



## RESEARCH & DISCUSSION PAPER

*Inclusive and Ethical Use of Digital Identity (IEUDI) Working Group*

### **Kaupapa - Background**

Digital Identity New Zealand (DINZ) is a purpose driven, inclusive, not-for-profit membership funded organisation, whose members have a shared passion for the opportunities that digital identity can offer. DINZ support a sustainable, inclusive and trustworthy digital future for all New Zealanders.

DINZ is committed to being 'tiriti honouring' by giving mana to Te Tiriti o Waitangi and being an effective treaty partner with Tāngata Whenua. Te Tiriti o Waitangi and He Whakaputanga are the founding documents for Aotearoa. Te Tiriti o Waitangi asserts to have equitable partnerships (Ōritetanga) between Māori and Non-Māori as well as empowering Māori to have Rangatiratanga. Both Māori and Non-Māori world views of identity inform our intent and mahi in DINZ, therefore we will seek to empower Māori to have Kāwantanga (Governance) and Rangatiratanga (Self Determination).

In addition to having recently developed a Te Tiriti o Waitangi Charter, DINZ has a couple of key working groups in flight. These are the Digital Identity Trust Services Framework (DISTF) Working Group and the Inclusive and Ethical Use of Digital Identity (IEUDI) Working Group. There are significant overlaps in the desired outcomes between these working groups and associated legislation in progress (the Digital Identity Services Trust Framework and the Consumer Data Right).

### **Mahi - Inclusive and Ethical Use of Digital Identity Working Group**

The working group has been formed to address the following key issues:

- The need for clarity about those New Zealanders who may be disadvantaged in regard to benefitting from digital identity in a post-DISTF world. We need to understand the types of disadvantages, both digital and otherwise, that these New Zealanders directly experience or perceive.
- Propose actions to address those challenges. For example, would there be merit in developing a voluntary "Code of Practice for Inclusive and Ethical uses of Digital Identity" centred on the DISTF design principles, as a supplement to the regulatory arrangements that will be put in place?

The specific scope of this work is:

- To help ensure inclusive, ethical and responsible use of digital identity technologies that enable equitable digital identity outcomes for all New Zealanders.
- To build an understanding of the views and roles of relevant advocacy groups (for example but not limited to Citizens Advice Bureau, NZ Council for Civil Liberties etc) in the successful adoption of digital identity technologies.
- Providing constructive forums for discourse with groups that are either clearly disadvantaged in relation to digital identity or have concerns about the potential future uses of digital identity.

Importantly, consideration of the 'mechanics' of digital identity - i.e. looking at digital identity technologies from a technological design or operational deployment perspective - is not part of the remit of the IEUDI working group.

## Purpose of this paper

The purpose of this paper is to research existing mahi in the areas of inclusivity and ethics in digital identity. Once we have this understanding, we can identify any gaps and consider how we might address them, consider developing a Code of Practice and make overall recommendations to the Executive Council for DINZ.

## The Research – Inclusivity and Ethics

### Inclusivity – Definitions and General Concepts

The Ministry of Social Development (MSD) in New Zealand, following the 15 March 2019 terror attacks in Christchurch, produced a report<sup>[1]</sup> to support Government assessment of its role in supporting social inclusion.

The report noted that it is important to define social inclusion to help clarify the problems we are trying to solve. They settled on the World Bank definition which defined social inclusion as 'the process of improving the terms on which individuals and groups take part in society — improving the ability, opportunity, and dignity of those disadvantaged on the basis of their identity'.

In the New Zealand context, the MSD took this to mean that social inclusion refers to the degree to which:

- communities across New Zealand embrace diversity and ensure that all people feel recognised and accepted
- people are free from prejudice and discrimination
- people have the resources, skills and knowledge to meaningfully participate.

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<sup>1</sup> <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/social-inclusion-in-new-zealand-a-rapid-evidence-review/social-inclusion-in-nz-rapid-evidence-review-report.pdf>

The New Zealand context is unique in a number of ways that are important when interpreting and applying the evidence about social inclusion, especially evidence from overseas. In particular, the nation's bicultural foundations, the historical and ongoing injustices towards tangata whenua, and the evolving Māori-Crown partnership, are a fundamental starting point for understanding social inclusion in New Zealand.

