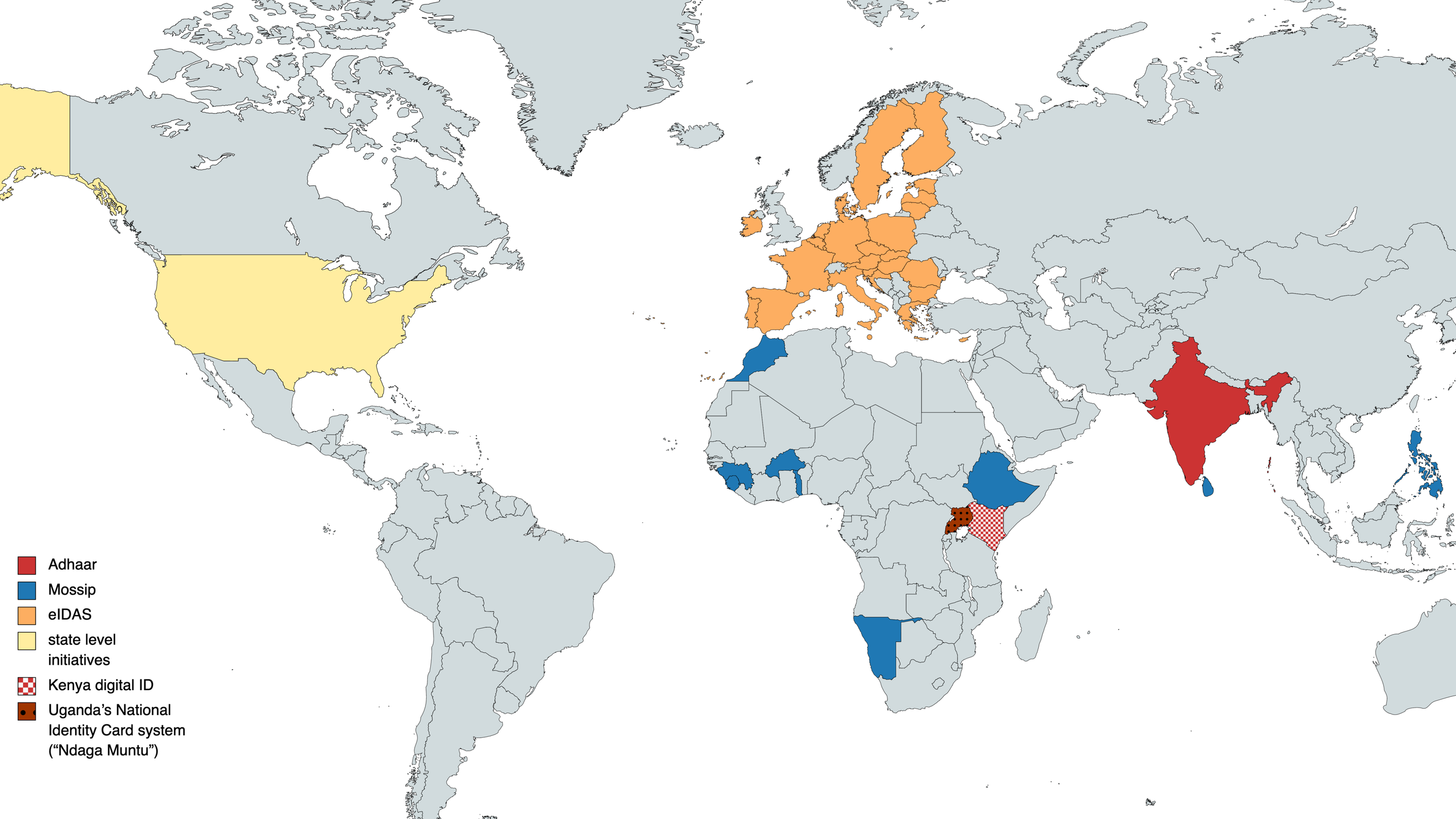
Please Identify Yourself!

Digital Identity Systems in the EU & around the world

Thomas Lohninger (epicenter.works), Udbhav Tiwari (Mozilla)
37c3, Hamburg, 27. December 2023

1 WHY & WHAT

Why these systems exist and how they work


Adhaar
Mossip
eIDAS
state level initiatives
Kenya digital ID
Uganda’s National Identity Card system (“Ndaga Muntu”)

SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD

TARGET 16·9

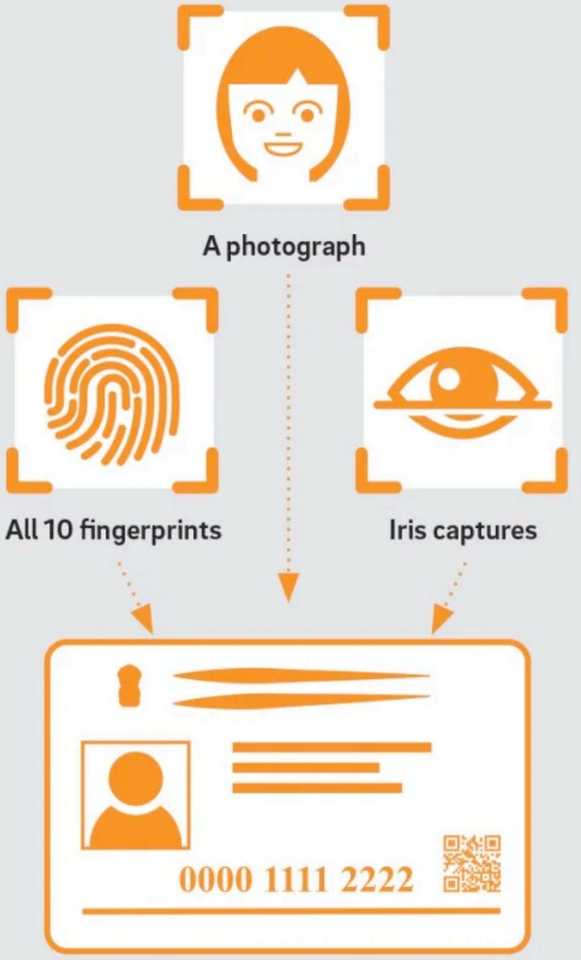
PROVIDE UNIVERSAL LEGAL IDENTITY

MERA AADHAAR, MERI PEHACHAN

AADHAAR: HOW IT WORKS AND HOW IT'S EVOLVED

The enrolment process

To ensure that each person receives only one Aadhaar number, the UIDAI (Unique Indentification Authority of India) set up a deduplication database built on three features.



The Aadhaar Card is primarily a means of individual identification.

