



Digital ID and Authentication Council of Canada

Accelerating the Establishment of a World-
Class Made-For-Canada Identity Ecosystem

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March 2017

Task Force – Payment Systems

2010 Given the importance of a safe and efficient payments system and the need to ensure it remains effective in light of new participants and innovations, the Task Force was asked to provide concrete, actionable advice and recommendations to the Minister of Finance. The Task Force was guided by the following mandate:

- Identify public policy objectives to be pursued in the operation and regulation of the payments system;
- Identify and assess the regulatory and institutional structures best suited to achieving these public policy objectives;
- Assess and report on the safety and soundness of the Canadian payments system;
- Assess the competitive landscape by identifying any potential barriers for new entrants and mechanisms to improve the competitive landscape of the domestic payments system;
- Assess the degree of innovation in the domestic payments system and report on the challenges and opportunities to bring new and innovative products to market in Canada; and
- Assess and report on whether consumers and merchants are well served by the domestic payments system.

Digital ID & Authentication (DIA)

Task Force Recommendation to Government:

- implement electronic invoicing and payments (EIP) for all government suppliers and benefit recipients;
- partner with the private sector to create a mobile ecosystem; and
- propel the build of a digital identification and authentication (DIA) regime to underpin a modernized payments system and protect Canadians' privacy.

The Digital ID & Authentication Council of Canada (DIACC)

Created as a result of the federal government's Task Force for the Payments System Review, the DIACC is a non-profit coalition of public and private sector leaders committed to developing a Canadian digital identification and authentication framework to enable Canada's full and secure participation in the global digital economy. DIACC members include representatives from both the federal and provincial levels of government as well as private sector leaders.

Delivering Components of the Pan-Canadian Trust Framework through a strong collaborative effort



Setting Canadian Standards for rules and tools to establish platform for services delivery.