The World Bank reports<sup>[2]</sup> that, in every country, some groups confront barriers that prevent them from fully participating in political, economic, and social life. These groups may be excluded not only through legal systems, land, and labour markets, but also discriminatory or stigmatising attitudes, beliefs, or perceptions. Disadvantage is often based on gender, age, location, occupation, ethnicity, religion, citizenship status, disability, sexual orientation and gender identity (SOGI), among other factors. This kind of social exclusion robs individuals of dignity, security, and the opportunity to lead a better life. Unless the root causes of structural exclusion and discrimination are addressed, it will be challenging to support sustainable inclusive growth and rapid poverty reduction.

Exclusion, or the perception of exclusion, may cause certain groups to opt out of markets, services, and spaces, with costs to both individuals and the economy.

Another distinctive feature of the New Zealand context is the astonishing pace and scale of recent social change — this is projected to continue apace for at least the next twenty years. Not only is New Zealand one of the most culturally diverse nations in the world, but there is an increasing awareness that social diversity in all its forms is becoming more complex, cross-cutting and interconnected. As these changes are occurring, many groups are being left behind, as evidenced by consistent and systematic disparities in health, education, justice and other wellbeing outcomes; in people's experience of prejudice and discrimination; and in wider societal attitudes towards different social groups.

Mindful of this context, the MSD report identifies evidence for six key ways to help make New Zealand more socially inclusive:

**1. Fostering common values and inclusive social norms:** Leaders at all levels can support an important and ongoing national conversation about New Zealand's values and norms, including the value of protecting and celebrating diversity and upholding shared civic norms. The principles of Te Tiriti o Waitangi (Te Tiriti) can also support this process by providing a distinctive, whole-of-Aotearoa New Zealand approach; one that values and upholds the nation's bicultural foundations while embracing New Zealand's increasingly diverse future as a strength.

**2. Encouraging and facilitating positive interactions between people:** There is compelling evidence that creating opportunities for people from diverse backgrounds to positively interact with each other helps to promote more positive inter-group attitudes. The policy implications of this are wide-ranging, including the need to ensure schools, communities, workplaces, institutions and media representations, better reflect New Zealand's diversity, as well as facilitating and normalising positive interactions between diverse groups.

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<sup>2</sup> <https://www.worldbank.org/en/topic/social-inclusion>.

### **3. Tackling harms to inclusion, including prejudice, discrimination and other harmful behaviours:**

There is clear evidence that many New Zealanders routinely experience prejudice and discrimination, which negatively affects people's wellbeing and prevents people from participating in society. This discrimination takes a variety of forms and includes not just interpersonal but also structural discrimination and prejudice. Comprehensive, evidence-based strategies and ongoing monitoring are needed to prevent and limit these impacts, especially in schools and workplaces where most prejudice and discrimination occurs.

**4. Supporting people to have the knowledge and skills they need to participate:** Ensuring equitable access to education and training, that adapts to meet people's diverse needs, is a critical long-term driver of social inclusion. An inclusive education system should give all New Zealanders the social and emotional skills needed to understand and appreciate diverse perspectives, as well as empowering people from diverse backgrounds to be able to participate socially and economically.

**5. Supporting people to have a voice and feel heard:** There is very good evidence that giving people a voice, ensuring people feel heard, and treating people fairly contributes to people's trust, civic participation, and willingness to make compromises for the common good. Providing equitable access to these opportunities to have a voice and feel heard would help start to address the marked disparities in institutional trust felt by marginalised groups.

**6. Reducing inequality and improving opportunities for people by providing support and resources:** Inequality in people's access to resources and opportunities are a fundamental brake on progress towards greater social inclusion. Redressing these inequities, especially through access to employment opportunities and ongoing reforms to the tax-transfer system, are essential for building social inclusion over the long term.

## **Ethical Use – Definitions and General Concepts**

Ethics is the branch of philosophy that examines right and wrong moral behaviour, moral concepts (such as justice, virtue, duty) and moral language. Ethics or moral philosophy is a branch of philosophy that "involves systematizing, defending, and recommending concepts of right and wrong behaviour".