An Aadhaar ID is:
- **Universal, digital and secure**
- **Linkable to multiple applications**
- **Suitable for use as a banking address**

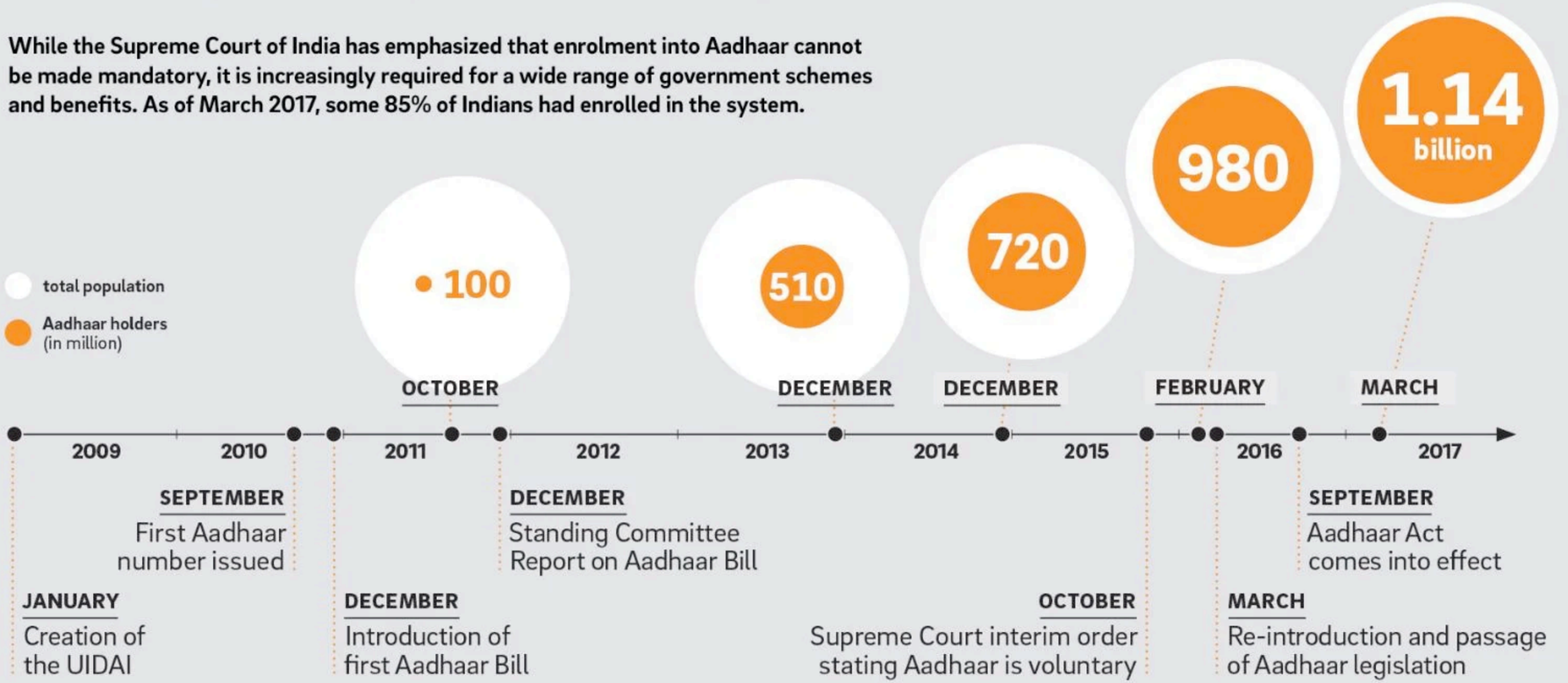
Infographic World bank snapshot 2012; United Nations

Roland Berger

AADHAAR: HOW IT WORKS AND HOW IT'S EVOLVED

The Aadhaar system: on the path to universal coverage

While the Supreme Court of India has emphasized that enrolment into Aadhaar cannot be made mandatory, it is increasingly required for a wide range of government schemes and benefits. As of March 2017, some 85% of Indians had enrolled in the system.



Source state of aadhaar full report 2016-17

Roland Berger

As States Continue To Mandate Aadhaar For RTE, Govt Affirms Aadhaar Not Compulsory For School Admissions

The clarification came in response to a question raised in the Rajya Sabha asking if the government has issued any advisory to the States on the same.

By Sarasvati NT Published July 26, 2023

Aadhaar
@UIDAI

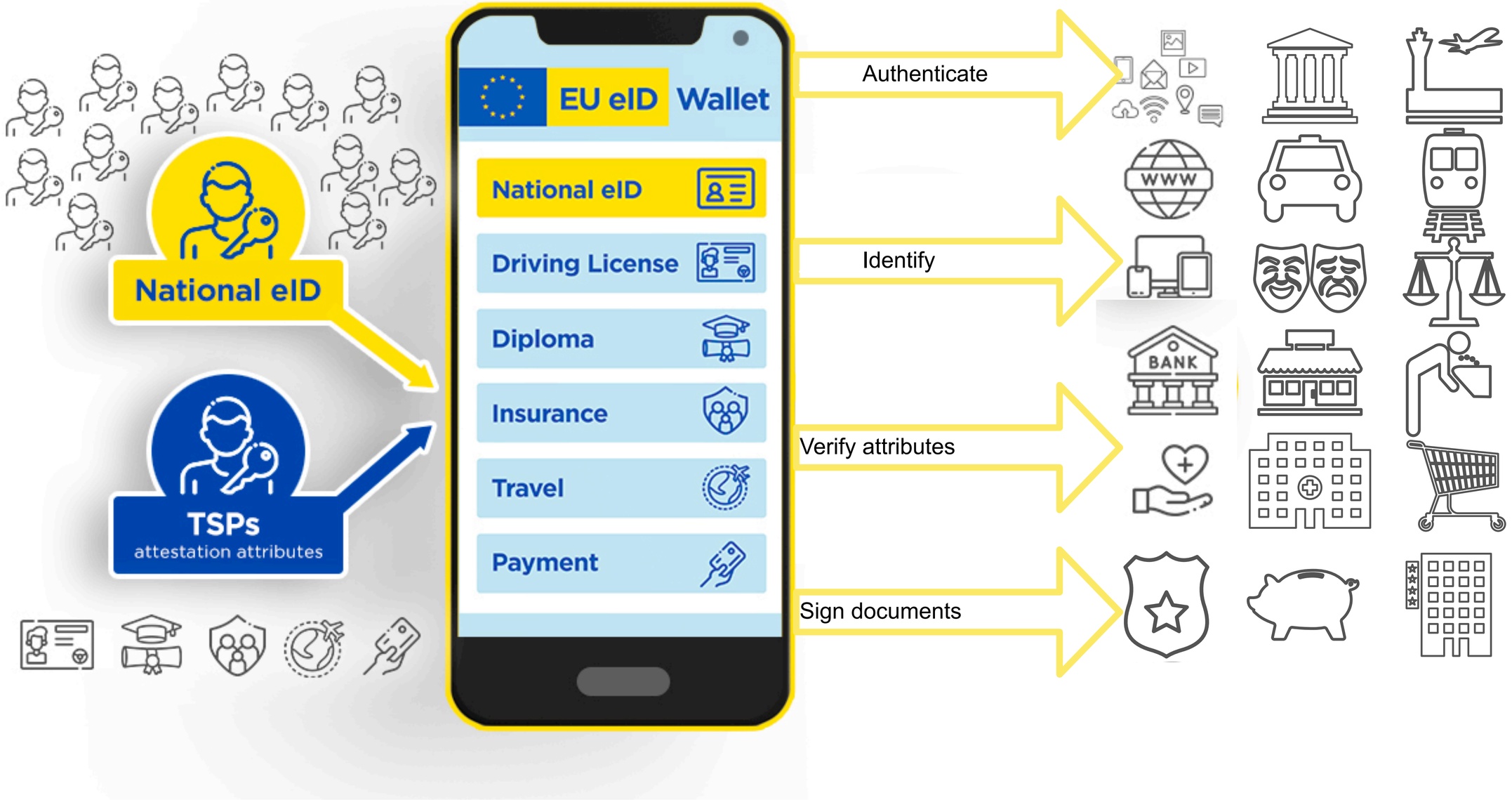
#AadhaarChildEnrolment
To enroll your child for #Aadhaar, you only need the child's birth certificate or the discharge slip from the hospital and the Aadhaar of one of the parents.
List of other documents that you can use for the child's enrolment: uidai.gov.in/images/commdoc...

