and quasi-judicial authorities have resumed regular functioning from this month.



Kirsten Han 韩俐颖

@kixes

#Singapore's TraceTogether app has been made compulsory for migrant workers living in dormitories, and those in the construction, marine, and process sectors:

mom.gov.sg/newsroom/press...

#Singapore #COVID19

USE OF TRACETOGETHER FOR FASTER CONTACT TRACING

9. To facilitate contact tracing should there be an infection, the following groups of migrant workers who stay or work in higher risk settings will be required to download, activate, and maintain the latest version of the TraceTogether mobile app, available from 1 June:

- Workers staying in all dormitories (i.e. purpose-built dormitories, factory-converted dormitories, construction temporary quarters and temporary occupation licence quarters)
- Work Permit and S-Pass holders who work in the Construction, Marine and Process sectors.

4:31am · 29 May 2020 · Twitter Web App

9 Replies 17 Retweets 22 Likes



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**So how do people
understand and protect
their rights?**



Terms of Service Didn't Read


Waiving your right What kind of rights do you give up on?

(Category: [Governance](#))

50 500 Waiver of legal actions ▾

50  You waive your right to a class action ▾

150 500 500px Store: Authorship ▾

50  Lawsuit and class action waiver. Arbitration for dispute resolution in the United States ▾

50  Lawsuit and class action waiver. Arbitration agreement. Survives termination of ToU agreement. ▾

50  Trial and class action waiver ▾

WORRY TECHNOLOGY IS OUT OF CONTROL

Percent who agree

The pace of change in technology is **too fast**

⊥

61%

I worry technology will make it impossible to know if **what people are seeing or hearing is real**

⊥

66%

Government **does not understand emerging technologies** enough to regulate them effectively

⊥

61%

Trust in technology 2019-2020	
Global 26	-4
Largest declines in:	
France	-10
Canada, Italy, Russia, Singapore	-8
U.S.	-7
Australia	-6

2020 Edelman Trust Barometer. CNG_POC. For the statements below, please think about the pace of development and change in society today and select the response that most accurately represents your opinion. 9-point scale; top 4 box, fast. 28-mkt avg. ATT_MED_AGR. Below is a list of statements. For each one, please rate how much you agree or disagree with that statement. 9-point scale; top 4 box, agree. 28-mkt avg. PER_GOV. How well do you feel the government is currently doing each of the following? 5-point scale; bottom 3 box, not doing well (data excludes DK responses). 25-mkt avg. (data not collected in China, Russia, and Thailand). TRU_IND. Please indicate how much you trust businesses in each of the following industries to do what is right. 9-point scale; top 4 box, trust. 26-mkt avg. All questions asked of half of the sample among the general population.