Trust and ethics are reciprocal and mutually reinforcing. They travel together as it were and act in tandem. Think of them as the respiratory system and heart of the organization. If one fails, the other follows. Keeping them in good shape requires constant attention and daily practice.

Rachel Botsman, Trust Expert, Lecturer and Author defines trust as 'having a confident relationship with the unknown'. Trust is the foundation of every action, relationship and transaction and it is the bridge between the known state (where humans love to be) and the unknown (where there is a sea of uncertainty).

Technology is transforming how we trust and it has become equally important to product innovation, risks and behaviour change. We cannot underestimate how high/fast we are expecting people to leap in the digital identity area. Providers of digital identity technologies and services have a responsibility to earn subjects' or users' trust and then to ensure that trust is maintained over time. Trust is a continual process, not a 'once and done'. We therefore need to ensure that we are providing the opportunity for everyone to be appropriately involved and, most importantly, allowing all groups the opportunity to offer their perspectives and insights so that any digital identity solution offered is inclusive, ethical, able to be trusted and accessible to all.

## **What's happening around the world in Digital Identity (a non-exhaustive overview)**

### **Digital Government Exchange – Digital Identity Working Group**

Established in 2020, eight member countries have set out principles for the future of Digital ID. The Digital Identity Working Group (DIWG) comprises Australia, Canada, Finland, Israel, New Zealand, Singapore, the Netherlands, and the United Kingdom and is chaired by Australia's Digital Transformation Agency.

The group has drafted a set of high-level principles to support the development of mutually recognised and interoperable digital ID systems and infrastructure. The 11 principles call for digital ID infrastructure to be:

- open
- transparent
- reusable
- user-centric
- inclusive and accessible
- multilingual
- secure and private
- technologically neutral and compatible with data portability
- administratively simple
- able to preserve information
- effective and efficient

The Group believes that a common set of definitions and universal taxonomy (classification) for digital identity is critical to enable mutual recognition of digital identities and interoperability of digital identity systems.

The Group also noted that a universal taxonomy would help formalise the intent and achieve the outcomes required for mutual recognition of digital identities across borders, and interoperability of digital identity systems. Ultimately, when applied, this enables more efficient government interactions, increased support for businesses operating across borders and simple, streamlined experiences for people travelling internationally.

It warned that misaligned legislation between countries on issues such as privacy, security, and data sovereignty had the potential to undermine mutual recognition and interoperability. It said some countries were “more able to share data [with other] countries, such as member states of the EU, while others are less able”.

However, it added that though its member countries’ existing policies were specific to their respective government’s requirements around digital identity, all were broadly aligned to ISO standards, EU standards or industry best practice.

“Across most member countries, trust frameworks, policy and legislation have been developed with future mutual recognition and interoperability in mind, opening up the broad opportunity to achieve interoperability between the digital identity systems and infrastructure,” it said.

The Digital Government Exchange (DGX), Digital Identity Working Group has authored ‘Digital Identity in response to COVID-19’<sup>[3]</sup>. This report expands on the above with an overview, a section on the current digital identity landscape (including digital identity models, policy and legal settings and technical settings), the experiences of the member countries and their Covid 19 Use cases and touches on future mutual recognition and interoperability

## **The Global Government Forum (GGF)**

The Digital Leaders Study published by the GGF (<https://digital.globalgovernmentforum.com/digital-leaders-study>) is based on interviews with seven national digital leaders working at the centre of government to drive transformation.

The interviews assess the barriers and challenges to digital best practice and set out findings on how digital reform can be achieved.

Among the findings in the report is a warning that departmental leaders and ministers often lack the understanding and commitment to drive digital transformation. According to the interviews undertaken for the research, very few senior public officials “are genuine champions of digital transformation”. They also highlight that civil service recruitment and performance management often weeds out people with the skills and behaviours required to lead such projects.

The report highlighted that in most countries, the careers of public servants progress based on political and policy skills – rather than technical expertise.

