

Technology and Privacy in 2020 ...and beyond.



EUROPEAN
DATA
PROTECTION
SUPERVISOR

Virtual EDPS-DPO meeting, 11 December 2020

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This was 2020

1.

Data protection amidst a global health crisis



Contact Tracing with Mobile Applications

In public health, contact tracing is the process to identify individuals who have been in contact with infected persons. Proximity tracing with smartphone applications and sensors could support contact tracing. It involves processing of sensitive personal data.

1. What is Contact Tracing?

During epidemics of infectious diseases, such as the Coronavirus disease (COVID-19), it is important to lower the number of new infection cases and to stop it eventually. Therefore the infection chain of onward transmissions must be interrupted. When those persons known to be infected reveal their recent contacts, other infected persons may be identified, informed and e.g. isolated already early on, even before they become aware of their infection. The process to identify contacts of known cases is called contact tracing.

A person becomes a *contact* of a primary case by e.g. face-to-face contact within a short distance over some time span, physical contact or spending time indoors together—all within the incubation period of e.g. up to 2 weeks for the coronavirus disease.

To establish the risk exposure in contact tracing, information about the **distance** between the persons and the **duration** of contact are important. *Close contacts* with high-risk exposure may then become subject to different rules or treatments.

1.1. Traditional Contact Tracing

After a confirmed or probable case of an infected person has been identified, health authorities usually **interview the person, e.g. by phone**. The European Centre For Disease Prevention and Control (2020) lists the following generic steps:

1. The person's clinical history is collected.

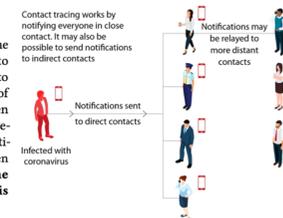


Figure 1: Contact Tracing.

2. The contacts of the identified persons are gathered with their risk of exposure for classification, and background data like e.g. work with vulnerable populations.
3. The contacts are then called to confirm their health status and to test those with symptoms, monitor actively close contacts, and ask other contacts to self-monitor and apply precaution.

This case-by-case approach is very resource intensive. Tracing all contacts can be difficult when people have many contacts, do not accurately remember them or cannot provide information on how to reach out to them.