4:30 AM · Jul 27, 2021

		What is it?	What is in it?	Who is the owner?
India Stack	Consent layer	A modern privacy data sharing framework	Open personal data store	Reserve Bank of India
	Cashless layer	An electronic interoperable payment network	IMPS, AEPS,APB, UPI	National Payments Corporation of India
	Paperless layer	Easily store and retrieve information digitally	Aadhaar e-KYC, e-Sign, Digital Locker	Department of Electronics and Information Technology
	Presence-less layer	Unique digital biometric identity with open API access	Aadhaar card, Mobile Aadhaar	Unique Identification Authority of India

EU eID Wallet
National eID
Driving licence
VISA
MASTERCARD
MAESTRO
EU DIGITAL IDENTITY
#DigitalEU

Issuer Holder Relying Parties



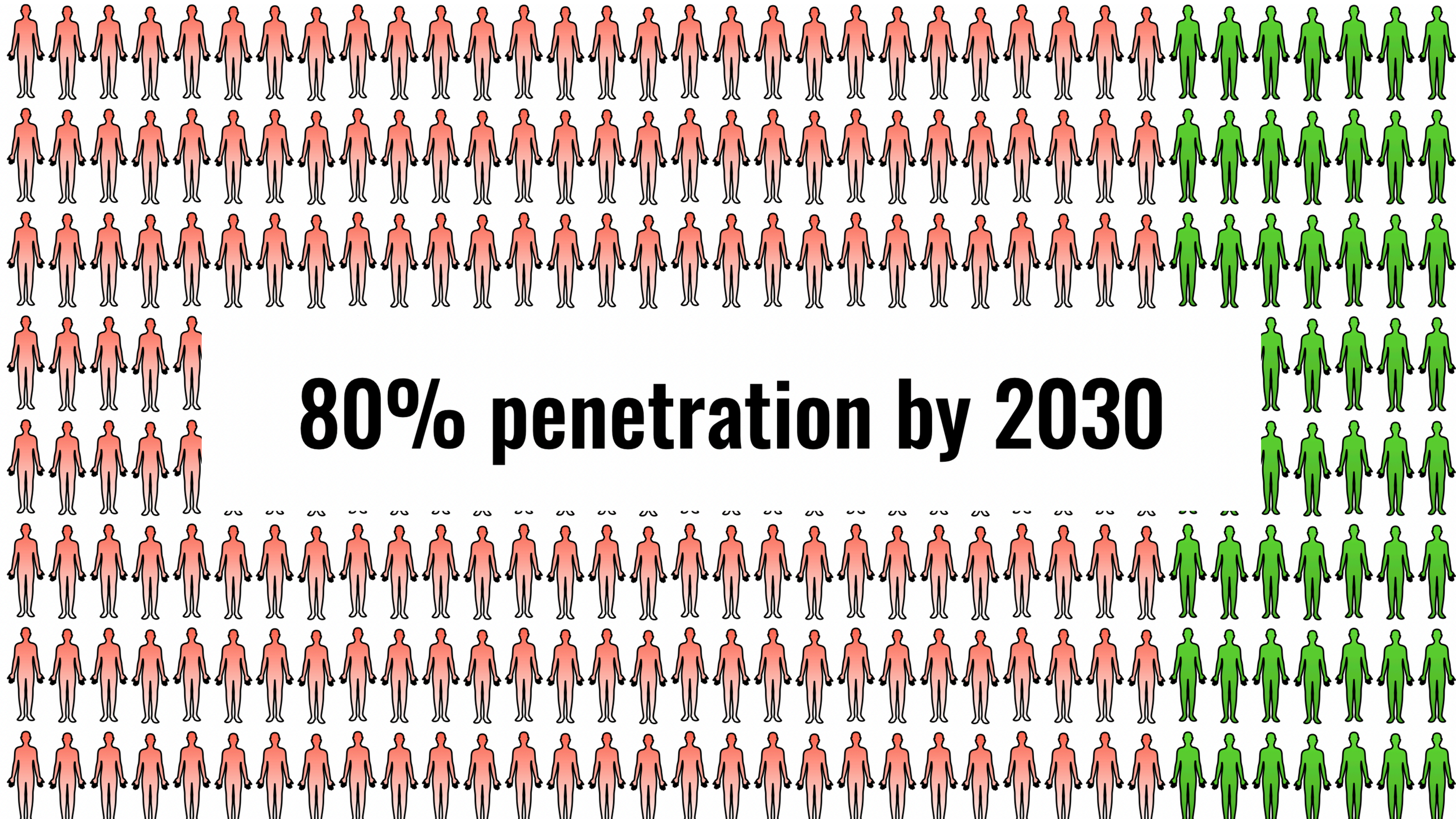
Universal Infrastructure

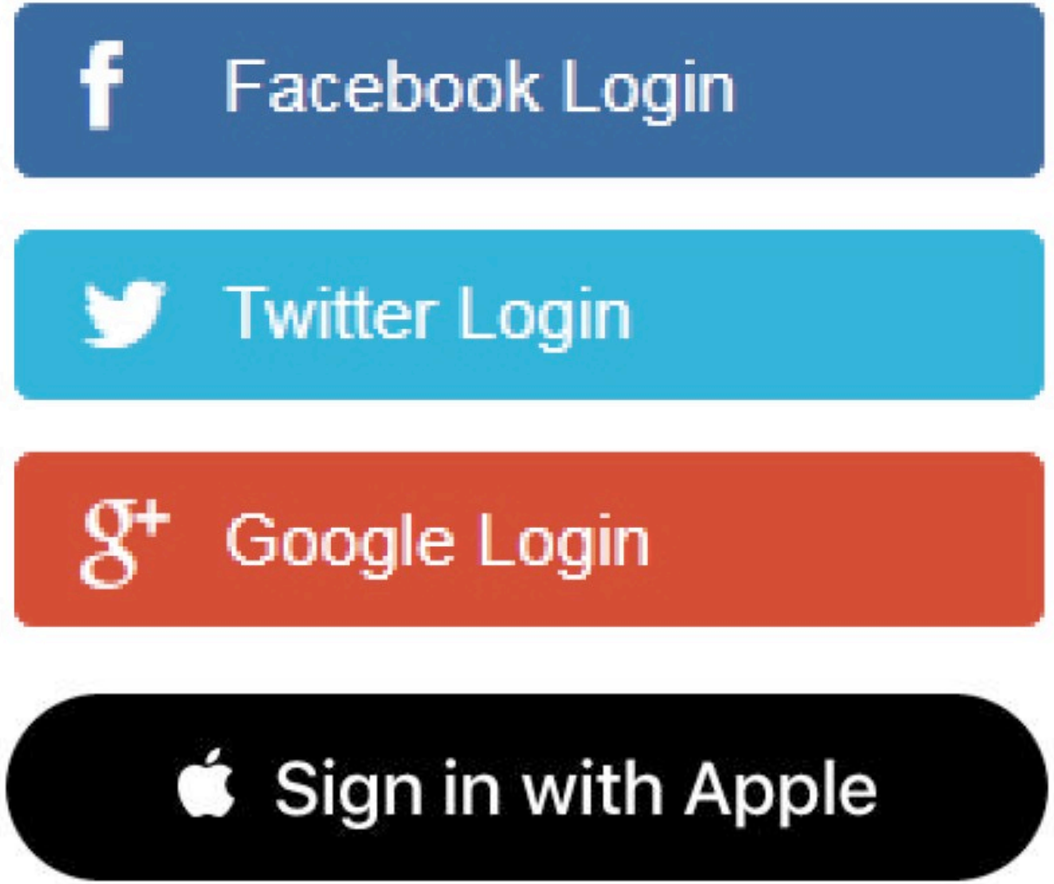
to identify, authenticate and verify attributes

about legal and natural persons

vis-à-vis government and private sector

online and offline.