Pan-Canadian Trust Framework

Charter/
MOU

Trusted Digital
Identity

Trusted Access
& Authorization

Trustmark
Certification

Verified Person

Delegation/
Consent

User Sign-in

Verified
Organizations

Verified
Relationships

Authentication

Service
Authorization

Resources

Access

Profiles

Assessment

Privacy

Security

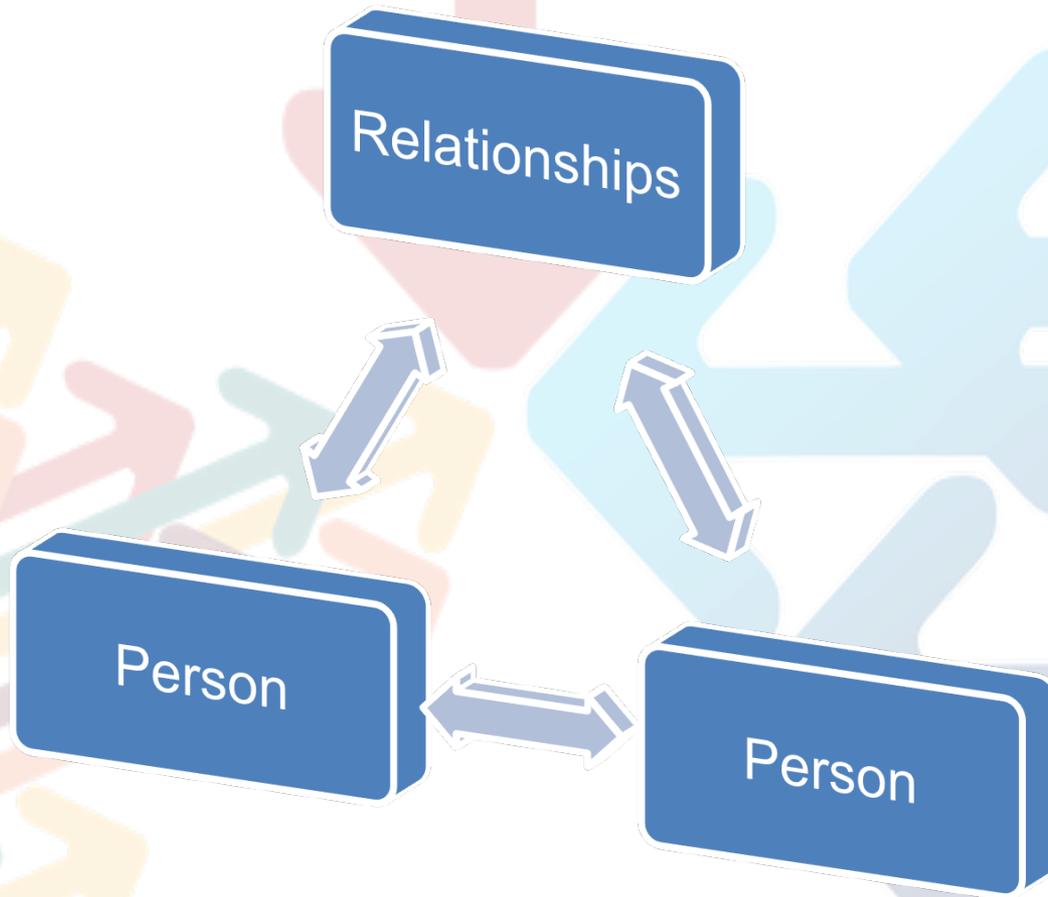
Audit & Logging

Service Delivery

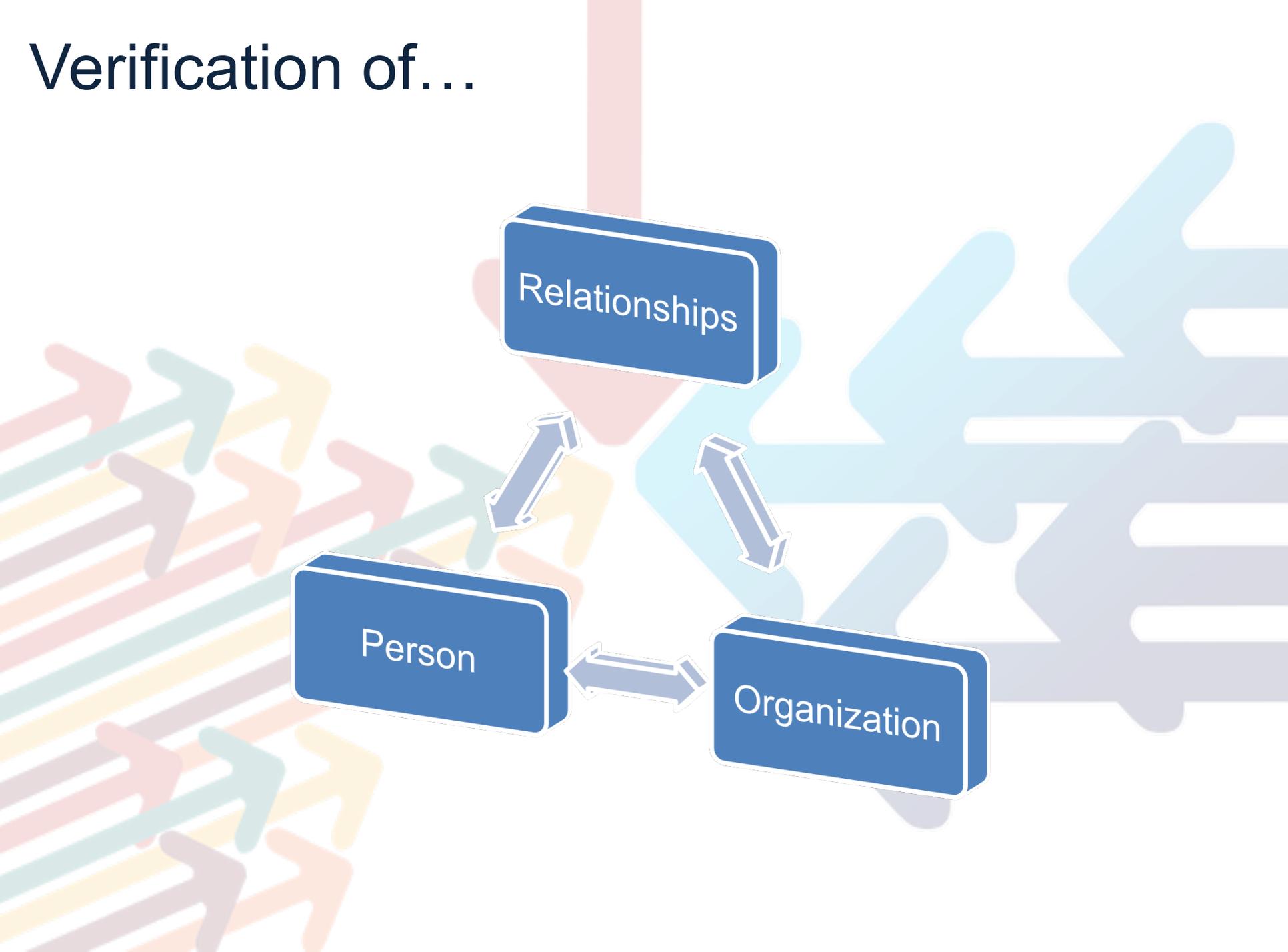
Organizational

Glossary

