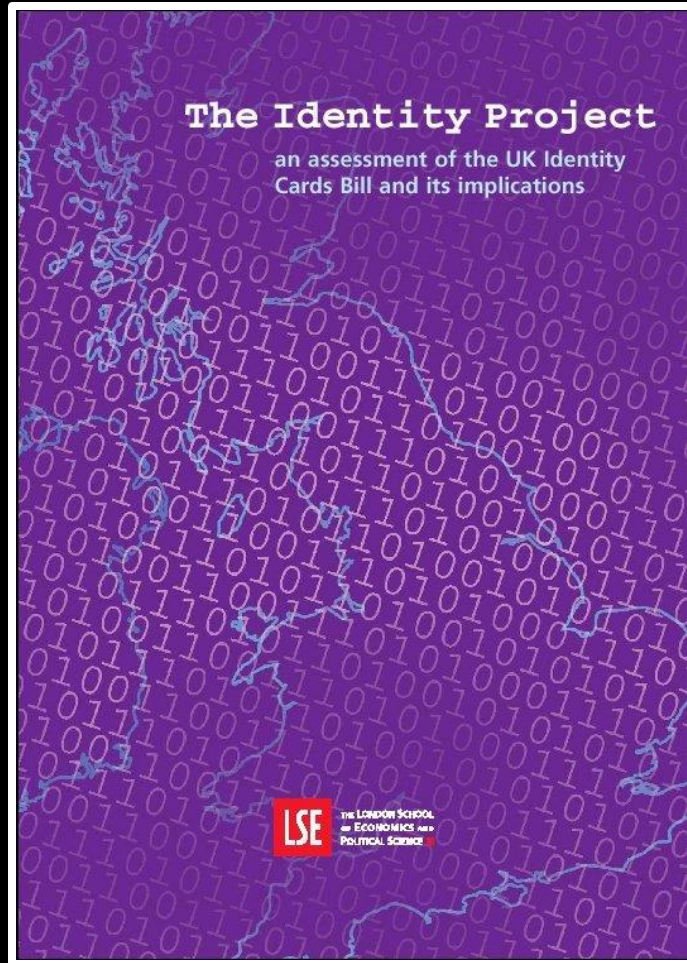


The economic costs of identity exclusion: Evidence from across the identity supply chain