80% penetration by 2030


Facebook Login
Twitter Login
Google Login
Sign in with Apple

O2 Telefónica

MOTEL ONE

TABACCO SHOP

Deutsche Bank

axel springer

Google

OTTO

BUNDESNOTARKAMMER
KÖRPERSCHAFT DES ÖFFENTLICHEN RECHTS

amazon

schufa

facebook

2 RISKS

What can go wrong

Personal data of a billion Indians sold online for £6, report claims

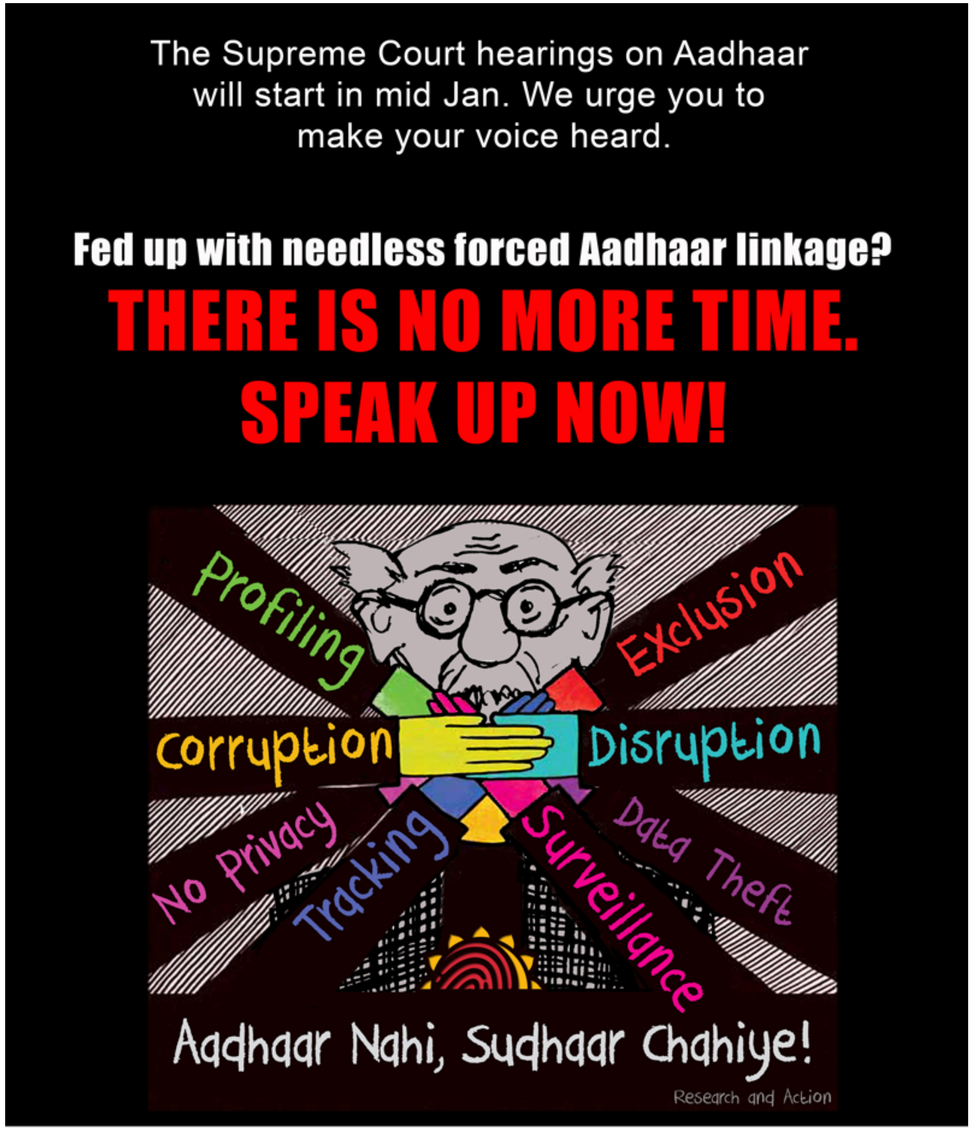
Newspaper says it bought access to details from world's largest biometric database, used to administer public services