**Our digital
transformation and
governance systems
lack legitimacy**

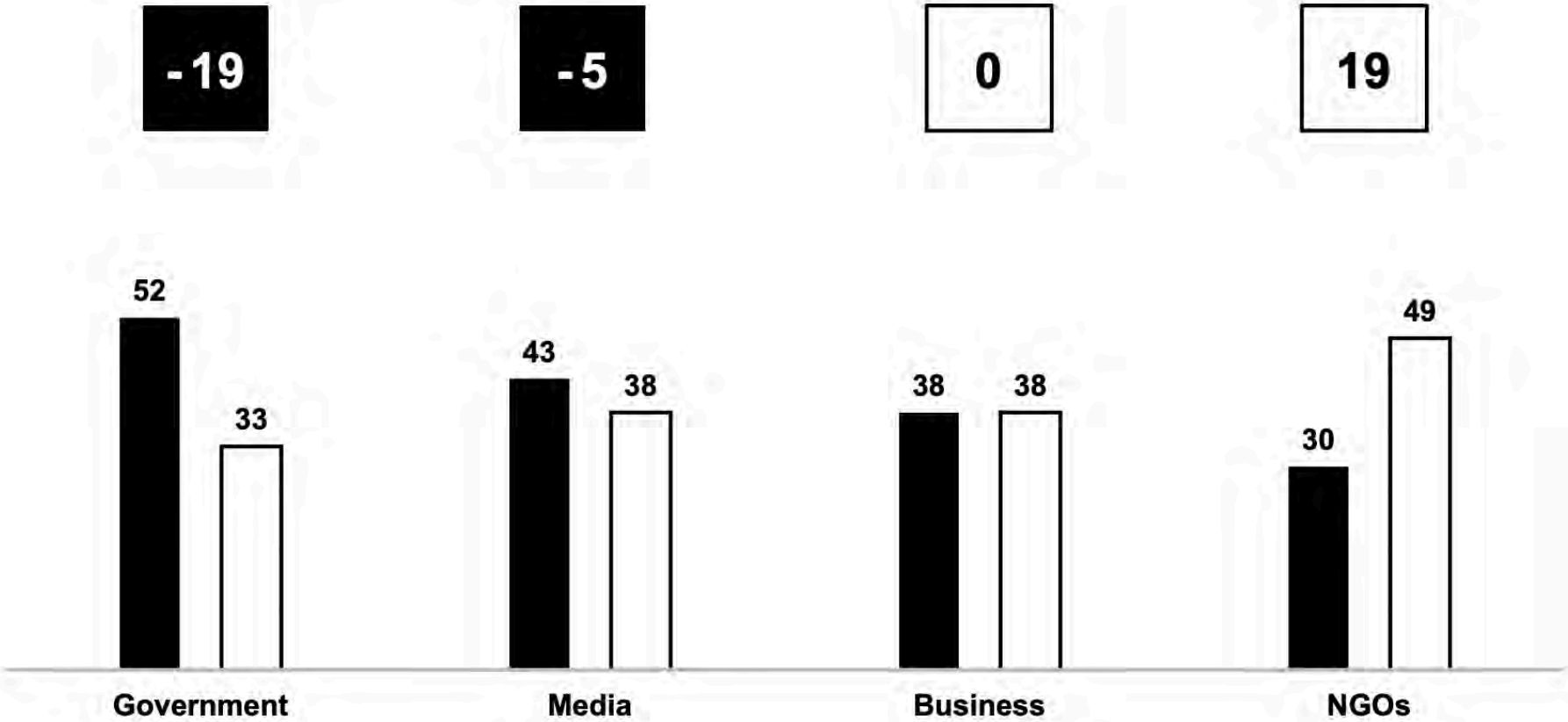
INSTITUTIONS SEEN AS LACKING HONESTY

Percent who cite each as a reason they trust or distrust each institution

This institution...

- Is purpose-driven
- **Is honest**
- Has vision
- Is fair

■ Corrupt and biased
□ Honest and fair



Epic fail



**innovation vs.
politics
experimentation**

LeRoy Watten

The Belmont Report

Ethical Principles
and Guidelines for
the Protection of
Human Subjects
of Research

The National Commission
for the Protection of Human Subjects
of Biomedical and Behavioral
Research

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Trump-backed drug to be tested on thousands in Mumbai slums

The move underscores the desperation and mounting pressure on health care officials for solutions against a novel pathogen which has infected over 2.1 million people globally and killed over 146,000. |

Bloomberg | Last Updated: Apr 18, 2020, 10.36 AM IST



Save



Mumbai, which has seen more than a tenth of India's over 13,800 cases and a quarter of its deaths, has emerged as the biggest virus hotspot in India.

By Dhwani Pandya and Ari Altstedter

India's financial capital [Mumbai](#) is fine-tuning a plan to administer an unproven but much touted anti-malarial drug in neighborhoods including Asia's most crowded slum, the first-of-its-kind mass experiment to ward off the [coronavirus](#).

The city officials are identifying a target group which will receive [hydroxychloroquine](#), according to Suresh Kakani, additional commissioner of Municipal Corporation of

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POST-NORMAL PANDEMICS: WHY COVID-19 REQUIRES A NEW APPROACH TO SCIENCE



Two (or more) heads are better than one. Original image: 1961, Designer Janusz Stanny, Brain Puzzles (cc by 2.0) <https://flic.kr/p/9AvLZY>

Research

- Informed consent
- Scientifically proven necessity
- Proportionality - methods escalate through stages of validation to human trials based on severity of impact
- "Due Process"

Practice

- Legal duty to individual
- Serves the best interests of the individual subject
- Professional systems of accountability
- Reasonable expectation of success

ethics infrastructure

- Professional Licensing & Certification
- Dedicated Experimentation Spaces
- Regulated Market Access
- Fiduciary Duties to Patients
- Standards of Malpractice
- Independent Adjudication

What is a data trust?

**A data trust is a tool to
build legally
enforceable digital
governance and rights.**

Behind the façade

Although well ordered on the outside, the Capitol's interior is a bewildering warren of rooms and corridors

HOW IT WORKS

The grantor puts an asset into a trust, which gives control of the asset to a trustee for a purpose, on behalf of a beneficiary.

The statistics...

US Capitol

Architect: William H. Russell (1800-1878)
Years of construction: 1833-2019

Location:
Capitol Hill, Washington DC, USA

Full height (today):
88m (288ft)

Dome height:
87.4m (287ft)

Area of site:
67,000m² (721,182ft²)

Cost of construction:
Approx \$133mn (£86mn)

Old Senate Chamber

Used by the Senate and the Supreme Court, the chamber is still occasionally used by the Senate today.

Old Supreme Court Chamber

First used by the Senate and then the Supreme Court, the Old Supreme Court Chamber today serves as a museum.

Crypt

Originally intended as the burial place of George Washington, the crypt now houses exhibits related to the Capitol.

Statue of Freedom

Standing some 5.9m (19.6ft) tall, the bronze Statue of Freedom was put in place on 2 December 1863.

Capitol dome

From 1855-1866, the dome was built by James H. Smith and his son, John. The dome is made of iron and holds the Statue of Freedom.

Capitol rotunda

Used for important events such as the laying in state of eminent citizens, the rotunda is 29 feet (9.0m) in diameter.

Statue of Freedom
A large, seated female figure, the Statue of Freedom is the National Statuary Hall, which contains 100 statues – provided by all the American states.

Senate Chamber

Opened in 1859, this chamber is adorned with white marble busts of former presidents of the Senate (vice-presidents of the United States).