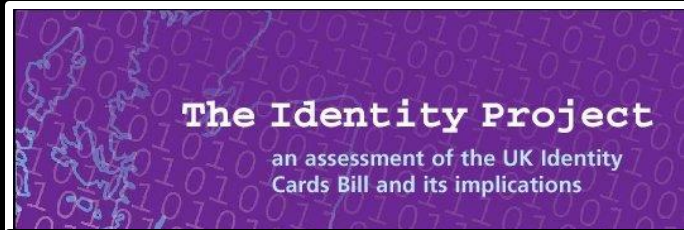
Professor Edgar A. Whitley

The perennial challenge of identity
exclusion

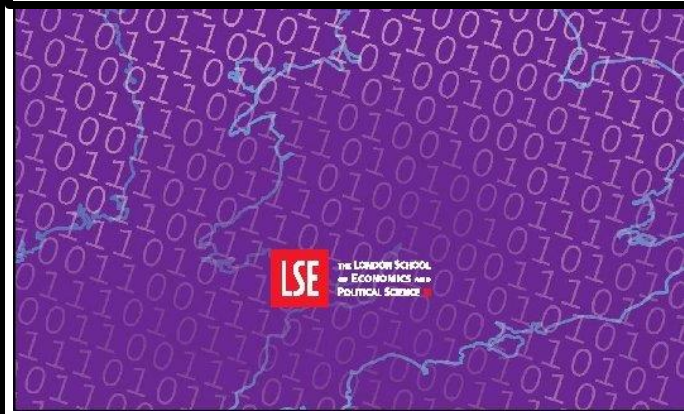
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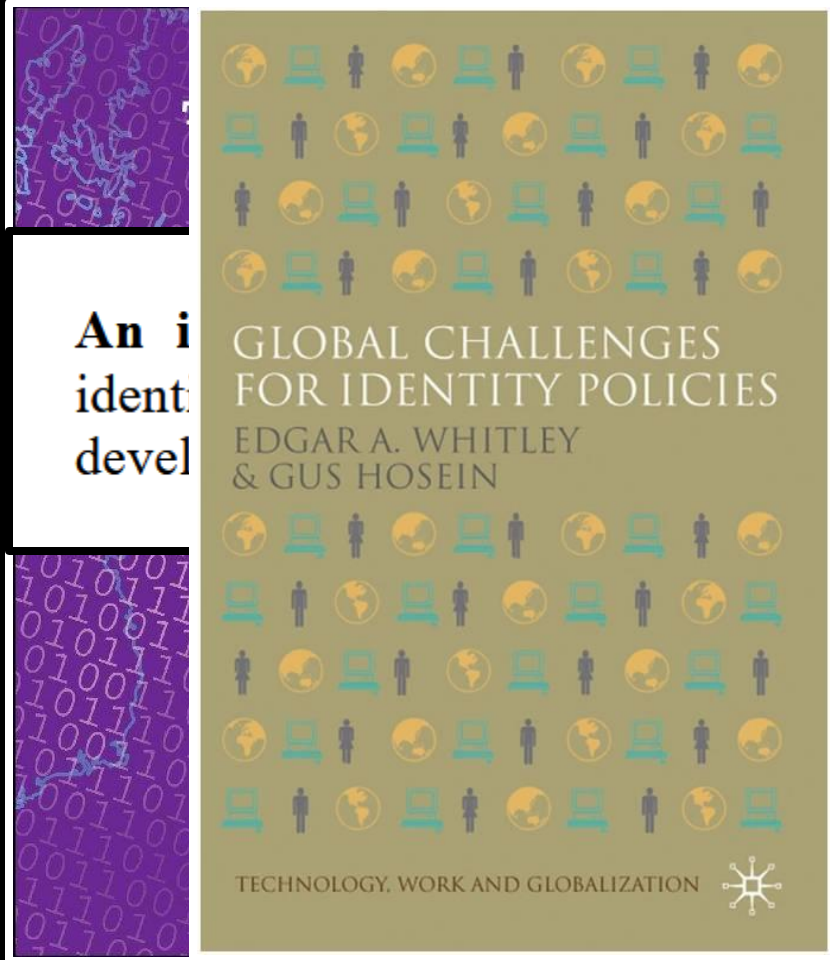
2005



An identity system should be inspired by clear and specific goals. Successful identity systems embrace clear objectives that facilitate responsive, relevant and reliable development of the technology, and which limit the risk of exclusion and abuse.



2010



inspired by clear and specific goals. Successful
ectives that facilitate responsive, relevant and reliable
d which limit the risk of exclusion and abuse.

2010

The prospects for effective identity policies 15

- Any identity policy should explicitly address concerns about identity exclusion, which might arise in the enrolment and verification stages. For example, a policy that requires evidence of bank accounts or a stable home address or requires or restricts particular languages or national symbols on identification credentials carries the risk of creating a subclass of identity-excluded individuals who are unable to realise the benefits of a universal identity scheme. Any national scheme needs to explicitly incorporate consideration of these issues from an early stage.