EB FLOOR Audio is talking



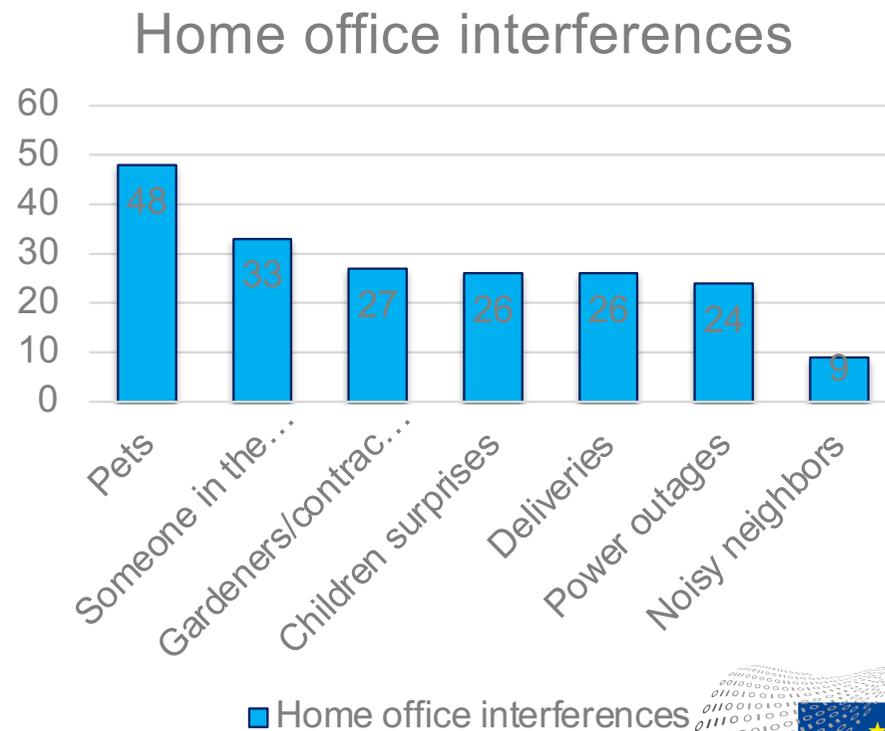
This was 2020

2. Virtual meetings



Home offices aren't all they're cracked up to be

- Interference from pets (48%), someone walking through the background (33%), gardeners/contractors making noise (27%), children making surprise guest appearances (26%), deliveries making noise (26%), power outages (24%), noisy neighbors (21%), and cleaning service vacuuming or cleaning around your workspace (9%) were all noted as culprits for distractions while on a conference call.
- 22% of those ages 65 and older admitted to taking conference calls from unconventional locations including the closet, in a car, on a boat, in a store, from a child's sporting event, and even from the bathroom.
- (Source: UnifySquare.com)



