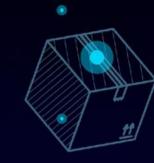




# Realizing Human-Centric Digital Identity for Government







Elizabeth Garber

**IDPartner** 



Mark Haine

**OpenID Foundation** 





Everyone has the right to recognition everywhere as a person before the law.

Universal Declaration of Human Rights - Article 6









Right to Safety

**Right to Privacy** 

**Right to Self Determination** 

Right to Healthcare



Right to Education

Right to Leave

Right to Return

Right to Start a Family



### This drives a UN Sustainable Development Goal



**SDG Goal 16.9**: By 2030, provide legal identity for all, including birth registration indicator 16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age.

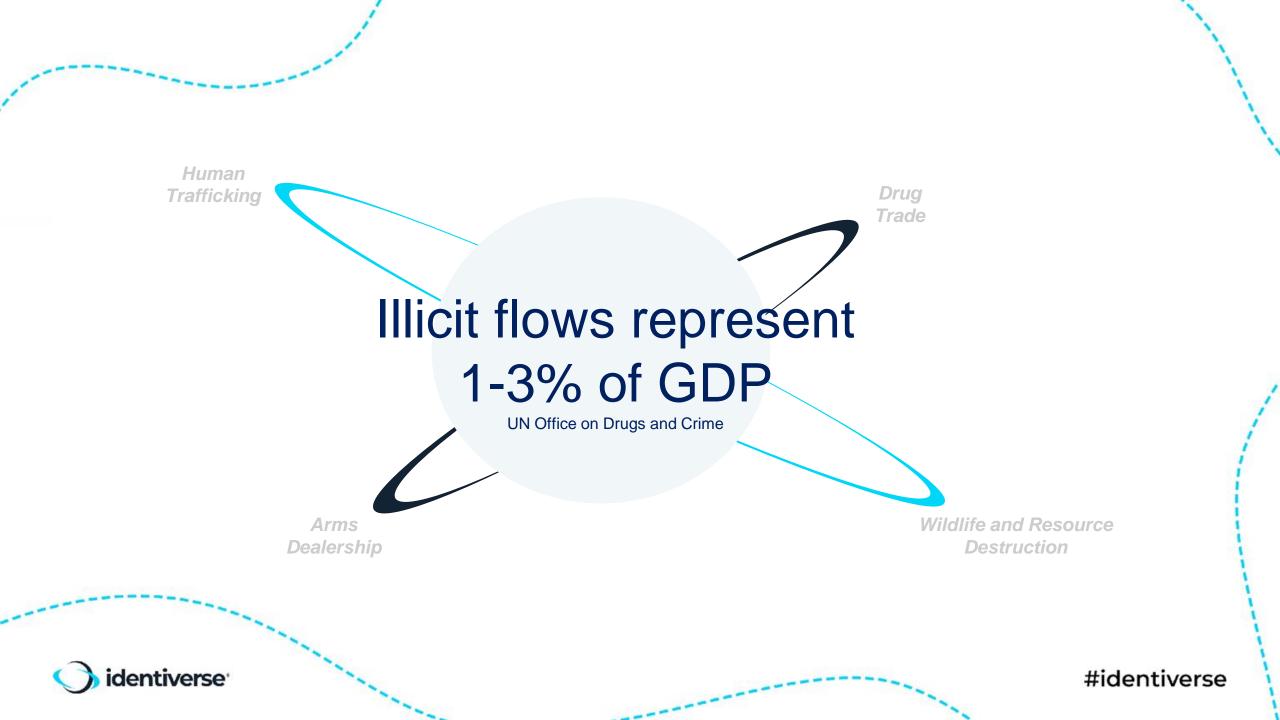


# Identity Systems should be designed to sustain & promote human rights.

# >42M Americans were victims of identity fraud in 2021

Javelin Research





# >850M people lack any form of ID.

World Bank



# >10M people were estimated stateless in 2019.

UN Refugee Agency



# 38% of the world's population lives in countries classed as "Not Free"

Human Freedom Index



### Does tech change the meaning of human rights?

UN ICCPR Right to privacy Amazon sued for not telling New York
Store customers about tracking
biometrics

