Biometric ID: Robust Enough for Development?

TABULA RASA Workshop





Points for Debate

Alan, slide 10: If ID is essential for rights, then cost cannot be a

barrier

Alan, slide 12: Much wastage of resources on transient, single-

purpose identification programs/components

Alan, slide 22: UK: card security reported vulnerable; US concern

over BELIEVE Card. Card security one reason UID

chose a central database

Peter: Identity is a right (to get benefits) and an obligation (to

be traceable)

Peter: Strong identity (accuracy at scale & inclusion) over

Weak identity (ease)

Question: Spoofing accepted (impersonation) or Strongest

identity (including Time & Location: Minority Report,

Orwell)



What if I had no Identity?

I can not own property

- Because you need to identify yourselves to buy it
- And you need to be able to prove you own it
- And to identify you when you want to sell it

I can not open a bank account

Because I need to identify myself

I can not earn money

Because an employer needs to certify the true identity of a person

I can not register myself as a citizen

- Because I need to identify myself
- And show breeder documents, which I do not have because I don't have an identity

I can not vote

Because every voter needs to prove their identity prior to voting

I can not get unemployment benefits

- Because I need to have worked in the first place, which I cannot
- And I need to have a bank account to receive payments
- And I need to identify myself as registered in The Netherlands
- And prove my identity

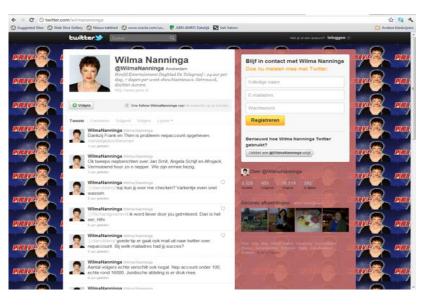
Point being

I cannot survive without a credible identity



What if I had a Weak Identity

- Impersonator: "trying to assume the identity of another"
 - Wikipedia: An Impersonator is someone who imitates or copies the behavior or actions of another, possibly as part of a <u>criminal act</u> such as <u>identity theft</u>. This is usually where the criminal is trying to assume the identity of another, in order to commit <u>fraud</u>, such as accessing confidential information, or to gain property not belonging to them. Also known as <u>social engineering</u> and <u>impostors</u>..



Impersonation is easy:

- To get an email address, URL, Twitter account, Linkedin page, Facebook page, Skype account that resembles someone's name is as easy as 123
- The truth is in the eyes of the beholder. So if people believe it is real, they will act on it as if it were real

Point being

- Spreading chaos or causing damage is easy
- Strong(er) identification is required



Strong Identity over Weak Identity

- Identification: "entities are the same if they have all their properties in common"
 - WIKIPEDIA: The **identity of indiscernibles** is an <u>ontological</u> principle which states that two or more <u>objects</u> or <u>entities</u> are identical (are one and the same entity) if they have all their <u>properties</u> in common. That is, entities x and y are identical if any <u>predicate</u> possessed by x is also possessed by y and vice versa. A related principle is the indiscernibility of identicals, discussed below.
- Single Modal: "an object or entity is identified by one property"
 - That means many objects or entities will be considered the same quite easily
 - That means identity theft, deliberate or not, is relatively easy
- Multi Modal: "an object or entity is identified by a combination of many properties"
 - That means one has to disclose a lot of information about him or her self
 - That means identity theft, deliberate or not, is complex



More is better, but ...:

- More modalities make a stronger identification
- But, it flips the 'Innocent until proven guilty' coin

Point being

- Strong identification is inevitable.
- But let's focus on possible implications



Spoofing vs Strong(est) Identity

Spoofing: "forging a modality"

- It is always possible to spoof
- Certain modalities are easier to spoof than others
- Spoofing many modalities is more difficult than spoofing a single modality, but still doable

Strongest Identity: "Multi Modal + Location + Time (= Big Brother)"

- If we assume anything can be spoofed, we need to add other factors into the identification
- Adding location and time into the mix, makes it impossible to impersonate without that being noticed



Developed countries:

- Few Trxs x High Value (Assets) = High Risk
- Many Trxs x Low Value (Internet) = High Risk
- → Strong identification is required!

Developing countries:

- ManyTrxs x Low Value (Rural) = High Risk
- → Strong identification is required!

Point being
We cannot escape from strong identity



Summary

- We live in a global society
- Therefore we need global identification
- Which implies scale
- That requires strong(est) identity
- For accurate identification of anybody (inclusion)
- Preventing impersonation and spoofing
- Resulting in a trusting society

In a Global Society:

Weak identity → Spoofing & Impersonation

Strong(est) identity → Anti-Spoofing & Trusted Identity



and what is your opinion?

Point 1 (Alan): If ID is essential for rights, then cost cannot be a

barrier

Point 2 (Alan): Much wastage of resources on transient, single-

purpose identification programs/components

Point 3 (Alan): UK: card security reported vulnerable; US concern

over BELIEVE Card. Card security one reason UID

chose a central database

Point 4 (Peter): Identity is a right (to get benefits) and an obligation (to

be traceable)

Point 5 (Peter): Strong identity (accuracy at scale & inclusion) over

Weak identity (ease)

Point 6 (Question) Spoofing accepted (impersonation) or Strongest

identity (including Time & Location: Minority Report,

Orwell)

WCC Smart Search & Match

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