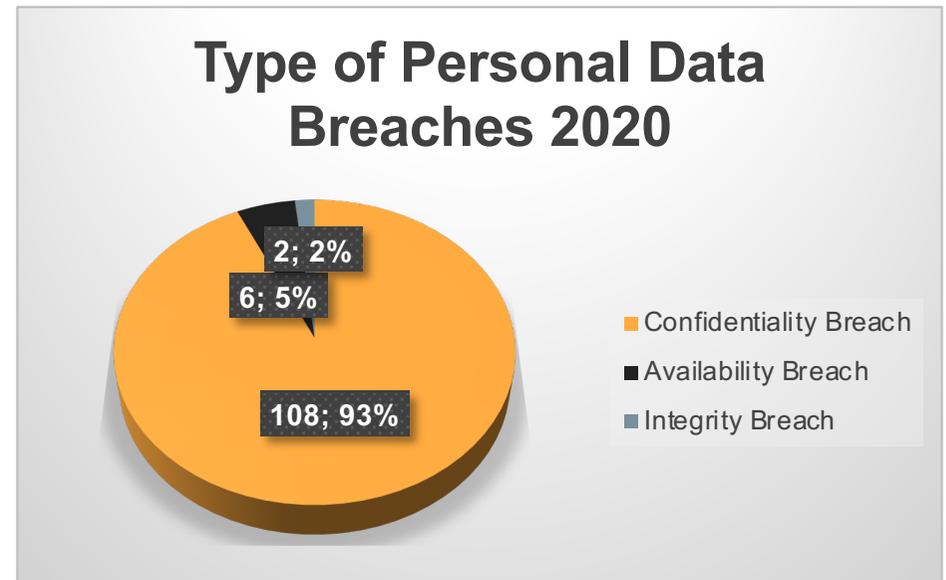
This was 2020

3. Encryption

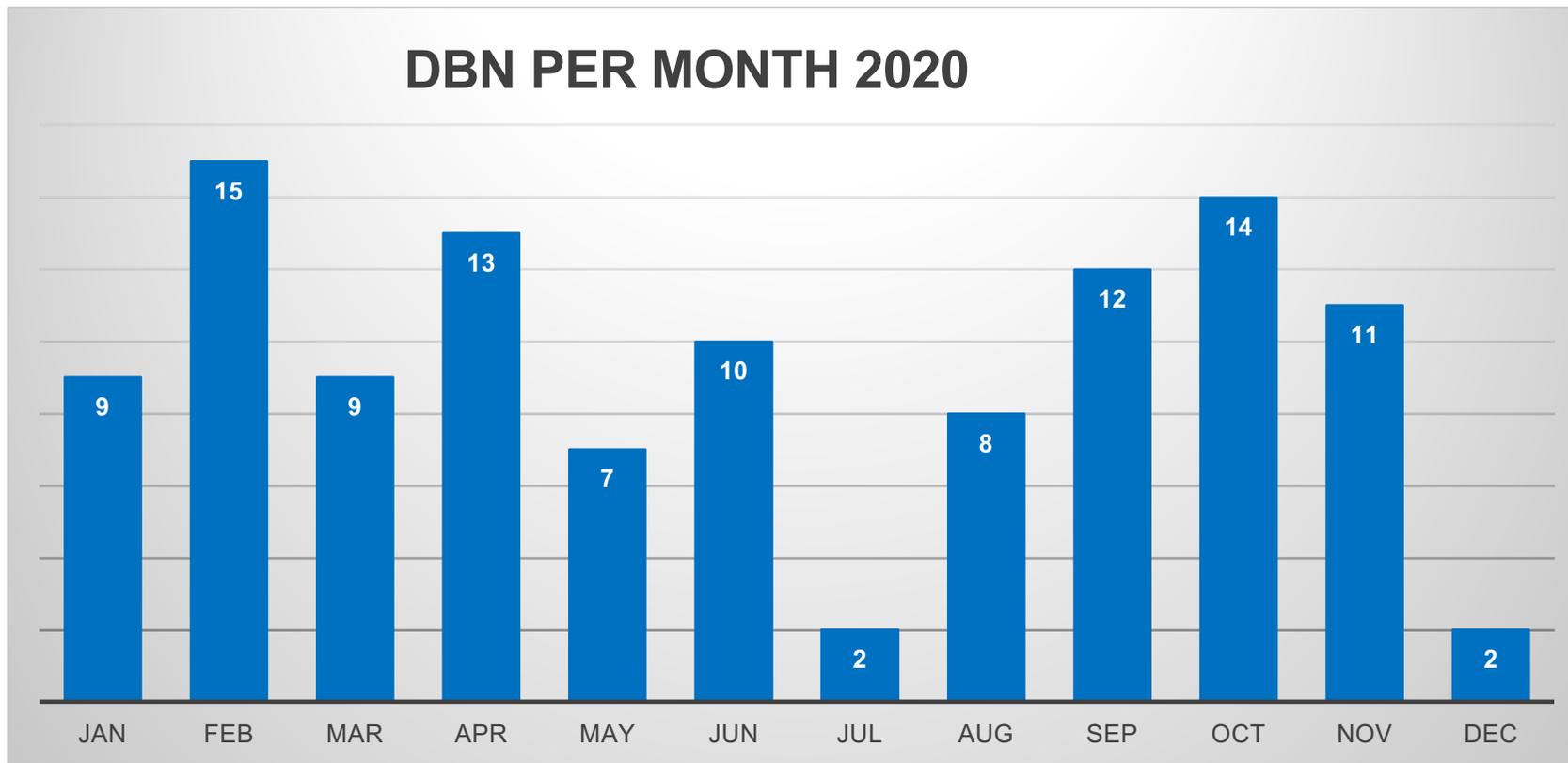


This was 2020

4. Personal data breaches



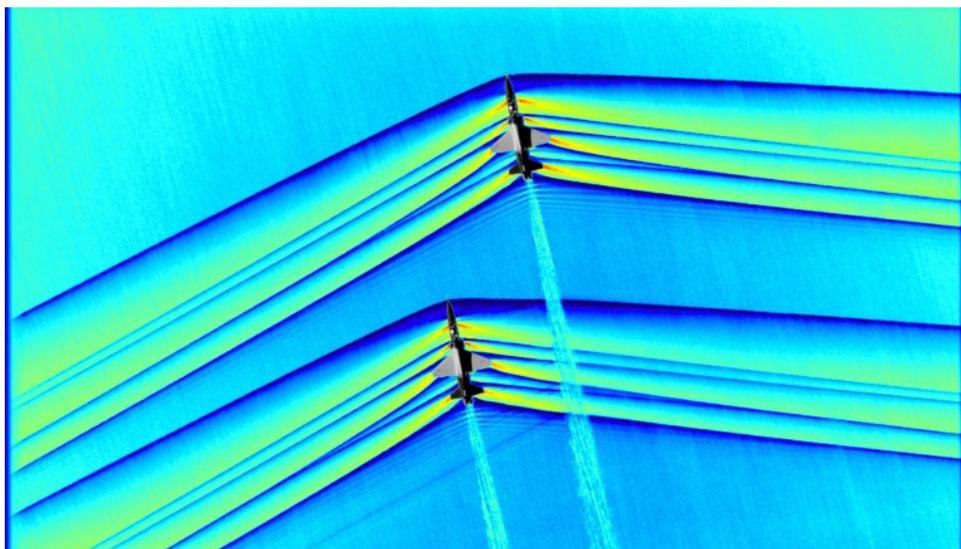
DBN PER MONTH 2020



PDB Notifications 2019-2020



And this will be 2021 ... (maybe)



