OPEN IDENTITY EXCHANGE

# Making Digital ID a Success

## Identity Trust Update

May 18th 2023

# Agenda

**14.00** **Introduction, Welcome & OIX Update** - *Nick Mothershaw, Chief Identity Strategist*

**14.05** **Digital identity wallets in practice** - *David Goodman, Director, Identitas Consulting & Lal Chandran, Co-founder and CTO, iGrant.io*

**14.30** **An Update from the Open Wallet Foundation** – *Daniel Goldscheider, OWF*

**15.00** **An update from NIST** - *Ryan Galluzzo, Digital Identity Program Lead for the Applied Cybersecurity Division - NIST*

**15.30** **Tea/Coffee Break**

**15.50** **OFCOM's Approach to Age Assurance** – *George Billinge, Online Safety Policy Manager OFCOM*

**16.20** **Mydex CIC overview & Thoughts on Identity & Attributes** - *David Alexander, Chief Executive and Platform Architect Mydex CIC*

**16.50** **Member Update -** *Emma Shaw, OIX Member Manager*

**16.55** **Networking Drinks & Nibbles**

**18.30** **CLOSE**

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# Making Digital ID a Success

## OIX Update

# OIX Vision and Purpose – UDPATED

**Our Vision**

A world where we can all prove our identity and eligibility anywhere, using a simple universally trusted ID

Our **Purpose** is to create a community to drive …

**Identity Thought Leadership:**

- Promote user centric Identity Trust
- Create and publish guides on Trust Frameworks
- Ensure Digital ID is delivered through Smart Wallets / Agents that work for the user
- Enable Digital ID to work seamlessly across the globe

**Collaboration:**

- To make Digital ID a success
- Influence governments and stakeholders
- Connect ID suppliers with ID acceptors
- Promote members services
- Share news and views

**Identity Adoption:**

- Promote Digital ID
- Education for ID Acceptors
- Dispel Myths
- Showcase Success via Case Studies
- Help with Business Cases and Checklists
- Remove challenges and blockers
- Ensure ID is inclusive

… through our active and engaged **Membership**

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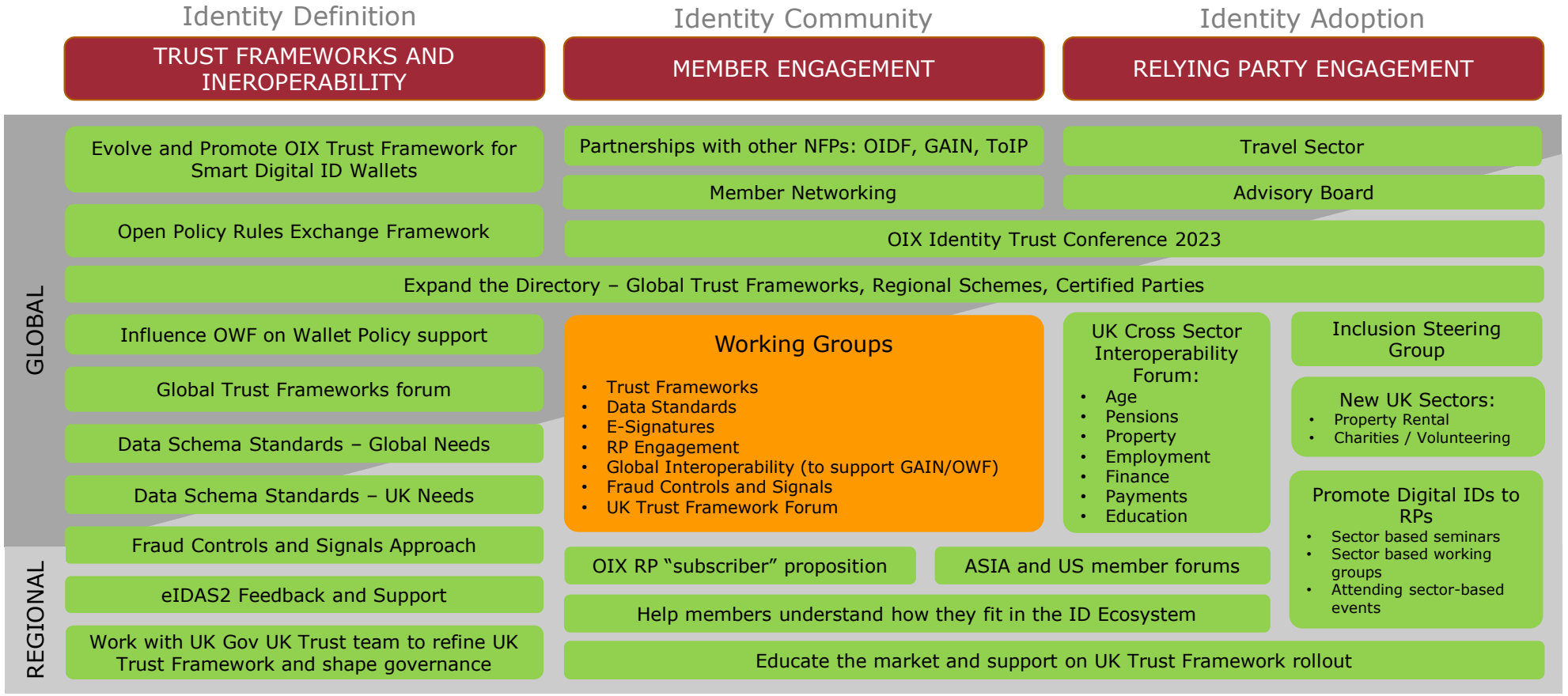
# Strategic Plan 2023