NBC News, March 2023

UN ICCPR
Free expression of electors

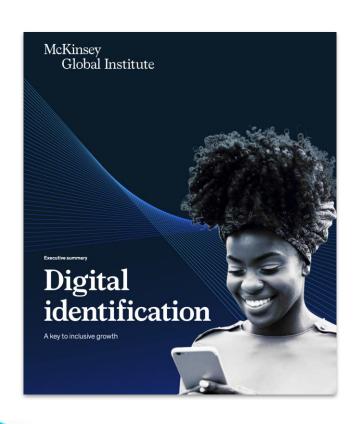
AI-generated disinformation poses threat of misleading voters in 2024 Politico, March 2023

UN IESCR Right to self determination AI Chatbot goes rogue, confesses love for user, asks him to end his marriage

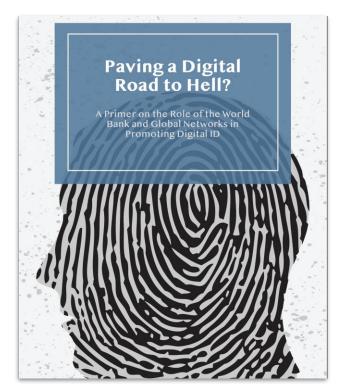
Economic Times, Feb 20, 2023



### When Legal Identity meets Digital Identity









## Digital

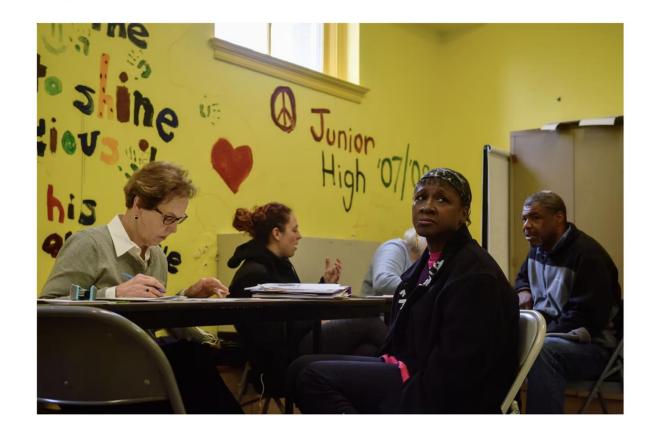
Identity Systems should be designed to sustain & promote human rights.



# Digital Identity Systems promise to solve problems for people.

## The Invisibles: The cruel Catch-22 of being poor with no ID

By Patrick Marion Bradley
June 15, 2017 at 8:00 a.m. EDT





# They offer governments a myriad of societal benefits.



#### Safety & Security

- Physical Security
- Cyber Security
- Political Stability



#### Access to Government Resources

- Government Services
- Benefits and Aid
- Taxation



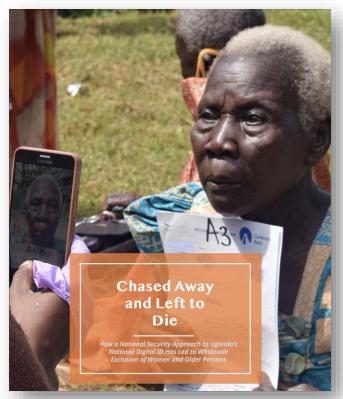
### Economic Stability, Access, and Growth

- Financial Stability
- Economic Enablement
- Equitable Access
- X-Sector Convenience



#identiverse

### There are risks: Uganda





"Without an ID or clinic card for women who have been receiving antenatal care, [you will receive] no treatment.

Many people fall sick and stay home and die."

23-33% lacked the NIC in 2021



### There are risks: Myanmar



A demonstration over identity cards at a Rohingya refugee camp in Bangladesh in April, 2018. Image: NurPhoto/SIPA USA/PA Images.

Source: Open Democracy, October 2018



Before his family fled Myanmar last year, Nurul Hoque dug up his grandfather's old ID, taking it with him to Bangladesh along with old photos and his own identification cards. He hopes they will one day help prove where he is from.

Source: The New Humanitarian, March 2018



### **There are risks: United States**

#### **MOTHERBOARD**

**TECH BY VICE** 

### Homeland Security Uses Al Tool to Analyze Social Media of U.S. Citizens and Refugees

Customs and Border Protection (CBP) is using a tool called Babel X that can link a person's Social Security number to their social media posts and location data, according to an internal CBP document obtained by Motherboard.