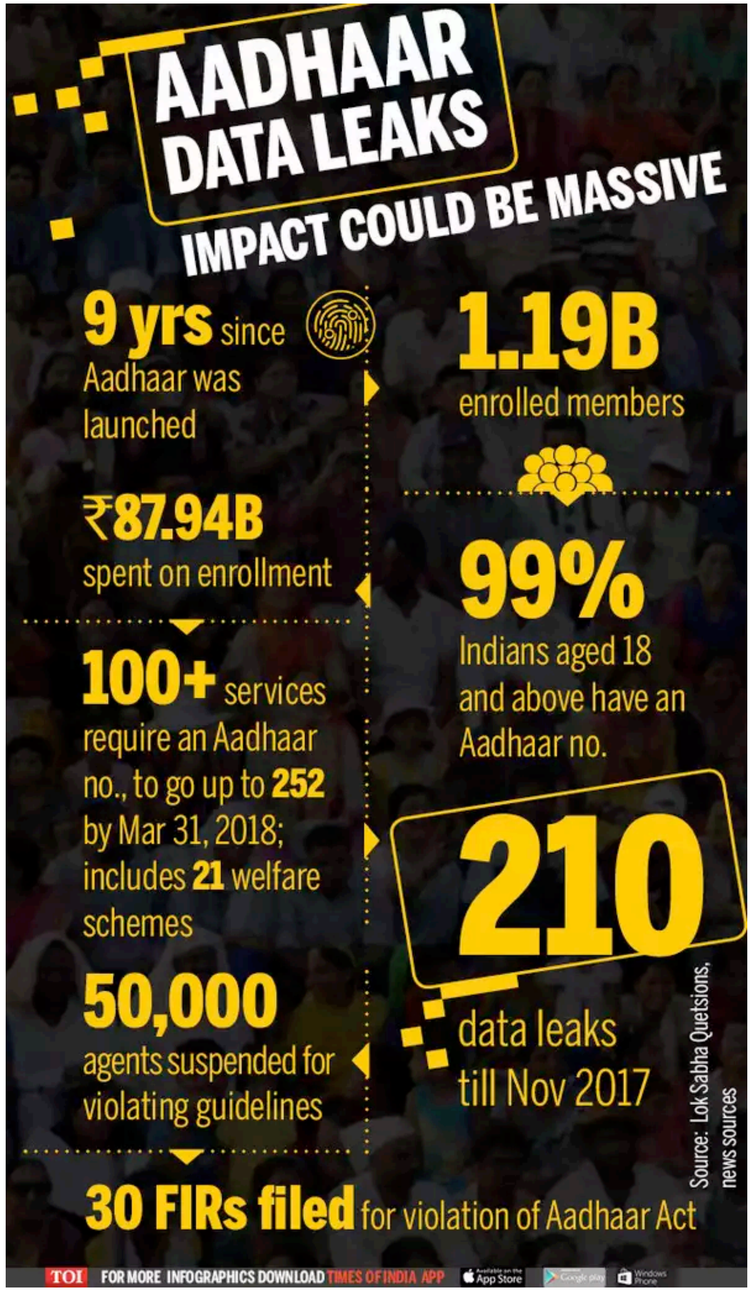
Michael Safi *in Delhi*

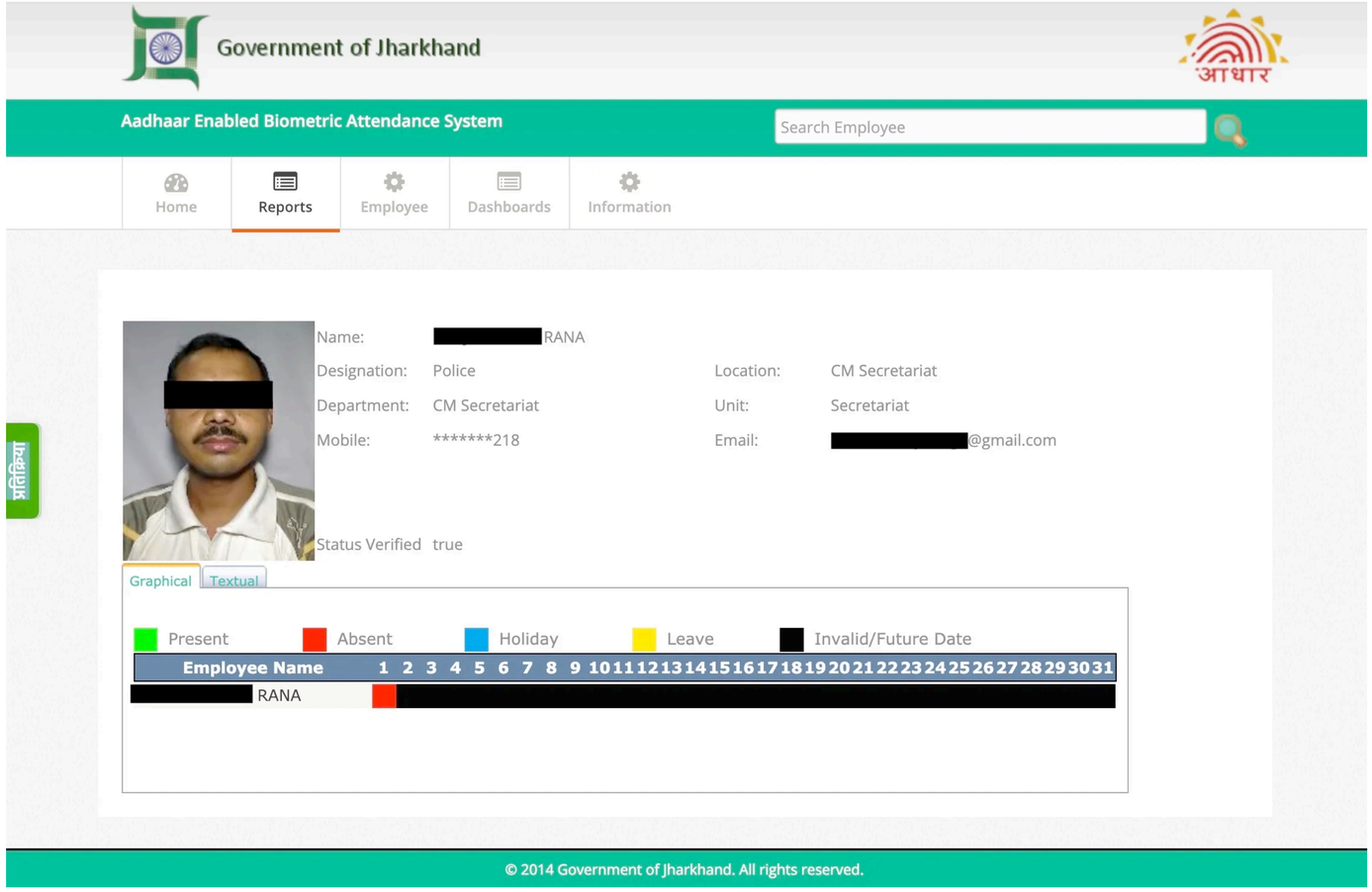
@safimichael

Thu 4 Jan 2018 12.20 CET

Women in Kolkata protest against the government's decision to link free lunch meals for children at state-run schools with Aadhaar cards. Photograph: -/AFP/Getty



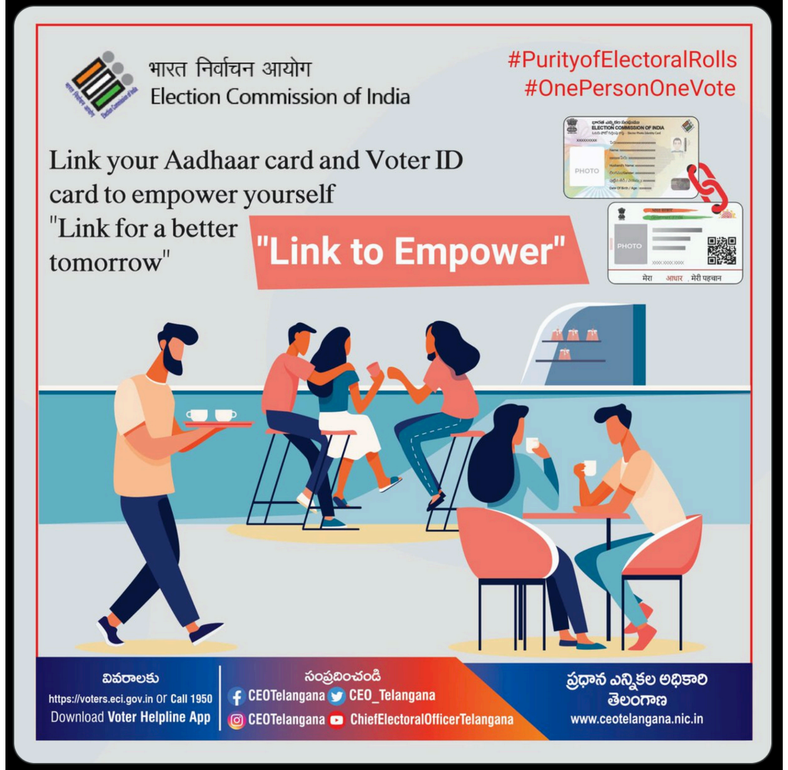

AADHAAR DATA LEAKS
IMPACT COULD BE MASSIVE
9 yrs since Aadhaar was launched
1.19B enrolled members
₹87.94B spent on enrollment
99% Indians aged 18 and above have an Aadhaar no.
100+ services require an Aadhaar no., to go up to 252 by Mar 31, 2018; includes 21 welfare schemes
210 data leaks till Nov 2017
50,000 agents suspended for violating guidelines
30 FIRs filed for violation of Aadhaar Act
Source: Lok Sabha Quetsions, news sources
TOI FOR MORE INFOGRAPHICS DOWNLOAD TIMES OF INDIA APP


Government of Jharkhand
आधार
Aadhaar Enabled Biometric Attendance System
Search Employee
Home
Reports
Employee
Dashboards
Information
Name: [redacted] RANA
Designation: Police
Location: CM Secretariat
Department: CM Secretariat
Unit: Secretariat
Mobile: *******218
Email: [redacted]@gmail.com
Status Verified true
Graphical
Textual
Present
Absent
Holiday
Leave
Invalid/Future Date
Employee Name 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
[redacted] RANA
© 2014 Government of Jharkhand. All rights reserved.