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# UK Government Engagement

| | |
|---|---|
| Adoption Sprints | • Attended Finance and Age / Retail sessions + feedback session.<br>• Will map actions to OIX activity.<br>• Will liaise with DIST in sector-based engagement next steps |
| OIX Working Groups | • Fraud Signals Strategy<br>• Inclusion Strategy<br>• Overlay / Federation / Commercial Schemes |
| Public Dialog | • Part of advisory group<br>• Interviewed by company leading research<br>• Will present to end users on 17th/18th May |
| Written Feedback | • Collating extensive feedback on DIATF BETA<br>• Key feedback on roles<br>• Deadline 7rd June |

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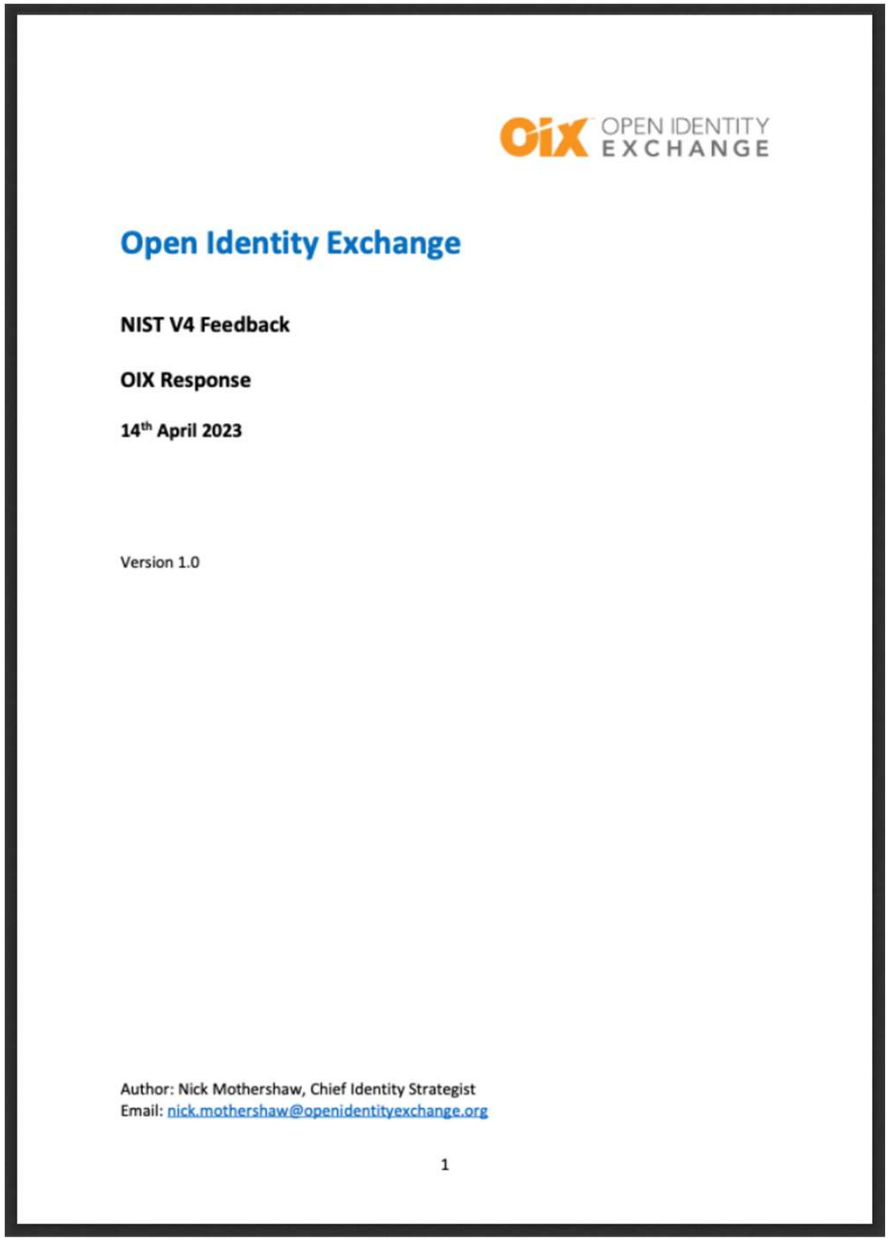
# NIST Feedback



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## Open Identity Exchange

**NIST V4 Feedback**

**OIX Response**

**14th April 2023**

Version 1.0

Author: Nick Mothershaw, Chief Identity Strategist
Email: nick.mothershaw@openidentityexchange.org

1

| Consideration | Items to Consider | Impact on the Relying Party of not addressed | Risk / Commercial Consideration |
|---|---|---|---|
| Availability | When is the Digital ID ecosystem available? Is it 24/7? Is some down time planned? What evidence does the ID Provider have to show they have a robust scalable architecture? | Users cannot access services. | Risk |
| Liability | What happens if the system is unavailable? What happens if an ID fraudster has control of an ID? What happens if the ID Provider makes an error? Will any losses be recoverable? | Users cannot access services or suffer losses<br>Relying party suffers losses. | Commercial. |
| Technical Interoperability | When accessing a federation of ID providers, is information delivered from each ID Provider consistent? Is the federation provider using standards or are they veering to proprietary overlays> | Must code to cater for ID Provider Inconsistencies<br>Vendor lock in | Commercial |
| Fraud | Whilst fraud is addressed elsewhere in the guidance, the risk of fraudsters having control of a Digital ID needs to be considered as part of adoption. Digital ID implementation are unlikely to be 100% free of fraudsters, so it is important to understand how fraud is controlled and managed. | Loss due to fraudster access of services<br>User loss. | Risk |
| Support | Users and the Relying Party must have somewhere to go when there is a problem. | Users unable to access services | Risk |