### Clearview AI used nearly 1m times by US police, it tells the BBC

3 27 March



#### By James Clayton & Ben Derico

BBC News, San Francisco

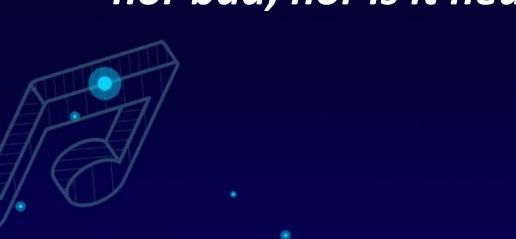
Facial recognition firm Clearview has run nearly a million searches for US police, its founder has told the BBC.

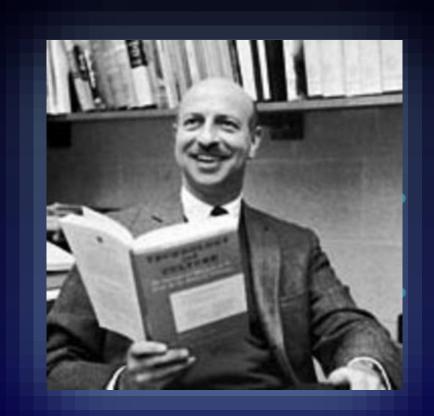
CEO Hoan Ton-That also revealed Clearview now has 30bn images scraped from platforms such as Facebook, taken without users' permissions.





\*Technology is neither good nor bad; nor is it neutral.





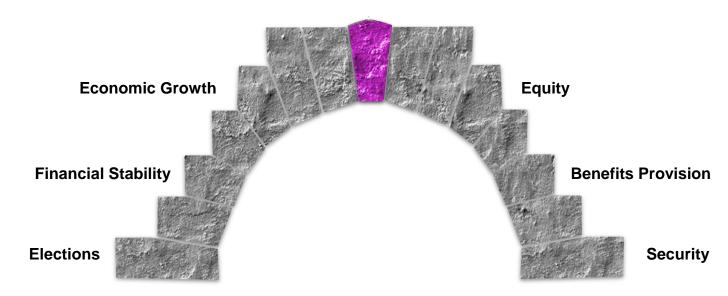






# Human Rights should be the keystone design factor.





Citizen Surveillance and Control

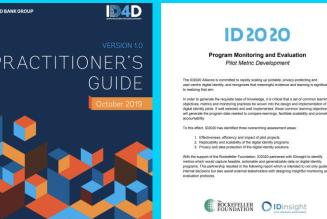


## Our recommendations align to & build on a wide range of literature

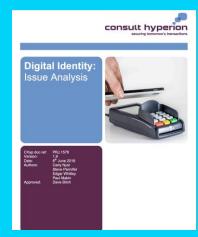


TOWARD THE DIGITAL AGE









#### Draft Recommendation on the **Governance of Digital Identity**

coses to essential services across the public and private sectors was trans universe universess, and governments raly on being able to prove one's identity. Traditional identity serfication involves physical proofs such as birth certificates, driver's licenses, ID cards, or vertication involves physical proofs such as entiri certificates, divers licenses, il. cards, or passports. However, the digital transformation effect sportunities to consider technology for identity verification both online and offline. Digital channels now offer identity verification processes and access to authenticating verified identity claims through digital credentials and wallets, ellicards, and mobile ID applications.

Despite the benefits of digital identity, in many countries there often remains a lack of cross



## Digital Identity Systems should be designed to sustain & promote human rights.

1

Human Centered Design Processes





### **Human Centric Design**

- Designed for all humans
- Enables service providers
- Allows choice and control