2015



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Insight Report

Identity in a Digital World

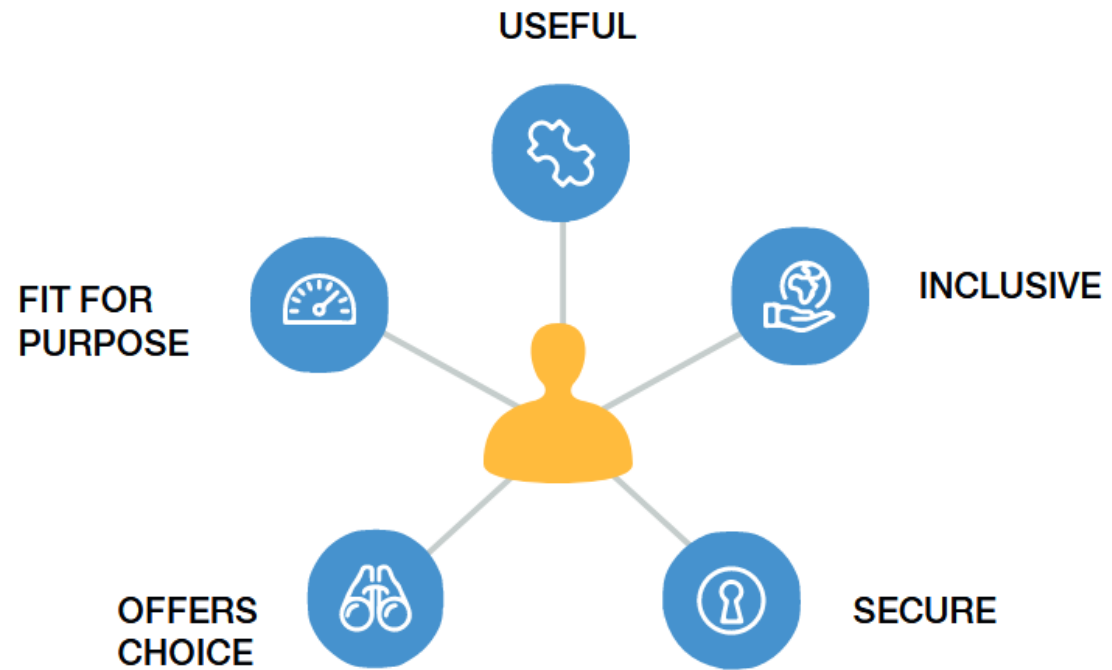
A new chapter in the social contract

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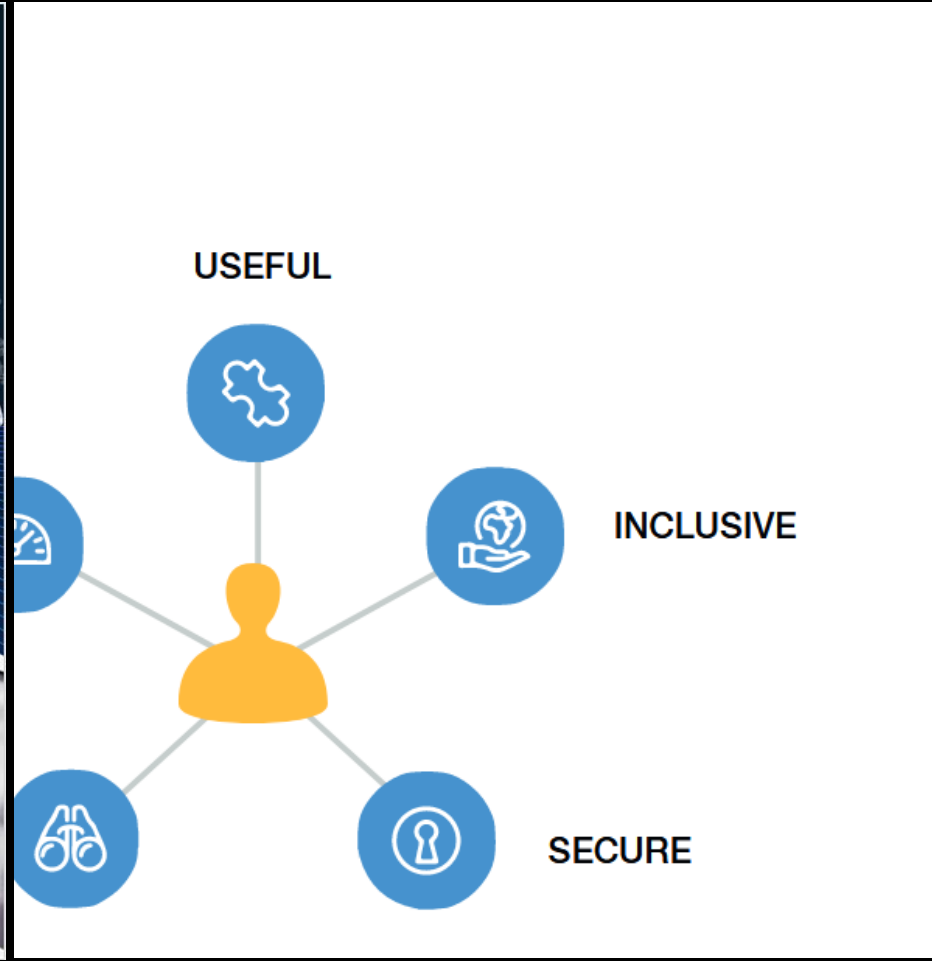
Figure 2: Five elements of good identity