CEO Telangana
@CEO_Telangana

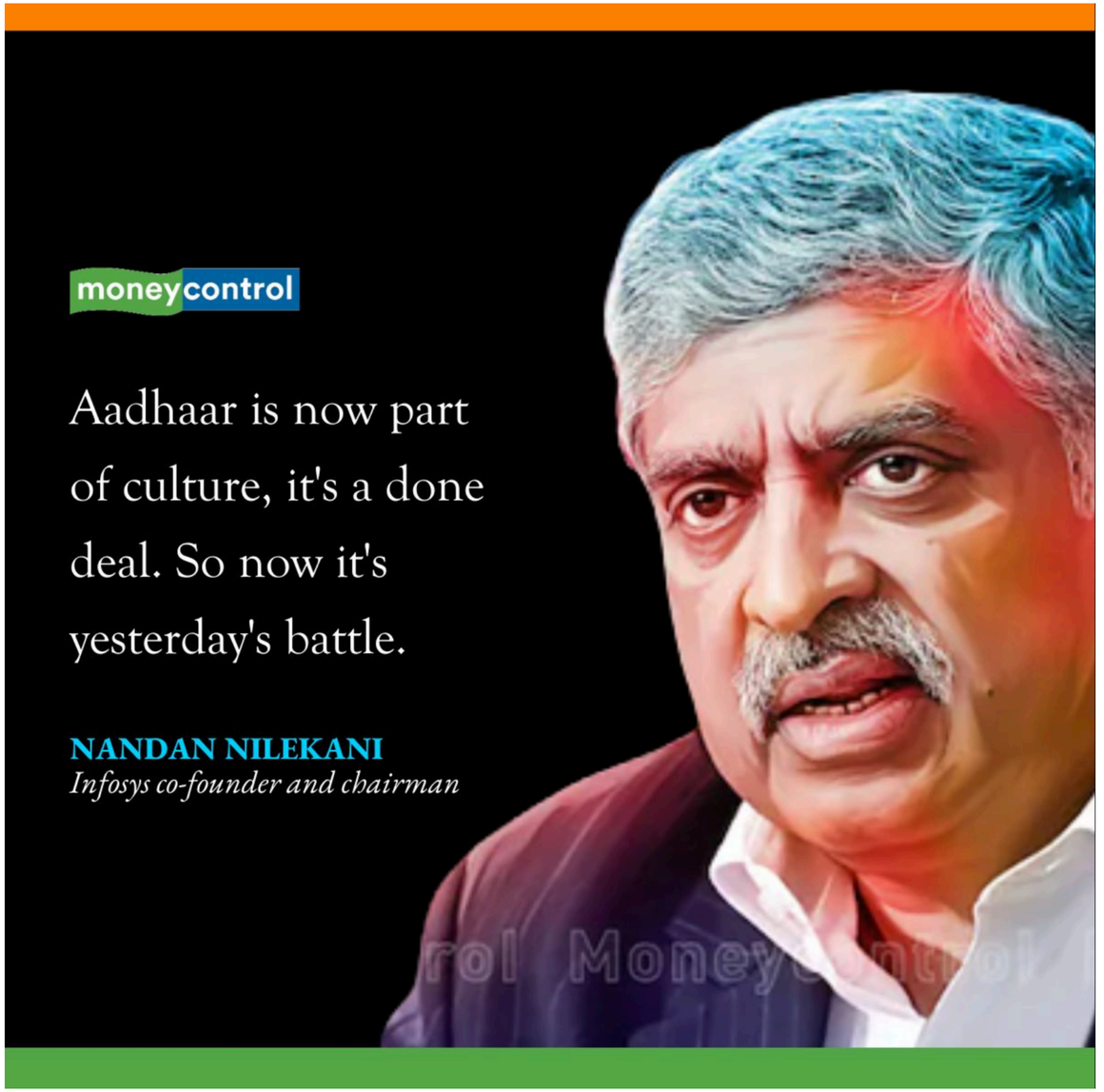
Link to empower - Link to progress. Don't just vote, make a difference by linking your Aadhaar card and your Voter ID today.

#ceotelangana #ecisveep #LinkToEmpower
@ECISVEEP



Spokesperson ECI and Election Commission of India

7:27 AM · Apr 21, 2023 · **852** Views


moneycontrol
Aadhaar is now part of culture, it's a done deal. So now it's yesterday's battle.
NANDAN NILEKANI
Infosys co-founder and chairman

Exclusion by design: how national ID systems make social protection inaccessible to vulnerable populations

Governments around the world are increasingly making registration in national ID systems mandatory for populations to access social benefits, healthcare services, and other forms of state support. By virtue of their design, these systems inevitably exclude certain population groups from obtaining an ID and hence from accessing essential resources to which they are entitled.

change.org/SoyMayorNOidiota

3

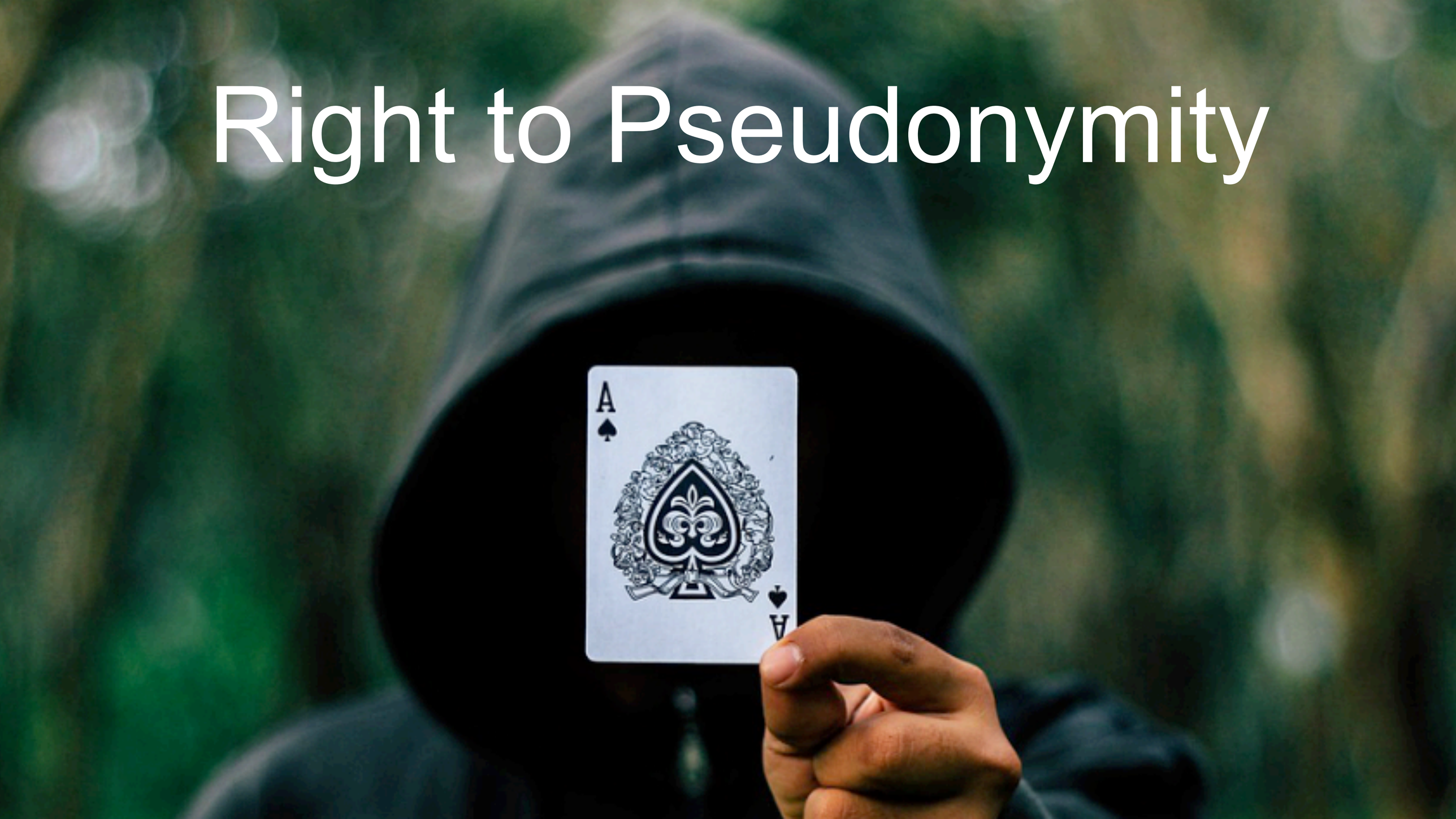
ARE SAFEGUARDS ENOUGH?