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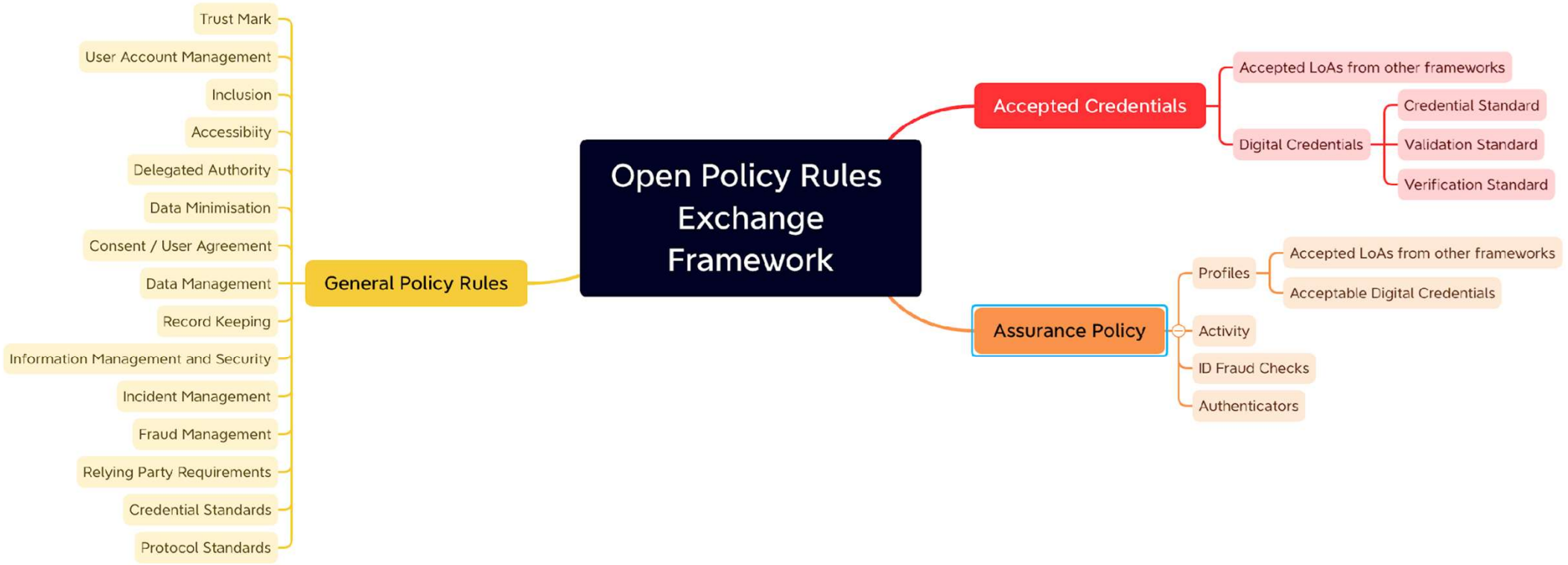
# Global Interoperability
# Open Policy Rules Exchange Framework