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McKinsey
Global Institute

Potential for misuse and possible risk elements

While digital ID can reduce risks associated with conventional ID programs, such as manual error, it could be ...



... **misused without the proper controls**, akin to dual-use technologies such as social media, GPS, or even nuclear energy.



... **exposed to risks already present** in any digital technology with large-scale population-level usage such as system failures, cybersecurity breaches, and privacy violations.



... **potentially exposed to some risks** found in conventional ID programs such as the exclusion of individuals.

Note: Value estimates assume the digital ID program enables multiple high value use cases, attains high levels of usage, is established with individual consent, and protects user privacy and ensures control over personal data.

Source: World Bank; ID4D; We Are Social *Global Digital Report 2018*; ITU; WDI; Findex; McKinsey Global Institute Analysis

McKinsey
Global Institute

April 2018

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PRINCIPLES ON IDENTIFICATION FOR SUSTAINABLE DEVELOPMENT



April 2019



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PRINCIPLES

INCLUSION

- 1 Ensure universal access for individuals, free from discrimination.
- 2 Remove barriers to access and use.

April 2019

Public Digital



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How do organisations respond to identity exclusion?

“The socially desirable answer would be to say that we are constantly working on this and are super focused, the reality of the situation is that, given the development constraints we have, and the pressure on our roadmap, in practice this is not our top priority” (P38)

What are the economic costs of identity exclusion?

What are the economic costs of identity exclusion?

What activities need to be undertaken to address the identity excluded?

An academic research study

- A qualitative study based on 45 interviews with 51 participants
- Hour long interviews over zoom
- 450,000 words in transcripts

What is meant by the identity excluded?

Happy path

- Present proof of identity
 - Match official photo ID against selfie
 - Check biographical data against independent records
- Account opened without need to visit branch

What is meant by the identity excluded?

Unhappy path

- Doesn't have official photo ID
- Struggles to take selfie
- Image comparison algorithm is biased

- Has a thin / non-existent file

Unable to open account

What is meant by the identity excluded?

Happy path

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Unable to open account

Doesn't have official photo ID

- A global concern
 - 5.9 million individuals in the UK cannot verify their identity through traditional means because they lack the documents typically used to verify an identity
 - 4.2 percent of US households, representing about 5.6 million households, were unbanked in 2023

Struggles to take selfie

- Is this caused by physical disabilities or user device?

Struggles to take selfie

- Is this caused by physical disabilities or user device?
- Are alternative authentication mechanisms available?

Struggles to take selfie

- Is this caused by physical disabilities or user device?
- Are alternative authentication mechanisms available?
- Might a form of assisted digital be appropriate?

Struggles to take selfie

- Is this caused by physical disabilities or user device?
- Are alternative authentication mechanisms available?
- Might a form of assisted digital be appropriate?
- Can digital tools help adjust the captured image?

Image comparison algorithm is biased

- Is the algorithm calibrated for user population?

Image comparison algorithm is biased

- Is the algorithm calibrated for user population?
- What demographic coverage is needed?

Image comparison algorithm is biased

- Is the algorithm calibrated for user population?
- What demographic coverage is needed?
- Do procurement processes include explicit consideration of algorithmic bias?

Image comparison algorithm is biased

- Is the algorithm calibrated for user population?
- What demographic coverage is needed?
- Do procurement processes include explicit consideration of algorithmic bias?
- Are claims about algorithm performance independently evaluated?