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Lessons From a User-Trusted Data Trust

October 2, 2019 | Read Time: 6 Minutes

Research

- Johns Hopkins Medicine is one of the first medical systems in the United States to try to gain value from patients' records.
- Valerie Smothers is the data trust administrator working to protect patient privacy while using records to improve care and facilitate research at the same time.
- The most important conversation is not about the data itself, says Smothers, but about data governance and the policies needed to define the trust's structure and inner workings.



June 11, 2018

Announcing the OpenCorporates Trust

Posted by: [molliehanley](#)

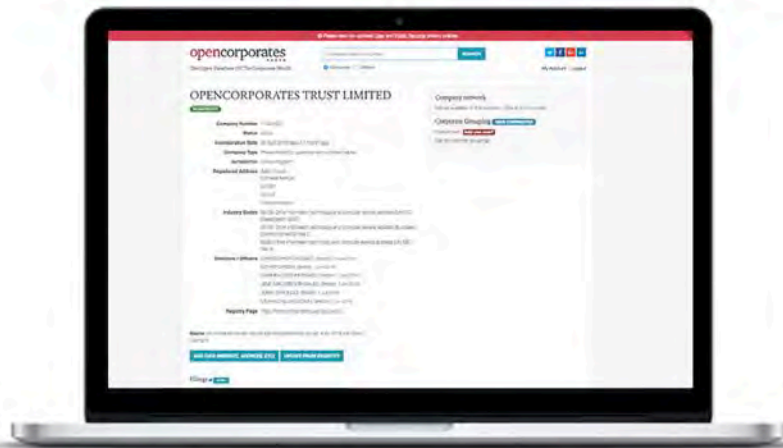
Community

Corporate Structure

Impact

Phase Two

Sustainability



Applause from you, Nanjira, and 103 others



Yeshi

[Follow](#)

Executive Director at Data for Black Lives @data4blacklives

Apr 4 · 10 min read

An Open Letter to Facebook from the Data for Black Lives Movement

Give Black researchers, data scientists and Black communities access to our data.

We urge you to work with Data for Black Lives and make a commitment to the following:

Representation

1. Commit anonymized Facebook data to a Public Data Trust.

2. Work with technologists, advocates, and ethicists to establish a Data Code of Ethics.

3. Hire Black data scientists and research scientists.



1.1K



2



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Oversight + Safety

Corporations, LLCs & Partnerships

Independence With a Purpose: Facebook's Creative Use of Delaware's Purpose Trust Statute to Establish Independent Oversight



20 Min Read

By: Vincent C. Thomas, Justin P. Duda, Travis G. Maurer | December 17, 2019

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Why Trusts

- Asset + Rights (vs. Organizational) Governance
- Aligned with Market Infrastructure
- Create Legally Enforceable Fiduciary Duties
- Oversight for Pluralization of Governance
- Global in Reach

The Challenges Ahead

Centre for International Governance Innovation

DEMOCRACY, DIPLOMACY, SURVEILLANCE & PRIVACY

Coronavirus: A Digital Governance Emergency of International Concern

Strident digital, surveillance and diplomatic policies are being written in the heat of a disaster — not through deliberation or agreement, but through escalating protectionist declarations

Sean McDonald

March 2, 2020



US Vice President Mike Pence speaks during a coronavirus briefing with diagnostic lab CEOs at the White House on March 4, 2020. (REUTERS/Carlos Barria)

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Conclusions + Recommendations

- Public technologies in implementation is political
- Government need clear infrastructures for public testing
- Legal and contractual guard rails should be pre-deployment requirements – including pathways to dispute + wind-down
- Quality assurance goes beyond functionality and should include anticipating application in commercial, criminal, and law enforcement contexts
- Define harms based on impact, not procedure
- Invest in research oversight and public communication

Thank You

sean@digitalpublic.io

Icons from the Noun Project: Agreement (Setyo Ari Wibowo), Diamond (Edward Boatman), Volcano (Creative Mania), Sailboat (Chrystina Angeline), Agreement (Setyo Ari Wibowo), Diamond (Edward Boatman), Safe (Aleksandr Vector), Erlenmeyer Flask (Lisole), Hand (Maico Amorim), Gnome (Nook Fulloption), Pedestal (Blake Stevenson), Content Provider (throwaway icons), Ship Wheel (my name is mud), Captain (Rémy Médard), Neighborhood (Andrew Doane), Connected Joystick (cathy moser), Lawyer (Stefania Servidio), Earth (Setyo Ari Wibowo), Tombstone (Made), Upload (Kimmi Studio), Safe (Aleksandr Vector), Form (Setyo Ari Wibowo), Decision Making (Delwar Hossain), Scientist (Andrew Doane), Ethnicity (MRFA), Privacy (Gregor Cresnar), Ethnicity (MRFA), Database (Milinda Courey), Government (Victor), Government (romzicon), Government (bezier master), Data (Jivan), Chart (Remco Homberg), Fisherman (Luis Prado), Fish (Kangrif), Contract (Giuditta Valentina Gentile), Code (Danil Polshin), Puzzle (HeadsOfBirds)

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