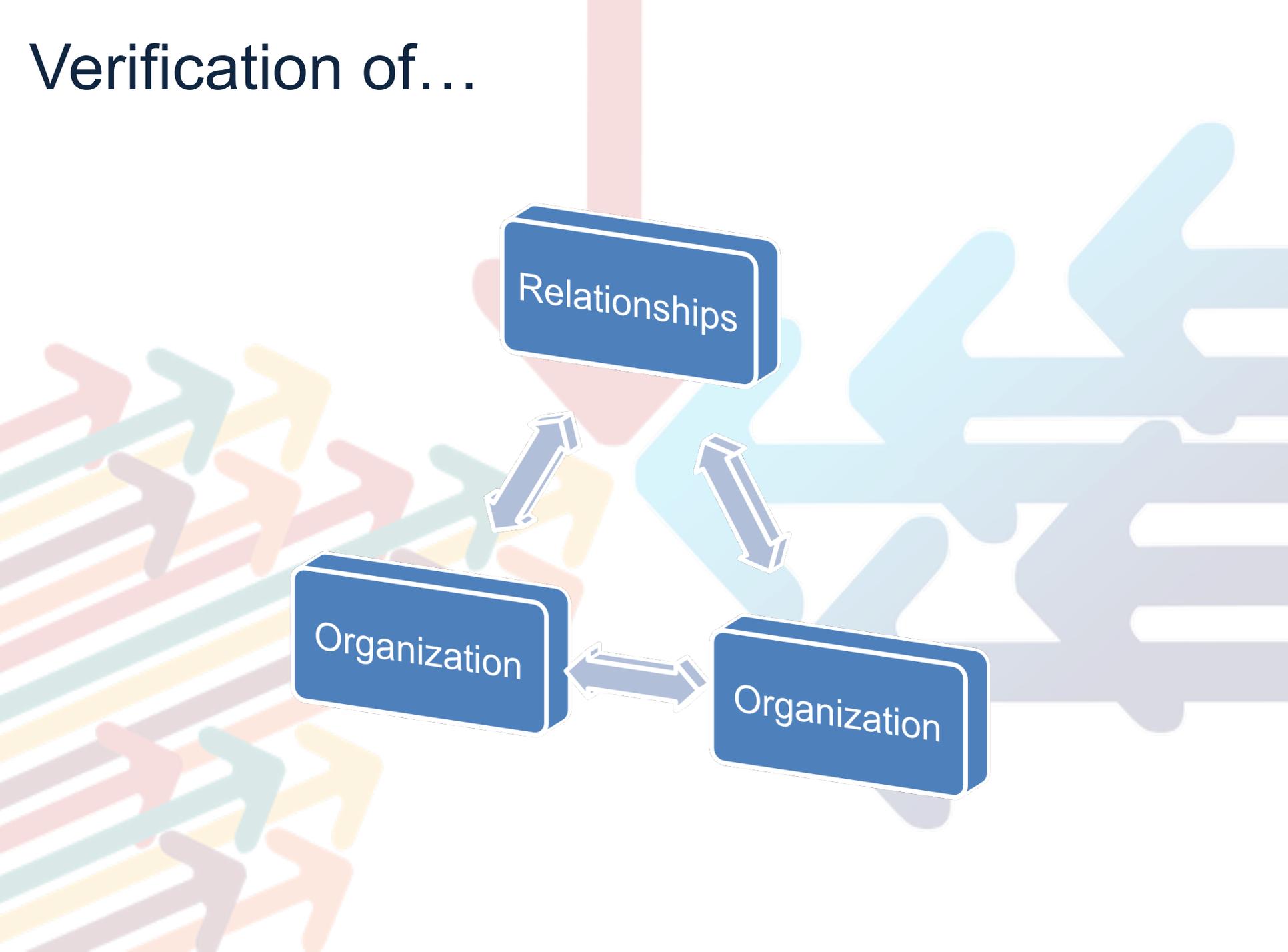
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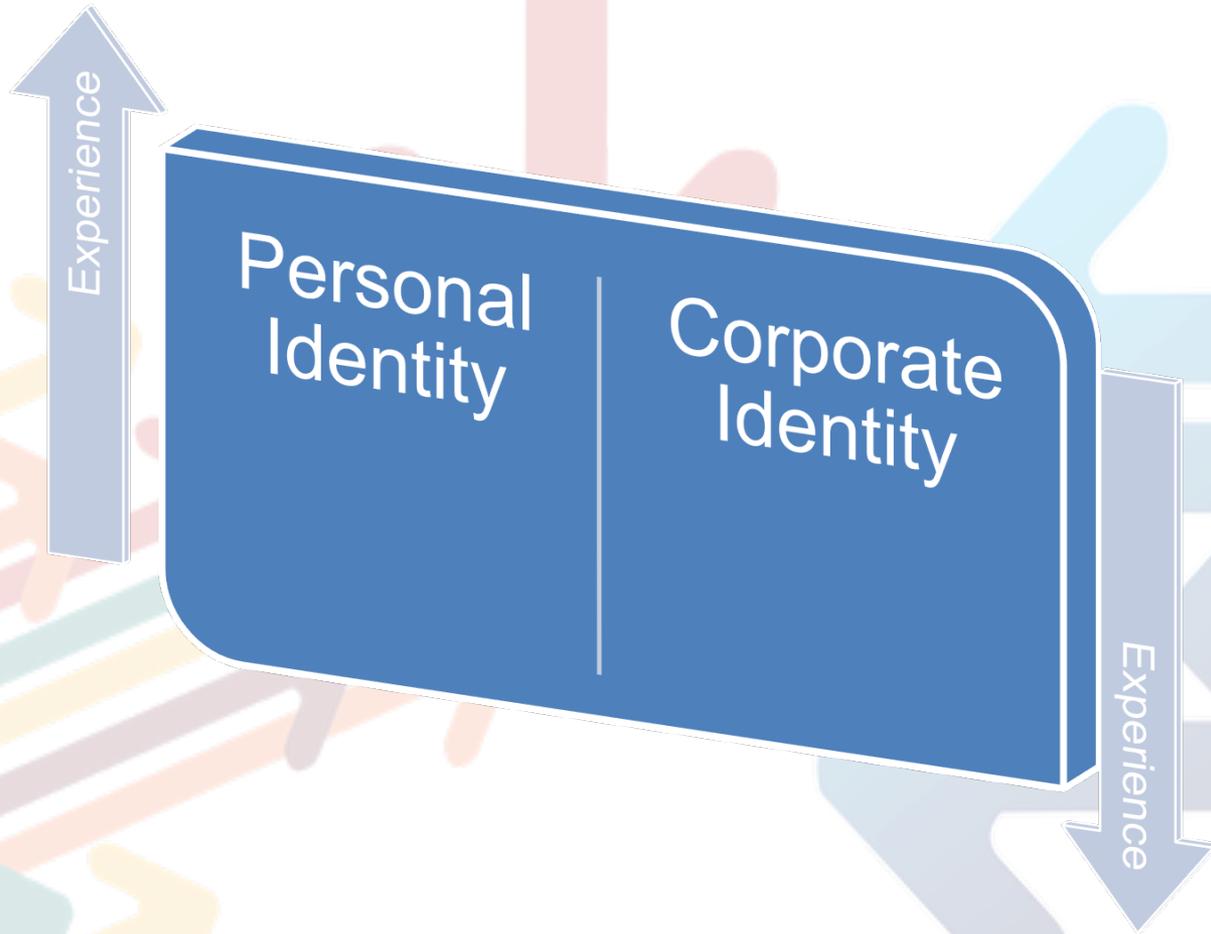
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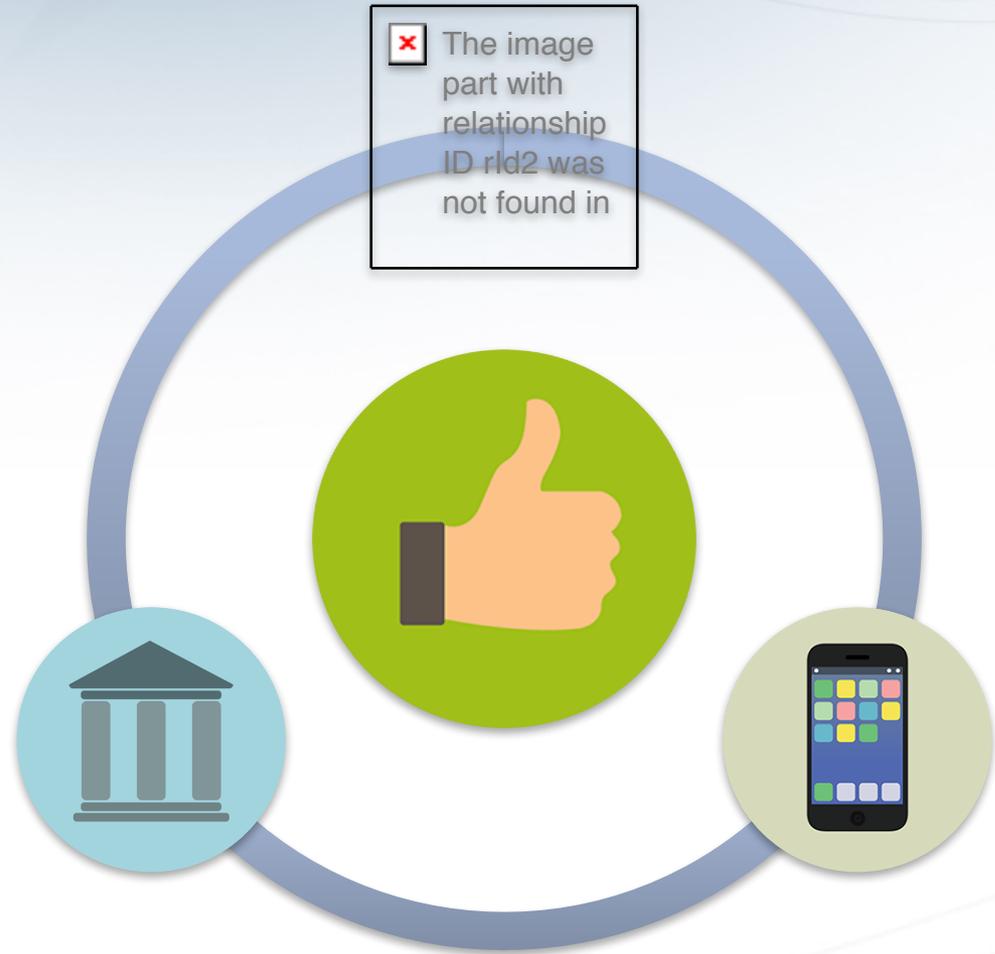
Intersecting Disciplines