Has a thin / non-existent file

- What alternative data sources might be used?

Has a thin / non-existent file

- What alternative data sources might be used?
- How do you evaluate the performance of alternative data sources?

Has a thin / non-existent file

- What alternative data sources might be used?
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- How are new data sources integrated into existing processes?

Has a thin / non-existent file

- What alternative data sources might be used?
- How do you evaluate the performance of alternative data sources?
- How are new data sources integrated into existing processes?
- Do new data sources satisfy regulatory requirements?

Approaching the problem differently

Approaching the problem differently

Widening the happy path

“I think that’s part of our problem. In the ecosystem, there isn’t an articulated value proposition that’s beyond pounds, shillings and pence” (P13)

Changing the narrative around exclusion

- Might we have missed business opportunities because of identity exclusion?
- How significant is our identity exclusion problem?
- How do we recover from the problem by making our service more inclusive?
- How do we limit future problems?

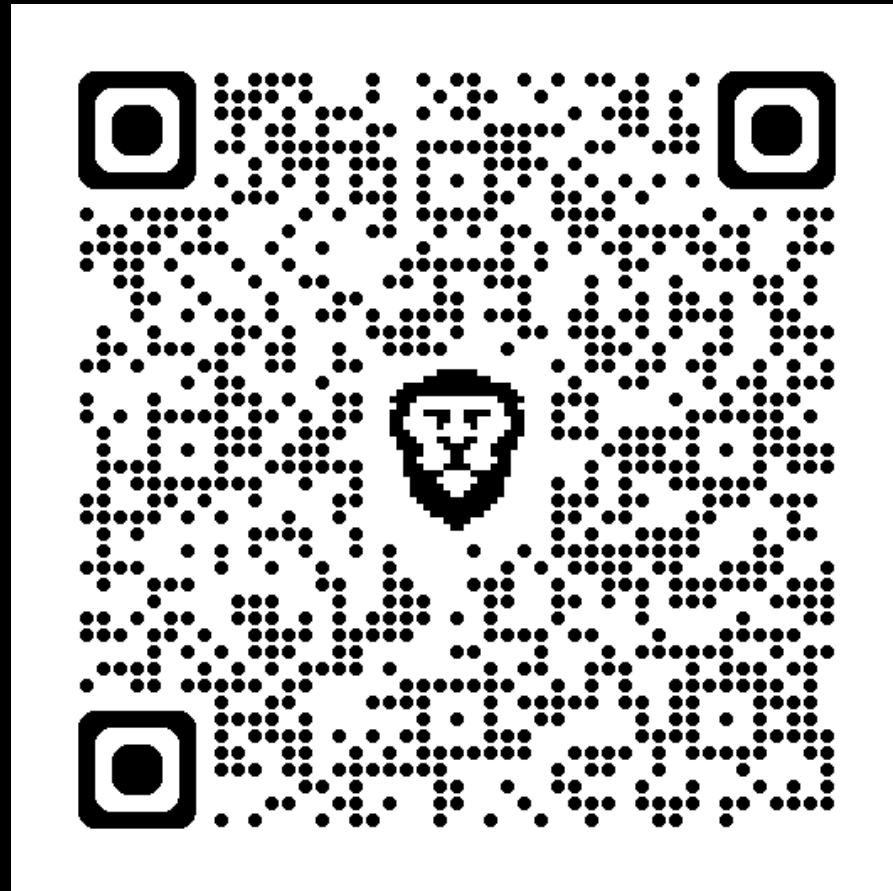
“My main frustration with the identity landscape as it exists today is that when people try to engage digitally and then they’re denied something important, I believe that they shouldn’t be required to solve it themselves. Instead, we can solve it for them” (P15)

“How do we get people more engaged in a positive way, in order to make their lives easier? This should be more than just being a risk mitigation strategy on the part of organisations” (P27)

Inclusion by design?

Launch of full report

12 June 2025, 14.00 BST



e.a.whitley@lse.ac.uk

With thanks to the sponsors of the research

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