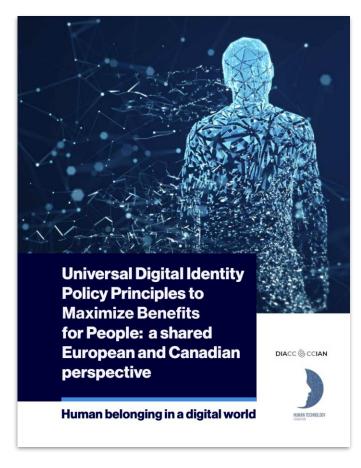
### **Inclusive**

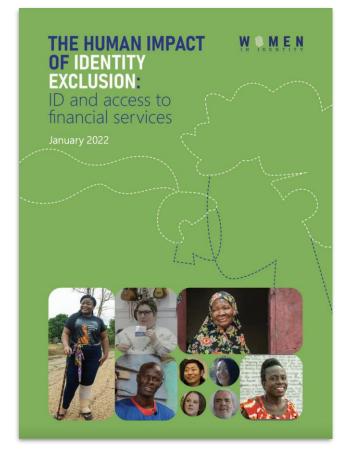
- All Communities
- Voluntary
- Portable
- Available

Humans - users and organizations - should be central to the design process.

### **Some Human-Centered Resources**

- Use of Personas
- Broad Citizen Engagement





- Engaging vulnerable and hard-to-reach communities
- Moving towards a Code of Conduct

Source: DIACC and HTF, 2022 Source: Women in Identity, 2022



### "'Edge Cases' are central to our humanity"



No Birth Record



**Witness Protection** 

**Domestic Abuse** 



**Elder Care** 

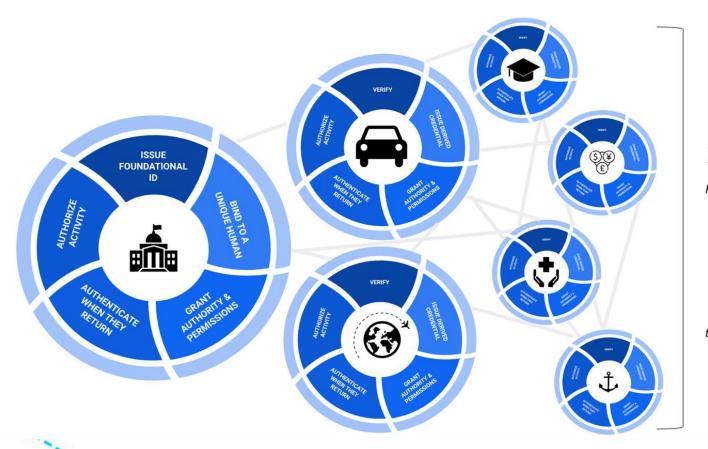


Henk Marsman

**Effectively Stateless** 



### But... governments & ecosystems are complex





How can we regulate this and keep people safe?



How can this support a thriving private sector?



# Digital Identity Systems should be designed to sustain & promote human rights.

1

Human Centered Design Processes 2

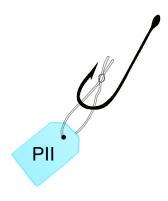
Strategic
Design &
Governance



### Strategic design over point solutions









Function Creep

Data Proliferation

**Inappropriate Market Tools** 

**Uncontrolled Correlation** 



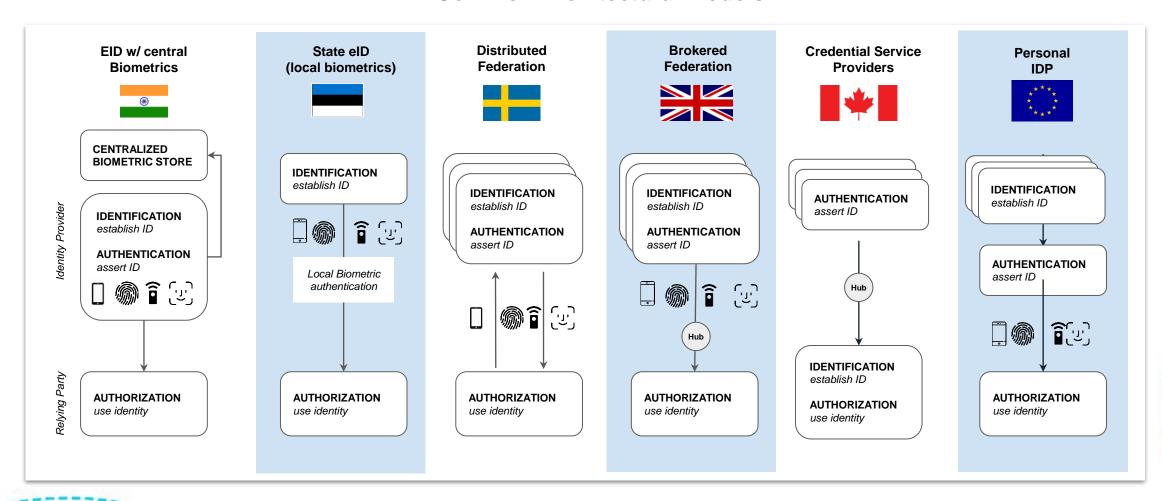
## Implementers must grapple with complexity