Outcome of the EU reform

The Good

4 343399 876228

Right to Pseudonymity



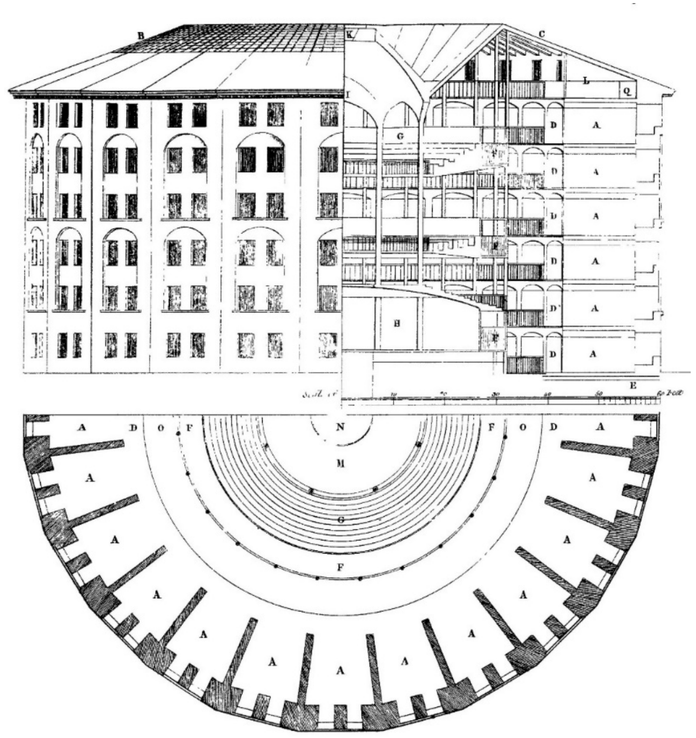
Zero Knowledge Proofs

USE CASE

The Bad

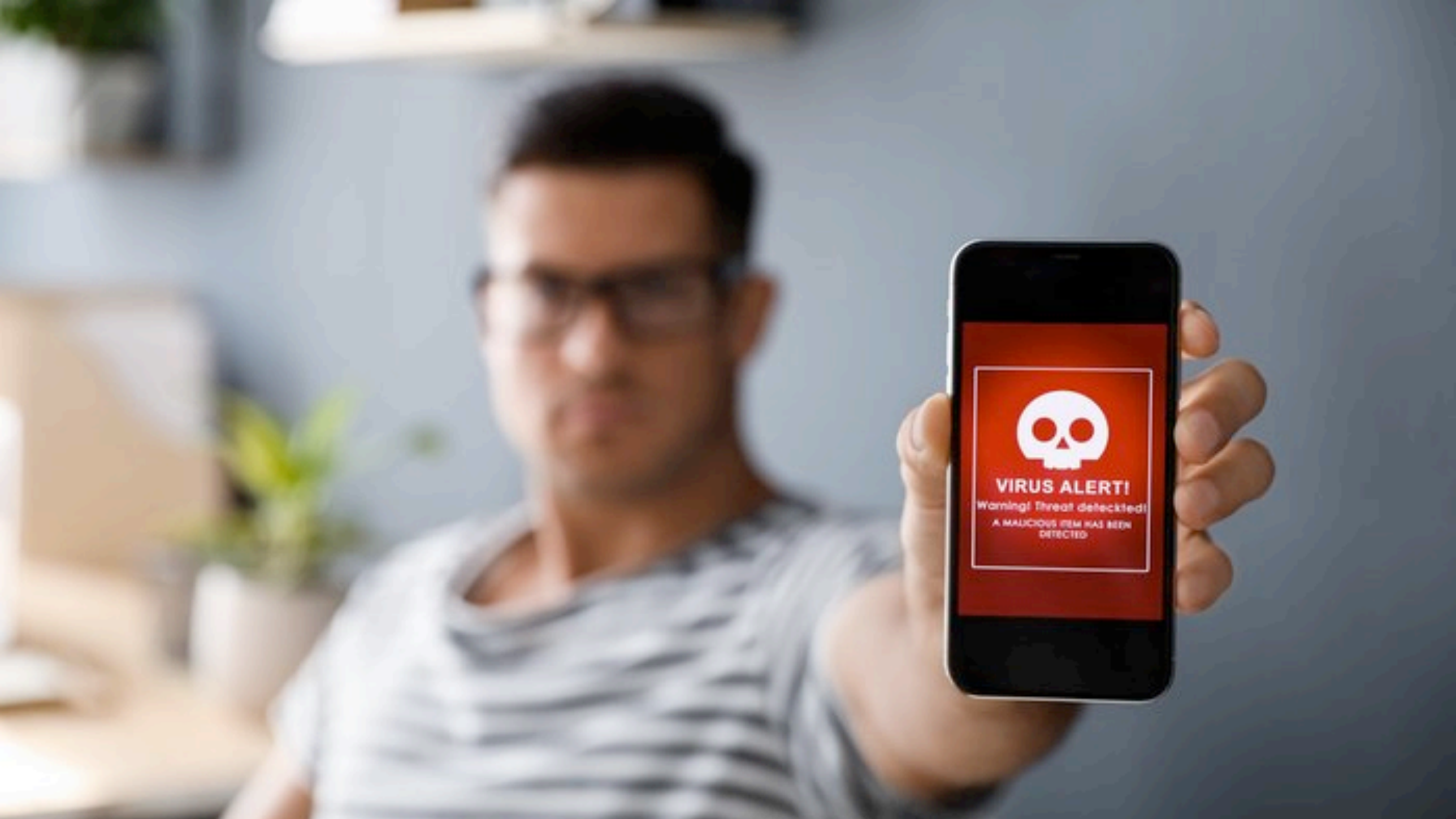
Unobservability or Panopticon?

All user transactions run via one server/ blockchain infrastructure?