Delivery Services Leveraging ID

The Pan-Canadian Trust Framework sets the foundation for business, legal, and technical (BLT) process interoperability.

The PCTF describes the roles, services, and requirements to be agreed on between participating service delivery and commercial industry sector organizations, to meet current and future Canadian innovation needs.



Grow Canada's GDP



Reduce Fraud



Increase Trust



Reduce Costs

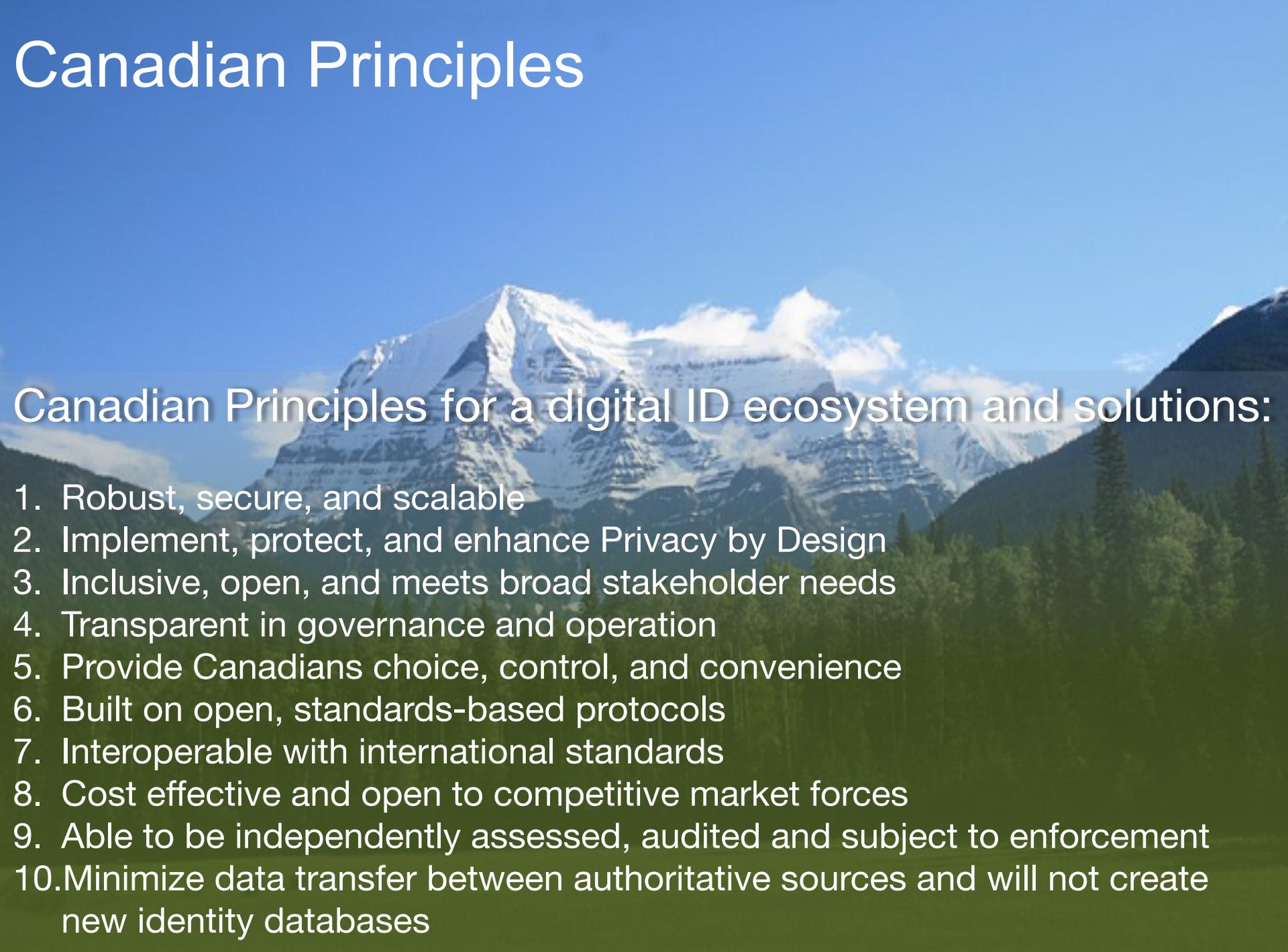


Increase Opportunities

Addressing the ID needs of persons and organizations not only to enable Canada's full and beneficial participation in the global digital economy, but to provide global leadership in the exportation of Canadian principled technologies.



Canadian Principles



Canadian Principles for a digital ID ecosystem and solutions:

1. Robust, secure, and scalable
2. Implement, protect, and enhance Privacy by Design
3. Inclusive, open, and meets broad stakeholder needs
4. Transparent in governance and operation
5. Provide Canadians choice, control, and convenience
6. Built on open, standards-based protocols
7. Interoperable with international standards
8. Cost effective and open to competitive market forces
9. Able to be independently assessed, audited and subject to enforcement
10. Minimize data transfer between authoritative sources and will not create new identity databases

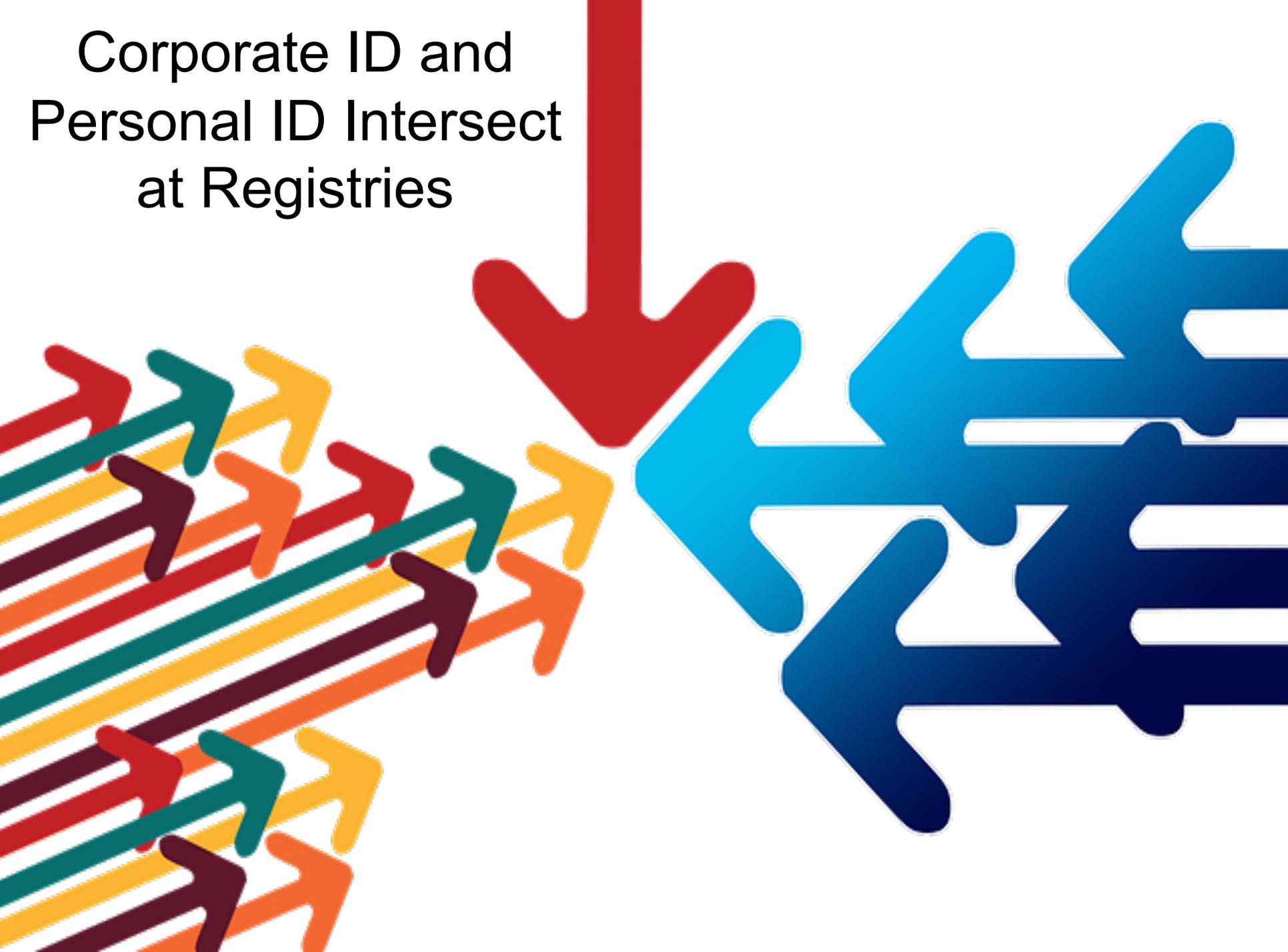
Driving Made-For-Canada Innovations through Proof of Concept Development



Can Blockchain
Technology Provide
Value to Corporate
Registries?