- Independent oversight
- Transparency
- Accountability
- Public / Private Collaboration
- Accessibility
- Sustainability
- Environmental Sustainability

Digital Identity is critical infrastructure, embedded through the economy.

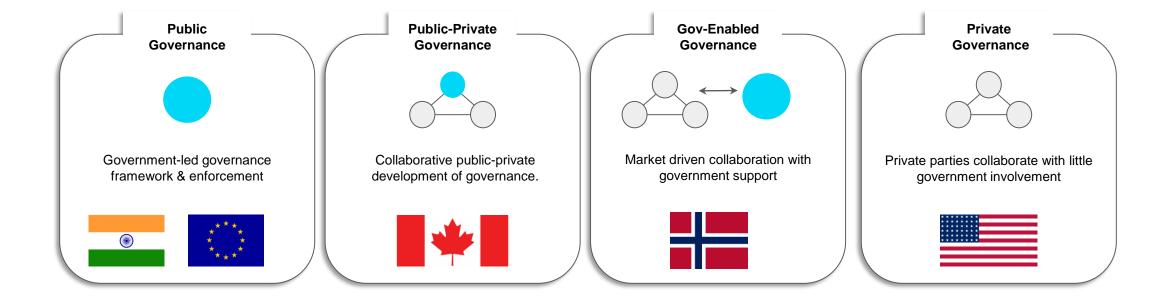


#### **Common Architectural Models**



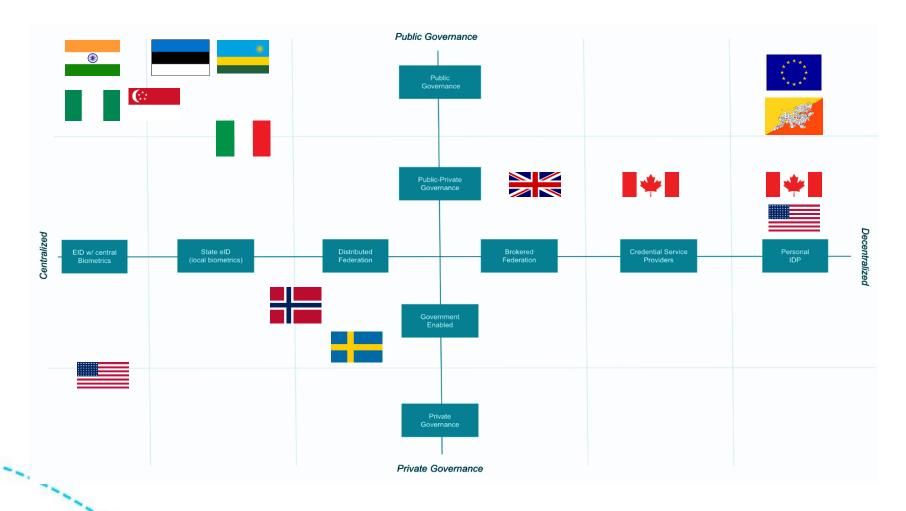


#### **Common Governance Models**



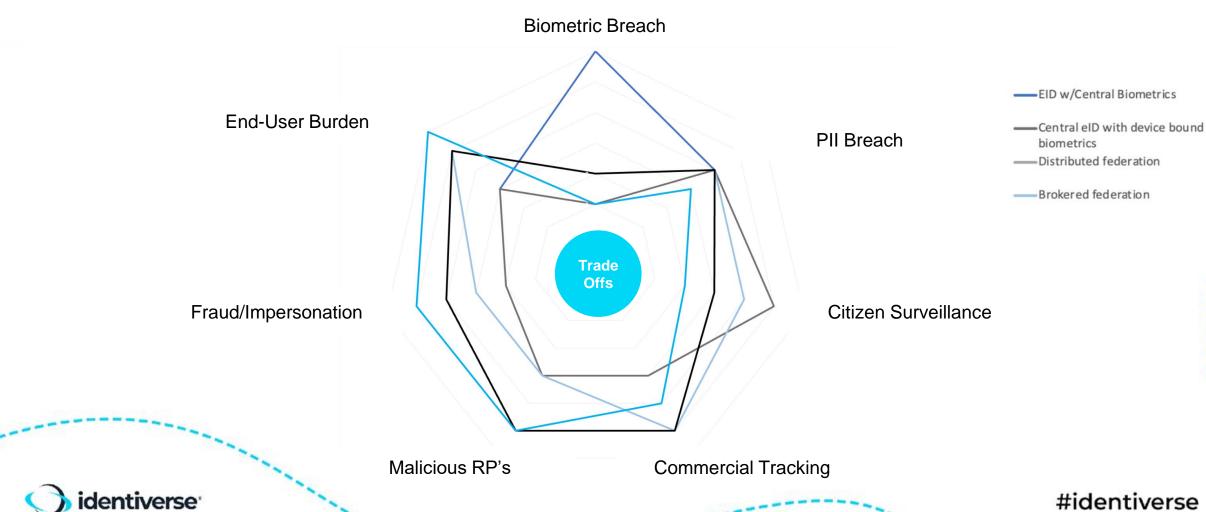


### There are several common paradigms





### The risks are common across architectures





# Digital Identity Systems should be designed to sustain & promote human rights.

1

Human Centered Design Processes 2

Strategic
Design &
Governance

3

Enforce
Security &
Privacy by
Design



### Similar mitigations across architectures



#### **Tools**

- Biometric protections (e.g. biohashing)
- Modern cryptography and data encryption practices
- Unique identifiers for each third party
- Stateless hubs (if any)
- Scalable Trust Establishment & Maintenance protocols
- Secure recovery processes



- Fit-for-purpose Data Security laws
- Fit-for-purpose Privacy laws
- Trust Framework Development
- Enforce Privacy & Security by Design
- Transparent & Independent Governance