As a result, commented one interviewee, senior digital figures in government end up working with departmental leaders who have “spent their entire careers being reflexively liability-conscious and risk-averse – because that’s how they got to be [departmental leaders] – and asking them to do the unthinkable and embrace change. It is the wrong cohort to try to get to lead such an operation”.

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<sup>3</sup> [https://www.tech.gov.sg/files/media/corporate-publications/FY2021/dgx\\_2021\\_digital\\_identity\\_in\\_response\\_to\\_covid-19.pdf](https://www.tech.gov.sg/files/media/corporate-publications/FY2021/dgx_2021_digital_identity_in_response_to_covid-19.pdf)

Such leaders, the report added, “know that their organisations should be more user-centred and more agile, but they’re not quite sure what that means and they don’t understand how to get there – given the way they’ve been taught to do business, and all the other pressures in their world”.

And while many national political leaders have a good understanding of the digital agenda, they can often be uninformed on how to realise that potential.

**Digital ID and data key to realising reforms:** The report also found there are two essential elements to ensuring digital transformation – the need for strong digital ID systems, and high-quality, cross-government data management.

Such reform requires two capabilities: departments must be able to share and match data on individuals, addressing any discrepancies between their datasets; and citizens need a single, secure, online access point.

“Until they develop these capabilities, governments are condemned to manage an ever-growing number of mismatching data sets, often while citizens accumulate separate sets of log-in details for every individual service – creating a future of fast-rising confusion, cost and complexity,” according to the report.

The requirement for this system means there is a “substantive gap” between those nations well advanced in identifying and putting in place the foundations of effective digital transformation, and those who are further behind on this journey.

## **World Economic Forum (WEF)**

The World Economic Forum has produced a report called ‘Identity in a Digital World - A new chapter in the social contract’<sup>[4]</sup>.

### **Key points in the report:**

“Our identity is, literally, who we are, and as the digital technologies of the Fourth Industrial Revolution advance, our identity is increasingly digital. This digital identity determines what products, services and information we can access – or, conversely, what is closed off to us.

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4 [https://www3.weforum.org/docs/WEF\\_INSIGHT\\_REPORT\\_Digital%20Identity.pdf](https://www3.weforum.org/docs/WEF_INSIGHT_REPORT_Digital%20Identity.pdf)

As digital services explode, and billions of elements in our everyday lives become connected to the internet, individuals are losing control of how they are represented digitally in their interactions with institutions. Others lack any digital identity at all, essentially excluding them from digital life. The result is a challenge to the social contracts that govern the relationships between individuals and institutions in a digital world. If we fail to act now, we could face a future in which digital identity widens the divide between the digital haves and have-nots, or a future where nearly all individuals lack choice, trust and rights in the online world. If we act wisely today, digital identities can help transform the future for billions of individuals, all over the world, enabling them to access new economic, political and social opportunities, while enjoying digital safety, privacy and other human rights.”

The report explores some ideas for how to achieve that better future, starting with a transformation that puts value on the individual at the centre. The need for shared understanding and coordinated action Digital identities have evolved. They are no longer simple and isolated pieces of information about individuals, but complex webs, crossing the internet, of their personal data, digital history and the inferences that algorithms can draw from this. Our digital identities are increasingly embedded in everything we do in our daily lives. Verifiable digital identities create value for businesses, governments and individuals alike. Yet there is a lack of shared principles, standards and coordination between various stakeholder efforts in this rapidly evolving landscape.

The report also explores ‘The five elements of user value’. At the World Economic Forum’s Annual Meeting in Davos 2018, a community of stakeholders from government, business and civil society made a commitment to advance towards a “good” future for digital identities. Since then, a broader group has joined the conversation and identified an initial set of five elements that a good identity must satisfy.

All five are equally important, and tensions exist between some: for instance, features to enhance security for individuals and their identities may reduce their convenience. User-centric digital identities – that deliver real value to individuals and therefore drive adoption – must succeed in all aspects. The report summarises the five elements of user value as follows (note that the report explores these in more detail):

**1. Fit For Purpose:** Good digital identities offer a reliable way for individuals to build trust in who they claim to be, to exercise their rights and freedoms, and/or demonstrate their eligibility to access services.