Corporate ID and Personal ID Intersect at Registries



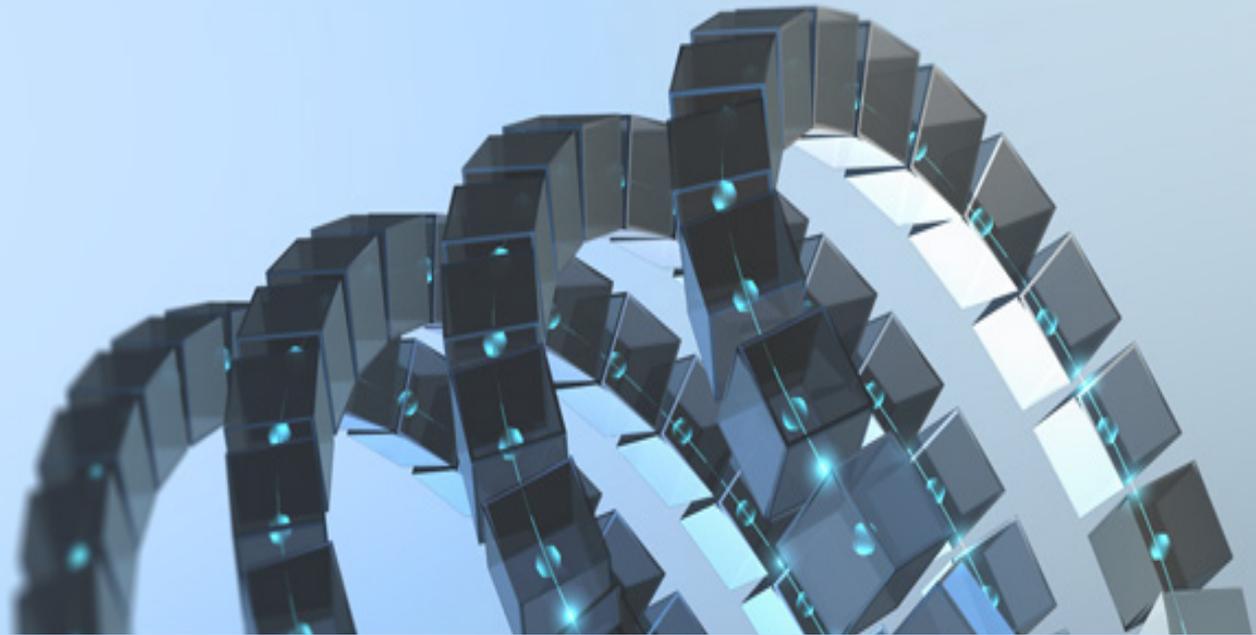
New West Trade Partnership

Benefits

The [New West Partnership Trade Agreement](#) creates a single economic region encompassing British Columbia, Alberta, Saskatchewan, and Manitoba. The implementation of the NWPTA presents a great opportunity for continued economic growth in these provinces.

Some of the benefits of the NWPTA include the following:

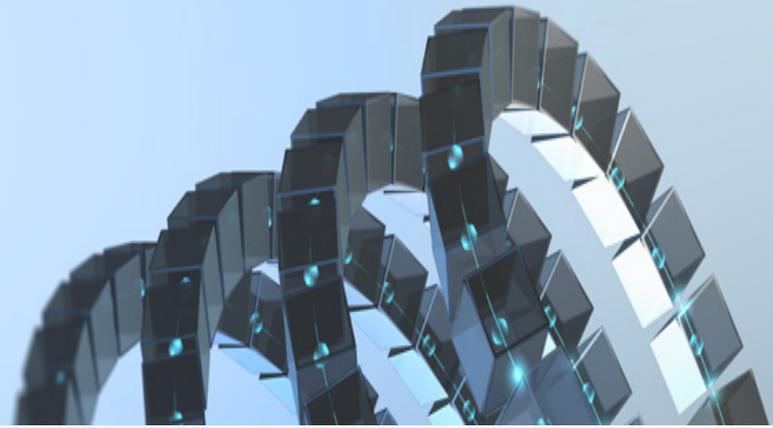
- **Canada's most open and competitive economy**
- **Labour mobility**
- **Business registration**
- **Streamlined regulations**
- **Enhanced competitiveness**
- **Best value for public spending**
- **An accessible bid protest mechanism**



DIACC Proof of Concept 3



Business Problem Statement

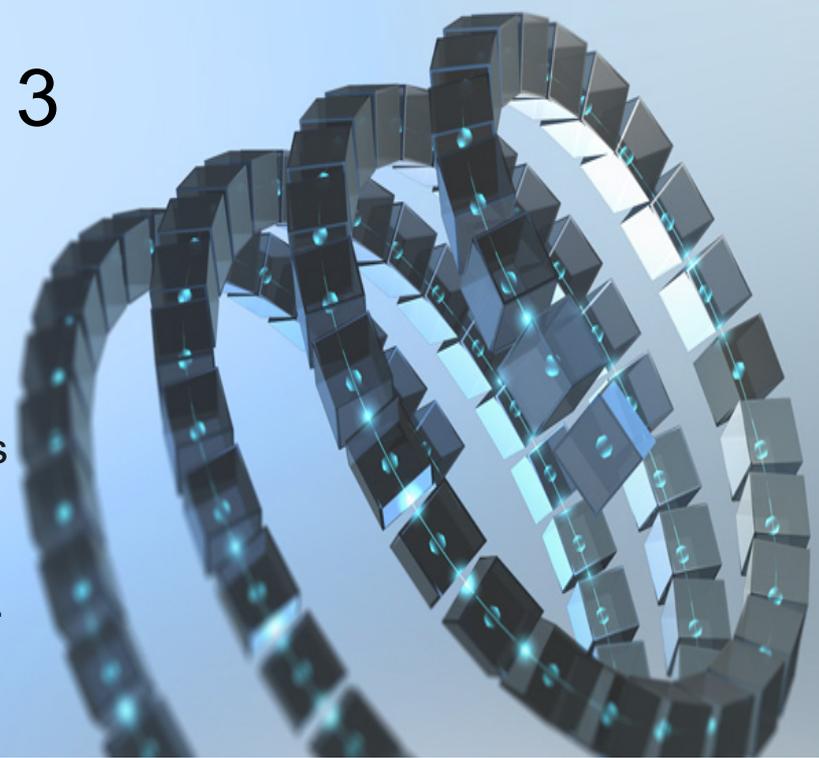


*Developed in collaboration
and with the consideration
of Blockchain related
capabilities...*

The **time and effort** to create and maintain corporate registry information that is **shared between jurisdictions** (Province to Province, Province to Federal Government, Provincial Government to Municipal Government) **is high**. For example, adding Manitoba to the New West Partnership will create a significant amount of work and new processes and checkpoints. **Is there a way to decrease the effort and improve the experience of both the Registrars and the businesses?**

DIACC Proof of Concept 3

Test the viability of blockchain technology for use in the context of corporate registries.