1. Techceleration



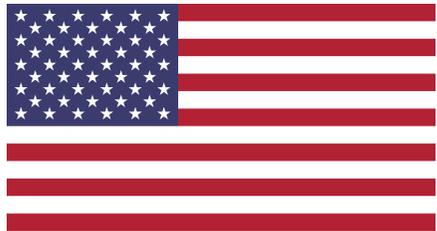
And this will be 2021 ... (maybe)



2. Artificial Intelligence



And this will be 2021 ... (maybe)

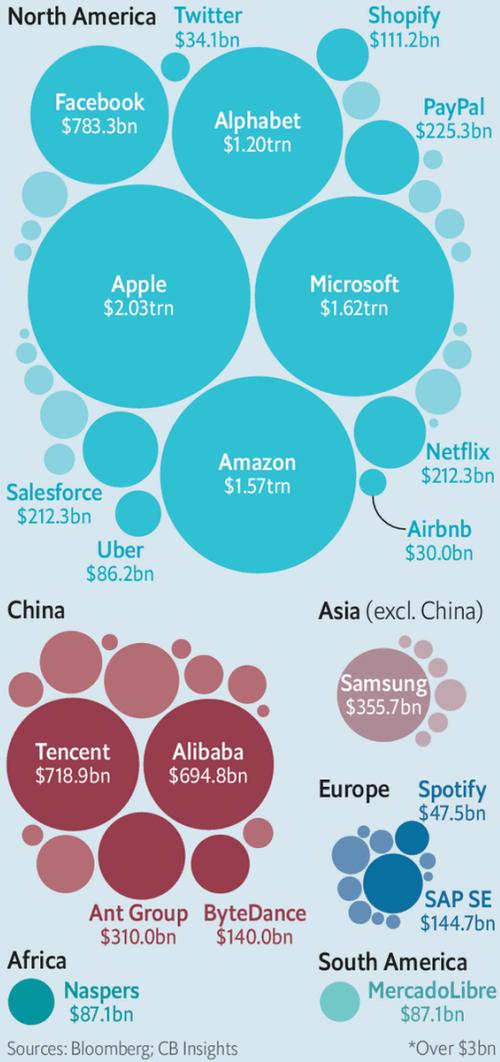


3. Increased tensions over data



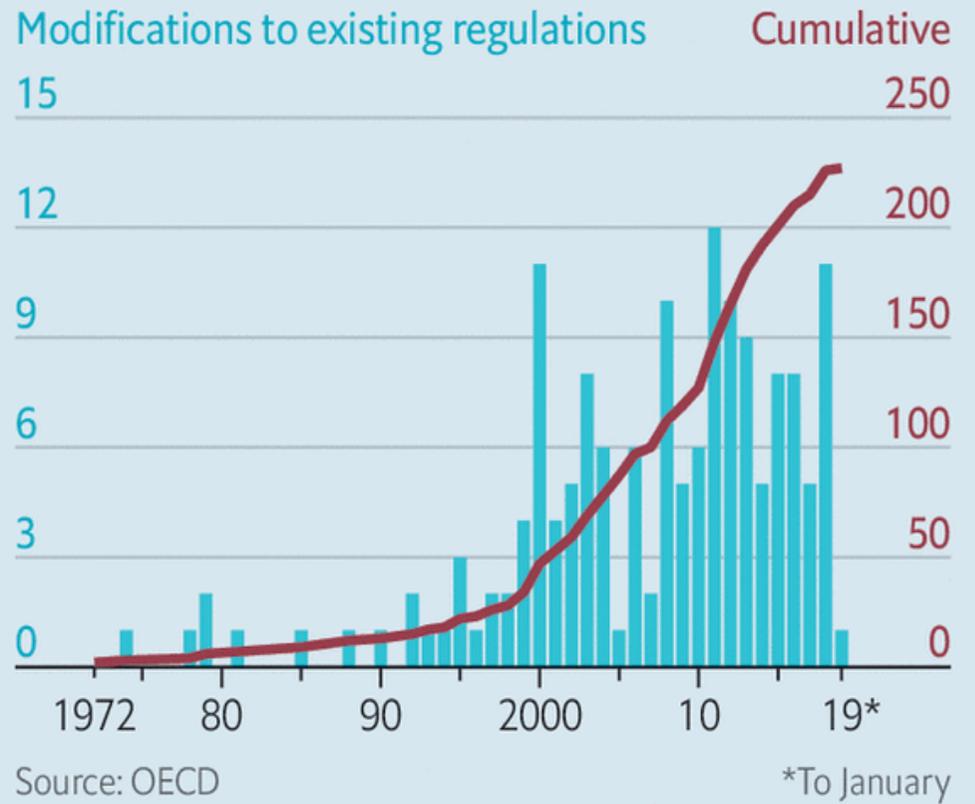
US and them

Selected global platforms, market capitalisation*
November 17th 2020 or latest



That's private

Data-protection regulations, worldwide



The Economist

And this will be 2021 ... (maybe)



4. The next frontier



Brain-Computer Interfaces Innovation, Security, and Society

Keynotes

Eberhard Fetz, U. of Washington
Dario Gil, IBM

Speakers

Ed Boyden, MIT
Jose Carmena, U.C. Berkeley
Edward Chang, UCSF
Mark Chevillet, Facebook
Ed Cutrell, Microsoft
Sara Goering, U. Washington
Patrick House, Kernel
Mary Lou Jepsen, Openwater
Kristin Lauter, Microsoft
Chaya Nayak, Facebook
Reardon, Facebook
Jeff Rogers, IBM
Francesca Rossi, IBM
Paul Sajda, Columbia U.
Ken Shepard, Columbia U.
Xabi Uribe-Etxebarria, Sherpa.ai
Moises Velasquez-Manoff, NY Times
Anna Wexler, U. Penn
Rafael Yuste, Columbia U.

Hosted Online!

November 19, 2020
10 am - 6 pm EST

Free Registration at

nri.ntc.columbia.edu/events/bci-symposium

Please note this seminar will not be posted on Youtube.



Spain: Digital Rights Charter

XXIV

Derechos digitales en el empleo de las neurotecnologías

1. Las condiciones, límites y garantías de implantación y empleo en las personas de las neurotecnologías serán reguladas por la ley con la finalidad de:
 - a. Preservar la identidad individual como conciencia de la persona sobre sí misma.
 - b. Garantizar la autodeterminación individual, soberanía y libertad en la toma de decisiones.
 - c. Asegurar la confidencialidad y seguridad de los datos obtenidos o relativos a sus procesos cerebrales y el pleno dominio y disposición sobre los mismos.
 - d. Ordenar el uso de interfaces persona-máquina susceptibles de afectar a la integridad física o psíquica.
 - e. Asegurar que las decisiones y procesos basados en neurotecnologías no sean condicionadas por el suministro de datos, programas o informaciones incompletos, no deseados, desconocidos o sesgados, o por intromisión en conexiones neuronales.
2. Para garantizar la dignidad de la persona, la igualdad y la no discriminación, y de acuerdo en su caso con los tratados y convenios internacionales, la ley regulará aquellos supuestos y condiciones de empleo de las neurotecnologías que, más allá de su aplicación terapéutica, pretendan el aumento cognitivo o la estimulación o potenciación de las capacidades de las personas.



PS





*Merry Christmas and
a happy
and better 2021!*



Image & video credits:

- Slide 2: EDPS, TechDispatch #1/2020: Contact Tracing with Mobile Applications
https://edps.europa.eu/data-protection/our-work/our-work-by-type/techdispatch_en
- Slide 3: DW News, <https://youtu.be/QLRVh22ze84>
- Slide 10: NASA Photo,
<https://www.nasa.gov/centers/armstrong/multimedia/imagegallery/Schlieren/index.html>
- Slide 13,14: The Economist
- Slide 16: Jim Meskinen,
<https://youtu.be/nD63QvIMB6k>