**2. Inclusive:** Inclusive identity enable anyone who needs it to establish and use a digital identity, free from the risk of discrimination based on their identity-related data, and without facing authentication processes that exclude them.

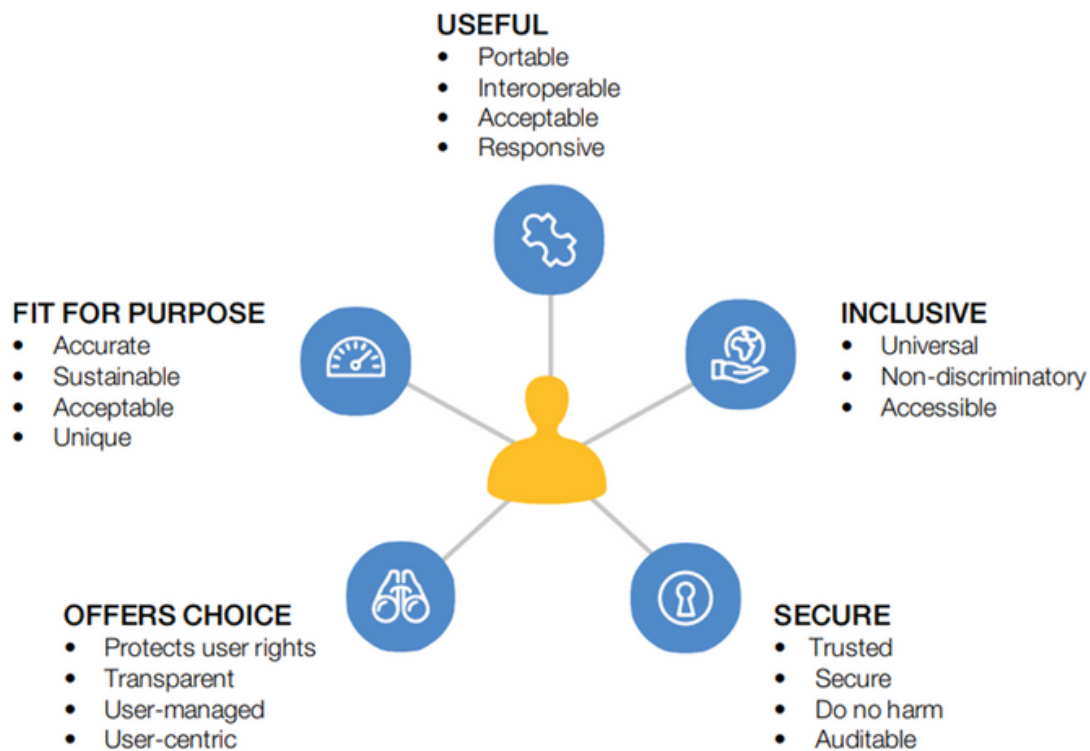


**3. Useful:** Useful digital identities offer access to a wide range of useful services and interactions and are easy to establish and use.

**4. Offers Choice:** Individuals have choice when they can see how systems use their data and are able to choose what data they share for which interaction, with whom and for how long.

**5. Secure:** Security includes protecting individuals, organizations, devices and infrastructure from identity theft, unauthorized data sharing and human rights violations.

#### The five key elements of designing user-centric digital identity



The report also:

- explores trends, opportunities and challenges in Digital Identity,
- explores priorities for public-private co-operation
- includes a section on design considerations for practitioners

## Principles on Identification for Sustainable Development

In 2017, a group of 25 development partners, United Nations and international organizations, government agencies, foundations, civil society, and private sector associations actively working to support identification (ID) systems developed the shared Principles on Identification for Sustainable Development<sup>[5]</sup> for maximizing the benefits of ID for development while mitigating the risks.

In common with many of the other initiatives discussed in this paper, these principles are:

### *Pillar 1 - Inclusion*

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

### *Pillar 2 - Design*

- Establish a trusted—unique, secure, and accurate—identity.
- Create a responsive and interoperable platform.
- Use open standards and prevent vendor and technology lock-in.
- Protect privacy and agency through system design.
- Plan for financial and operational sustainability.