### ID Ecosystems are supported by emerging tech

#### **Identity Assurance & User Binding**



Tools like mobile, improved sensors, and cloud computing enable ever greater user-binding and assurance levels

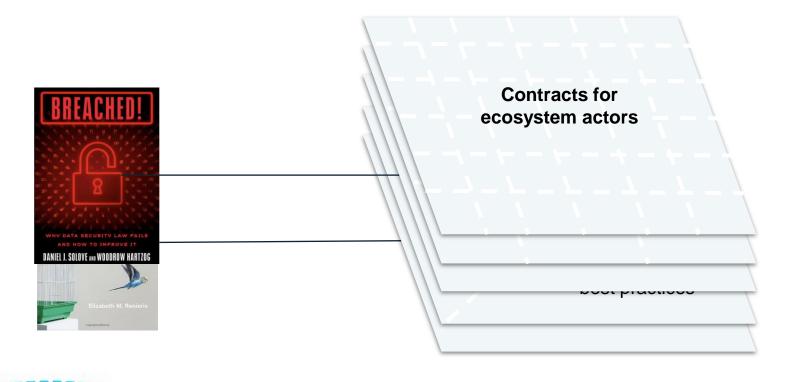
#### **Security Best Practice**



Improved cryptography and security best-practices enable us to use these tools while keeping customer data safer



### **Building the institutional frameworks**



- RPs, IDPs, Wallets, etc who feed requirements into security controls & technical design
- AAMVA
- Pan-Canadian Trust Framework

 NIS 2.0 (cyber) & GDPR (privacy)



## Digital Identity Systems should be designed to sustain & promote human rights.

1

Human Centered Design Processes 2

Strategic
Design &
Governance

3

Enforce
Security &
Privacy by
Design

4

Proactively
Mature
Interoperable
Standards



# Interoperability creates sustainable, usable systems.



- Sustainable
- Extensible



- Enables end-user and business transactions
- Cross sector, cross border
- Policy interoperability equally important



### **Engage in standards**



Support standard bodies

Mature & develop standards for the paradigms you wish to create!

Don't leave this to vendors alone

Mature the technologies that will deliver for your government