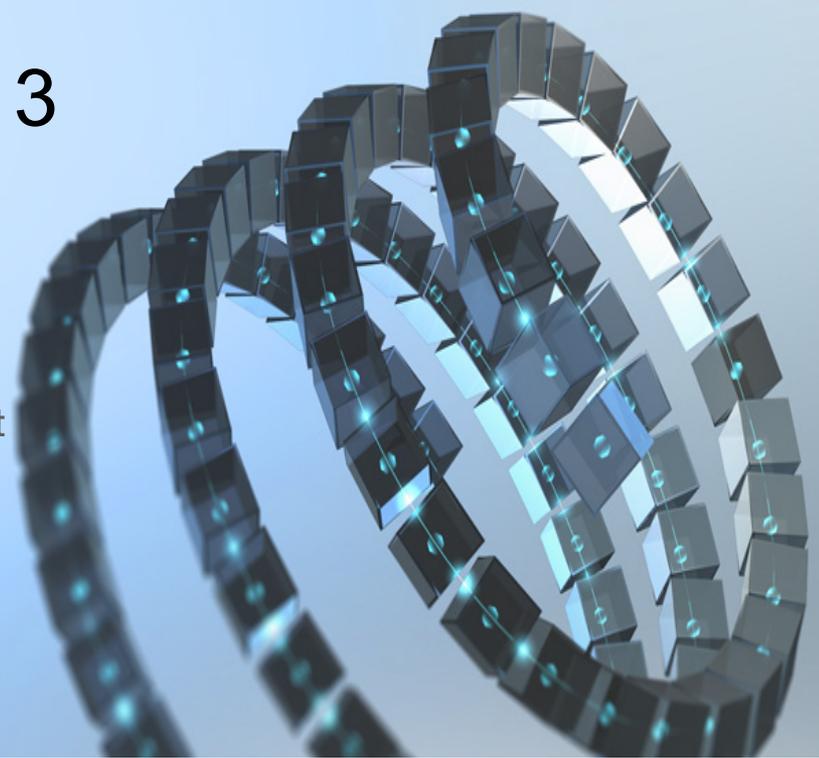


- **Neutral** – Proof of Concepts (POC) are operated under the neutral governance of the DIACC. POCs provide an opportunity to learn fast by testing viabilities. These slides provide a summary of a workshop and demo developed via an initial sprint. This presentation does not represent an official position of the DIACC.
- **Open** – The POC leverages the hyperledger open standard that is maintained by the Linux Foundation. Further developments of the POC will maintain an open standards based approach.
- **Collaborative** – The POC was proposed by DIACC member IBM in collaboration the Province of British Columbia as an initial key stakeholder. The POC has been developed using a collaborative approach. To begin the POC, IBM facilitated a 2 day design workshop in Victoria, BC to inform interested parties of the core concepts and open source components of blockchain technology.

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Level Set:

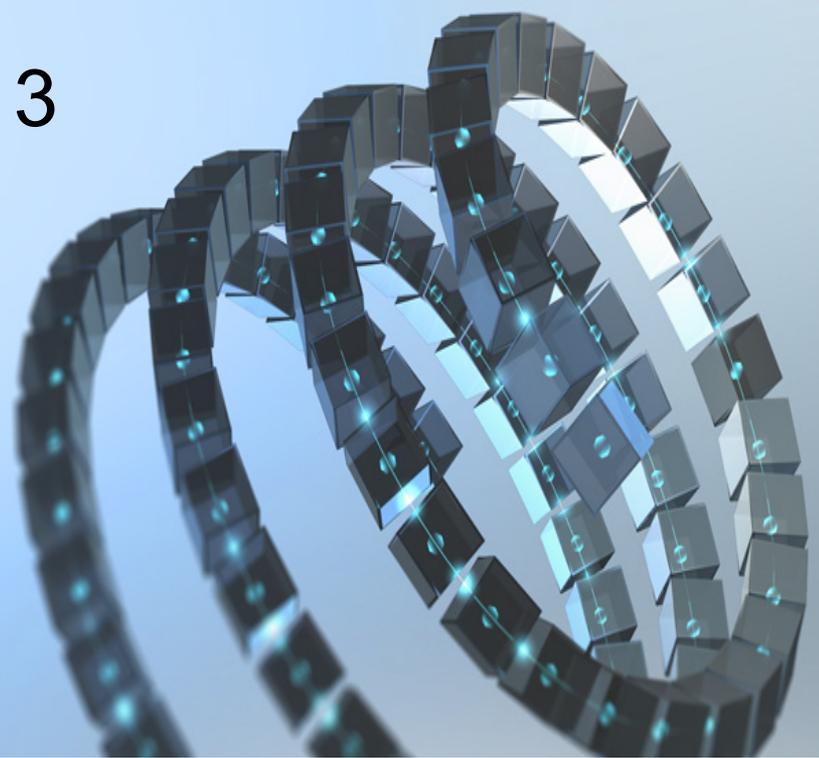
- There is significant potential for Blockchain to assist in areas of challenge for Corporate Registries particularly cross jurisdictionally.
- Blockchain is **not proposed as a replacement of all systems** but has the **potential to replace some elements** of the current registry systems - primarily where specific actions need recording, and providence of those actions is key.
- Development of Blockchain is iterative and agile and will take **collaboration** across parties interested in participating.