### *Pillar 3 - Governance*

- Protect personal data, maintain cyber security, and safeguard people's rights through a comprehensive legal and regulatory framework.
- Establish clear institutional mandates and accountability.
- Enforce legal and trust frameworks through independent oversight and adjudication of grievances.

## What's happening in New Zealand?

### **New Zealand Digital Identity Services Trust Framework (DISTF)**

Developed by the Department of Internal Affairs (DIA), the Digital Identity Services Trust Framework Bill<sup>[6]</sup>, which is intended to establish “a legal framework for the provision of secure and trusted digital identity services for individuals and organisations” is currently at the Committee of the Whole House stage of the legislative process.

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5 Principles | Identification for Development (idprinciples.org)

6 [https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/BILL\\_116015/digital-identity-services-trust-framework-bill](https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/BILL_116015/digital-identity-services-trust-framework-bill)

This question has clearly been considered in development of the DISTF, which has been based around the following eight principles[7] that clearly relate to the questions of ethics and inclusion:

- People-centred
- Inclusive
- Secure
- Privacy-enabling
- Enabling Te Ao Māori approaches to identity
- Sustainable
- Interoperable
- Open and transparent

On its webpages devoted to the DISTF, the DIA also sets out the following key concepts that have informed its development:

- Consent is always required
- Personal information will not be held in centralised database
- The system is opt-in
- Sharing between government departments remains controlled
- Privacy and security standards are built in
- Rules incorporate Te Ao Māori perspectives of identity
- Identity theft risks are managed

### **NZ Government Chief Data Steward (GCDS)**

The GCDS[8] (a function of the role of the Government Chief Statistician and Chief Executive of Statistics New Zealand) has a substantial work programme on government data management, that includes elements that could be valuable to the work of the IEUDI, for example:

- work on data ethics[9]; and
- a “Data Toolkit” to assist agencies understand and implement good data practices[10]

### **Department of Internal Affairs (DIA)**

Since 2021, the DIA has been working on the question of digital inclusion, under the auspices of the Government Chief Digital Officer. Important research has been undertaken into questions of digital inclusion as they relate to the disabled, Māori and Pasifika. As with the work of the GCDS, this work should provide important input and insights for the IEUDI to draw upon.

### **Citizens Advice Bureau New Zealand (CAB)**

The CAB is an organisation which this Working Group believes would be a very relevant participant, and a good source of information pertaining to social inclusion.

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7 <https://www.digital.govt.nz/digital-government/programmes-and-projects/digital-identity-programme/trust-framework/trust-framework-principles/>

8 Government Chief Data Steward (GCDS) - [data.govt.nz](https://data.govt.nz)

9 Data ethics - [data.govt.nz](https://data.govt.nz)

10 Data toolkit - [data.govt.nz](https://data.govt.nz)

They are a nationwide, but locally based, community organisation. They help people to know and understand their rights and obligations, and how to use this information to get the best outcomes. They provide people with the confidence and support they need to take action. They use insights from their clients' experiences to work for positive social change.

The aims of the CAB are to:

- ensure that individuals do not suffer through ignorance of their rights and responsibilities, or of the services available, or through an inability to express their needs effectively; and
- exert a responsible influence on the development of social policies and services, both locally and nationally.

CAB already have a piece of mahi underway entitled **'Inclusion in a Digital Age'**.

They have carried out research, looking at over 4,000 records of CAB volunteers' interactions with clients where issues of digital exclusion were identified. Anonymised information from these records formed the basis of their 2020 report, Face-to-face with Digital Exclusion[11].

There is still opportunity for people to get involved and advise CAB about their experiences with Digital exclusion.

There is also opportunity for this working group to get involved as follows:

*"This is an issue for everyone in Aotearoa, so we are keen to work with others. You might be part of a community or iwi organisation that wants to jump onboard. Maybe you are interested in doing some research in this area or have ideas about inclusive public services. You might want to write an article or opinion piece, or lobby Members of Parliament. Let us know!"*

*You can get in touch via email at [inclusion.campaign@cab.org.nz](mailto:inclusion.campaign@cab.org.nz), call us on 04 471 2735, or pop in to a CAB near you and ask them to help connect you with the CAB National Office"*

## **Māori perspectives on digital identity**

There is currently significant dialogue and work occurring between Māori and the Crown (primarily via the Government Chief Data Steward at Statistics NZ) on the topic of Māori data sovereignty, which is feeding into joint work on co-designing Māori data governance[12].