https://en.wikipedia.org/wiki/Panopticon

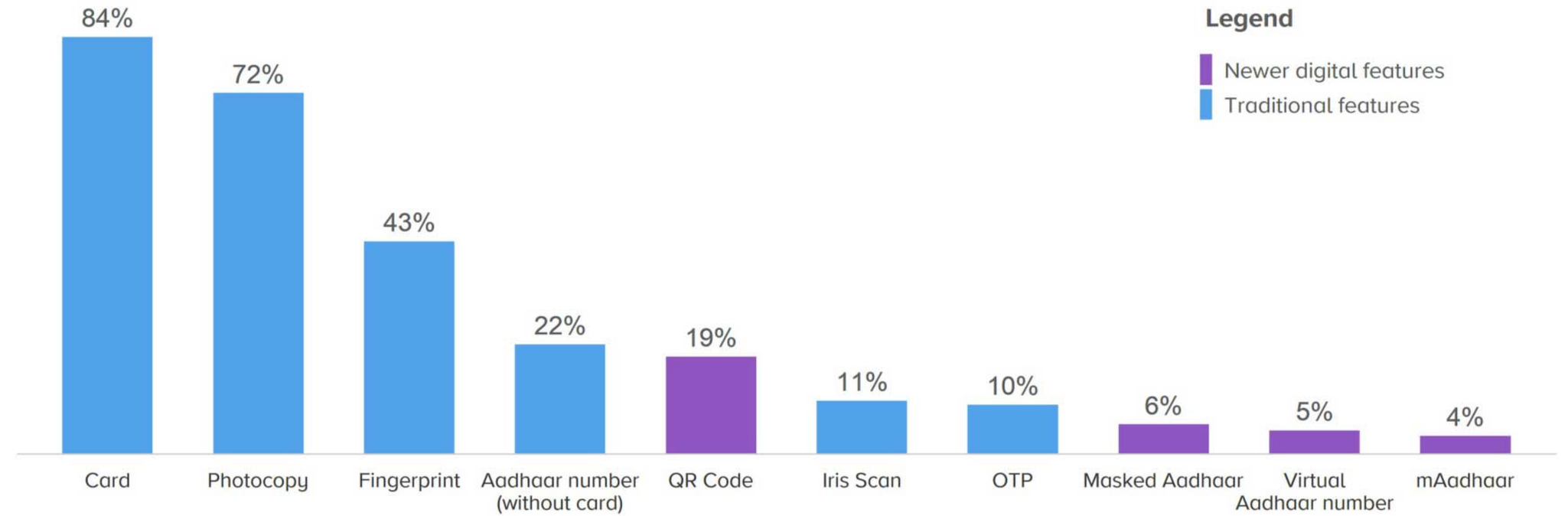
The Ugly


VIRUS ALERT!
Warning! Threat detecktedl
A MALICIOUS ITEM HAS BEEN
DETECTED

Open Source

Use of different forms and features of Aadhaar

% of respondents who have Aadhaar



AFRICA DATA PROTECTION DIGITAL ID POLICY PRIVACY

Kenya Government mandates DNA-linked national ID, without data protection law

Alice Munyua | February 8, 2019

World

Court orders safeguards for Kenyan digital IDs, bans DNA collecting

By **Humphrey Malalo** and **Omar Mohammed**

January 31, 2020 4:00 PM GMT+1 · Updated 4 years ago

Aa

WHAT'S NEXT?

World Domination ™

Timetable EU

- ☑ June 2021: EC proposal
- ☑ Dec 2022: Council general approach (🇨🇿 presidency)
- ☑ March 2023: Plenary vote 1st reading
- ☑ 21. March 2023: Trilogue starts (🇸🇪 presidency)
- ☑ 2023: Trilogue ends (🇪🇸presidency)
- ☑ 7. Dec 2023: ITRE vote
- ☐ 6. Feb 2024: Plenary vote 2nd reading
- ☐ ~ Aug 2024: Implementing acts
- ☐ ~2026: obligation to offer Wallet

eIDAS Expert Group (E03032)

ACTIVE

Subscribe to this group

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Details | Additional Information | Meetings | Subgroups | Statistics | Members

Type D - Member State Authority (27)

Country	Public Authorit(y-ies)	Membership Status
Austria	0 Behörde(n)	Member
Belgium	0 Behörde(n)	Member
Bulgaria	0 Behörde(n)	Member
Croatia	0 Behörde(n)	Member
Cyprus	0 Behörde(n)	Member
Czech Republic	0 Behörde(n)	Member
Denmark	0 Behörde(n)	Member
Estonia	0 Behörde(n)	Member

Chatkontrolle Stoppen!

Universal Safeguards for Digital Public Infrastructure

As digital public infrastructure (DPI) becomes integral to society, governance and finance, we must collaboratively establish safeguards to ensure global protection of fundamental rights.

United Nations
Office of the Secretary-General's
Envoy on Technology

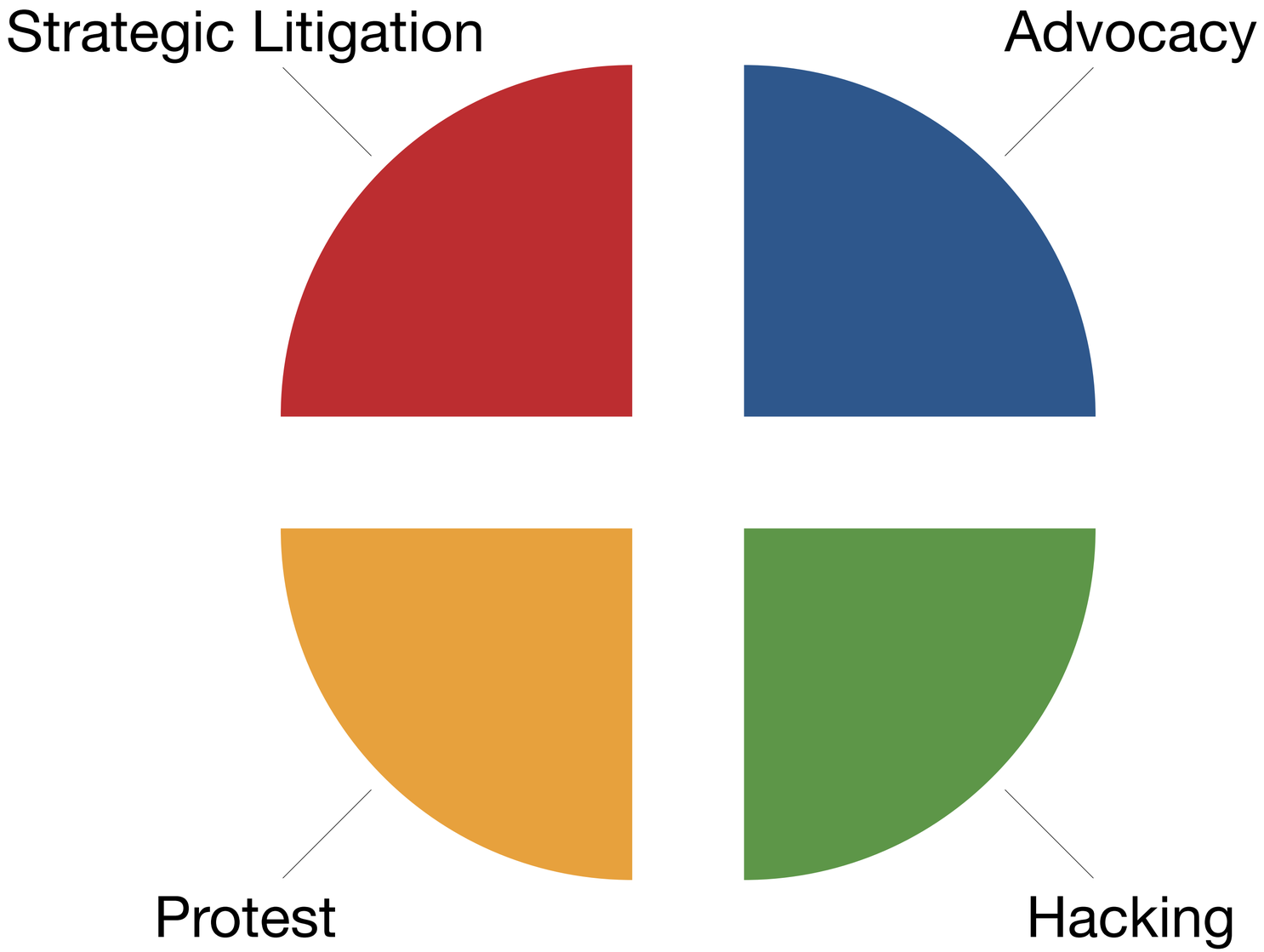
UNDP

dpi-safeguards.org

Timetable UN

- [x] Unofficial circulation of draft
- [ ] 13 February consultation 1
- [ ] 1 March consultation 2
- [ ] 8 March written input
- [ ] 2 April 1st reading
- [ ] 2 May 2nd reading
- [ ] 16 May 3rd reading
- [ ] ~May UN Civil Society conference (Nairobi, Kenya)
- [ ] 21 September 2024 Summit of the Future (Global Digital Compact)

Axes of Resistance



I HELPED SAVE THE INTERNET.
YOU CAN TOO.
support a free internet
bit by bit here
support.epicenter.works
EPICENTER
.WORKS
for digital rights