DIACC Proof of Concept 3

DIACC Thanks!

- To Province of BC for their insights as key stakeholders. Special thanks to **Beverly Dicks** and **Ian Bailey** for their breadth of participation through the collaborative input of the Province of BC teams.
- To the **IBM team** for producing an informative workshop and for the development of the POC sprint 1 deliverables.
- To all of the **participants in the workshop**. By working together we will accelerate the establishment of a made-for-Canada digital ID ecosystem that Canadians can use with confidence!
- More to come...



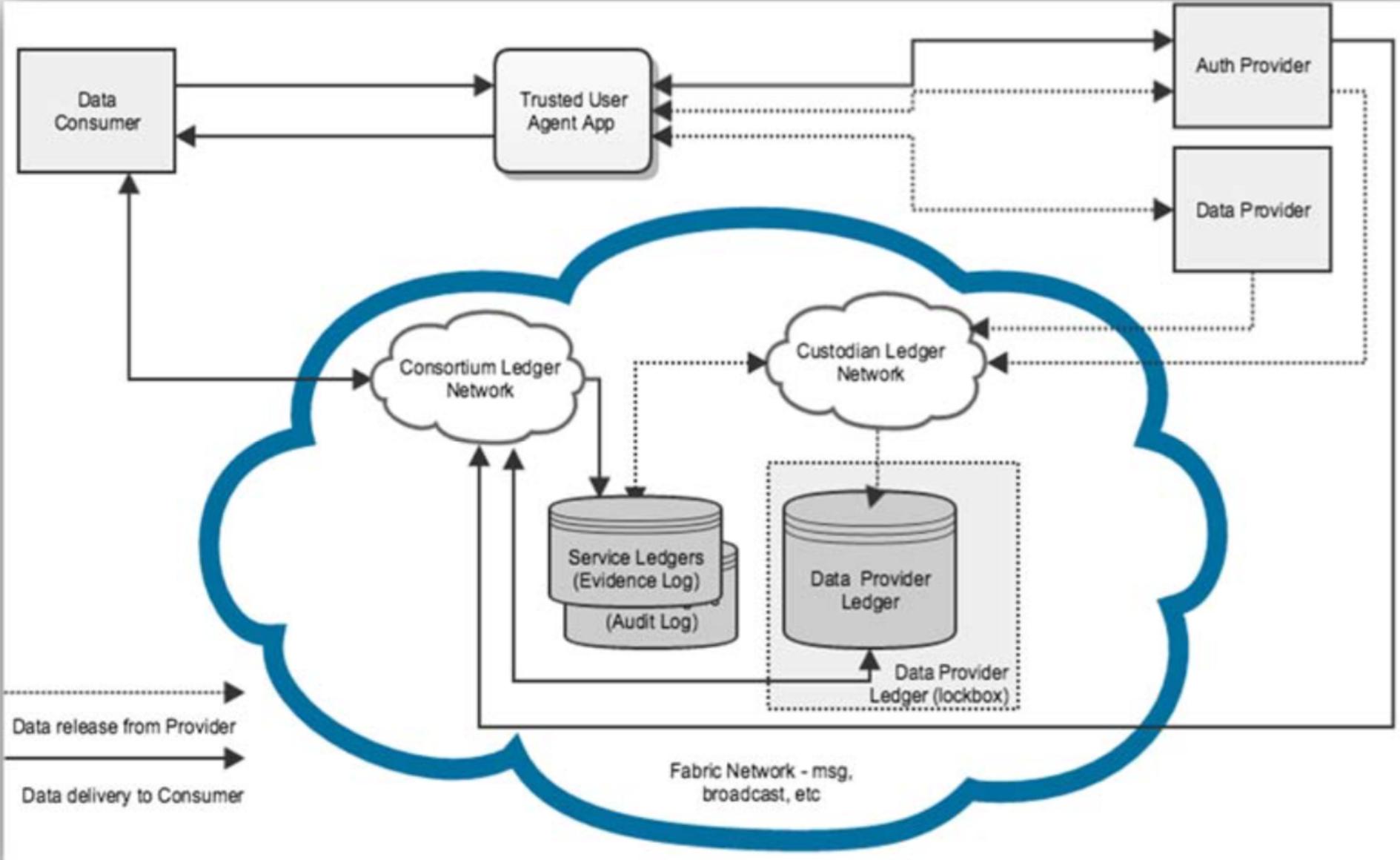
An aerial night view of a city, likely New York City, showing a dense urban landscape with numerous skyscrapers and residential buildings. The city is illuminated by streetlights and building lights. A prominent feature is a multi-lane highway with long-exposure light trails from vehicles, running vertically through the center of the image. Overlaid on the city is a network of white, glowing arcs and dots, representing a data or communication network. The arcs connect various points across the city, including the highway and surrounding areas. The sky is dark with some clouds, and the overall color palette is dominated by blues and greys, with the white light trails and network lines providing a stark contrast.

 **DIACC Applied Research**

CONSUMER DIGITAL IDENTITY LEVERAGING DISTRIBUTED PRIVACY ENHANCING TECHNOLOGY

This applied research explores current issues and opportunities in emerging identity markets, and describes the rational and technology paradigms for designing a consumer-centric, privacy-enhanced system using modern distributed architectures. The applied research companion paper was developed to accompany applied research developed by SecureKey under an applied research partner program of the Digital ID & Authentication Council of Canada (DIACC).

The Model



DIACC... Connecting Canadians

<https://www.youtube.com/watch?v=GPhFcDnLfmA>

DIACC Members

Directors



Sustaining Members



DIACC Call to Action

Now more than ever, the world is looking to Canada for digital ID innovations that are convenient, secure, and privacy respecting.

Canada can lead the world by making a substantial and sustained commitment to delivering an innovative made-for-Canada digital ID platform that Canadians can use with confidence.

Thank you!

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