While this work is focused primarily on data, not technology, and does not look at any particular types of data such as identity data, its outcomes should have significant bearing on Māori views about inclusive and ethical use of digital identity – especially because Māori concepts of identity are different to western ones.

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11 [https://inclusioncampaign.cab.org.nz/assets/Documents/Face-to-Face-with-Digital-Exclusion-/FINAL\\_CABNZ-report\\_Face-to-face-with-Digital-Exclusion.pdf](https://inclusioncampaign.cab.org.nz/assets/Documents/Face-to-Face-with-Digital-Exclusion-/FINAL_CABNZ-report_Face-to-face-with-Digital-Exclusion.pdf)

12 <https://www.data.govt.nz/toolkit/data-governance/maori/>

Research so far reveals little in the public domain on this topic, but we know it is a very important matter. As demonstrated by recent concern about the government's Identity Check service expressed by Māori[13], the success of the work of the IEUDI will depend on how it engages with Māori perspectives on digital identity.

## Discussion

The information above is a representative, not exhaustive, overview of activity at a global and local level that has a bearing on the work of the IEUDI. In researching what is happening internationally and locally in regard to ethical and inclusive use of digital identity, a few things stand out.

First, emerging mechanisms such as trust frameworks and sets of principles being articulated by the inter-governmental and NGO groups included in this research show considerable similarity of intent and approach and contain elements that speak to ethics and inclusion. Despite that, their primary focus is on enabling interoperable approaches to digital identity that improve economic efficiency in ways that users can trust, with comparatively little emphasis on ethics and inclusion. At the heart of the ethics question lies that idea that "just because we can doesn't mean we should". It is unclear how well this idea is understood and incorporated into the thinking behind all this work, and whether principles that speak to ethics and inclusion will actually be operationalised by those operating under these frameworks.

Second, at this stage it appears that there is comparatively little academic research or focus by civil society organisations on the questions the IEUDI is seeking to address which, optimistically suggests that, while challenging, our work could lead to something quite valuable.

One other thing for the IEUDI to take account of is the fact that digital identity is becoming a very polarising topic. Around the world, and here in New Zealand, there is a small but increasingly vocal group of critics that are fearful that digital identity technologies could be used as an enabler of social control and deprivation of fundamental rights. These concerns are best encapsulated in the idea that modern digital identity capabilities could enable proliferation of Chinese-style social credit systems. While very polarised, these are legitimate concerns that are important to understand and somehow take account of.

## Other References

Barriers to inclusion for all whether it be technological, societal, bureaucratic or regulatory bias:  
<https://dai-global-digital.com/digital-identity-series-part-3-digital-identity-and-exclusion.html>

How we can control our digital identities – including what is meant by digital identity, who is digital ID benefiting, can we trust governments to manage digital ID systems, is it OK to use digital ID systems for social accountability:

[http://technologysalon.org/how-we-can-control-our-digital-identities/?utm\\_source=dlvr.it&utm\\_medium=twitter](http://technologysalon.org/how-we-can-control-our-digital-identities/?utm_source=dlvr.it&utm_medium=twitter)

Podcast: The emerging ethics of digital identity with Jessica Figueras (ubisecure.com)

Final Report Summary - DIGIDEAS (Social and ethical aspects of digital identities. Towards a value sensitive identity management) | FP7 | CORDIS | European Commission (europa.eu)

[https://tengira.waikato.ac.nz/\\_\\_data/assets/pdf\\_file/0005/775472/Vaccine-pass\\_TiNT-Brief\\_Final18Nov21-1.pdf](https://tengira.waikato.ac.nz/__data/assets/pdf_file/0005/775472/Vaccine-pass_TiNT-Brief_Final18Nov21-1.pdf)

<https://www.waikato.ac.nz/rangahau/koi-te-mata-punenga-innovation/ra-2>