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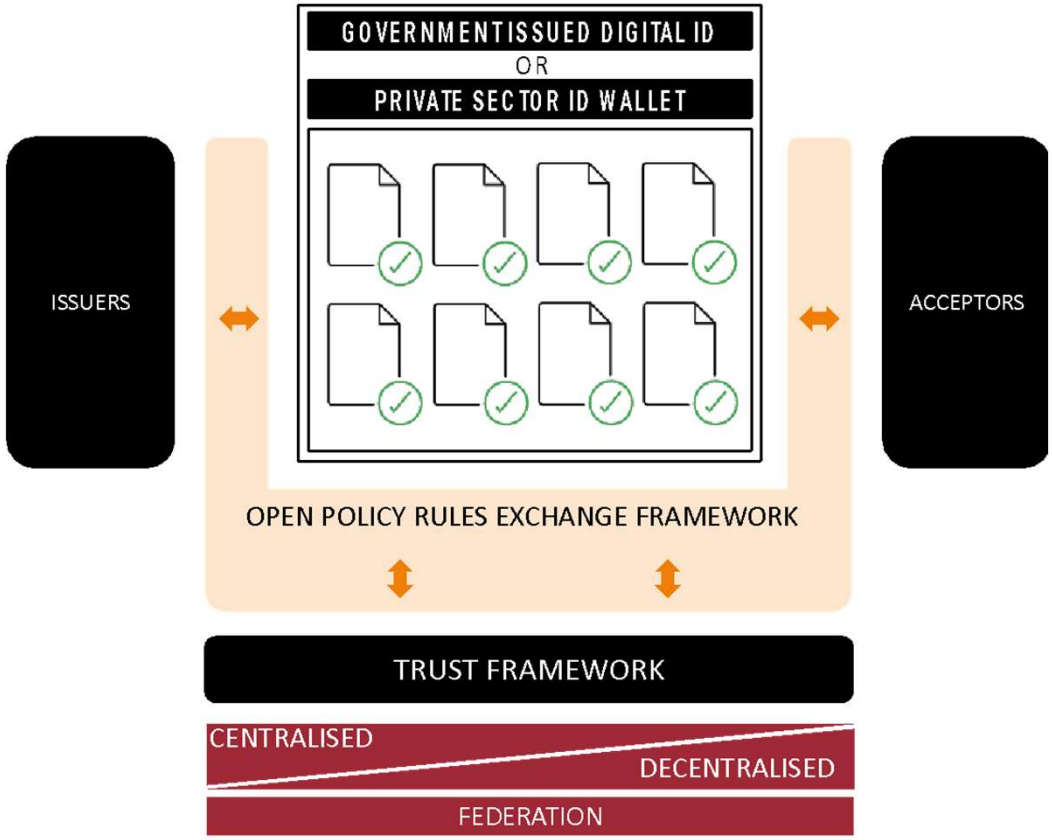
# Open Policy Rules Exchange Framework enables…

….policy interoperability across all parties, regardless of ID “Style” and Technology agnostic




- A **really Smart Wallet** should enable the user to hop from place to place, from Trust Framework to Trust Framework, **seamlessly.**

- At OIX, our Global Interoperability Working Group is exploring how this will work by analyzing the following:
  - EU eIDAS2
  - US NIST
  - UK DIATF
  - Canada DIACC
  - Singapore Singpass
  - Thai Trust Framework
  - MOSIP
  - Bank ID Sweden

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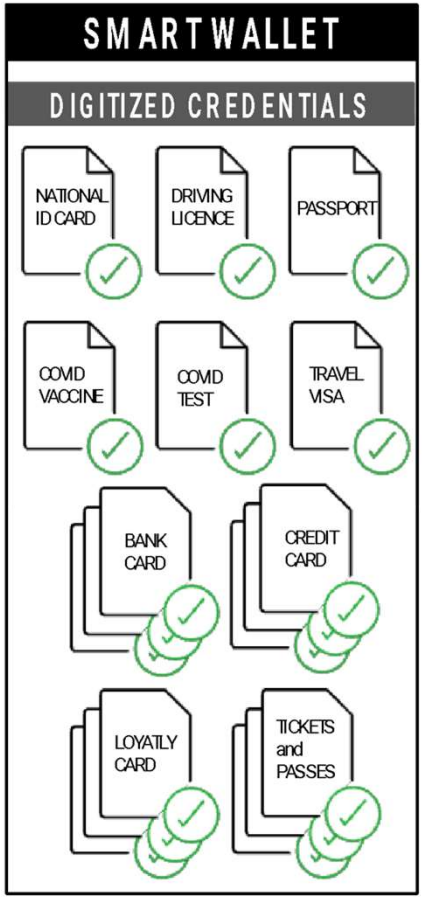
# Open Policy Rules Exchange Framework enables…

….key policy questions to be answered

Does the wallet meet my policy requirements?




Does a credential meet my policy requirements?

Hiring a Car

Can the wallet derive information I need?

Age Restricted Retail

Can the wallet derive a Level of Assurance I need?

Opening Financial Account

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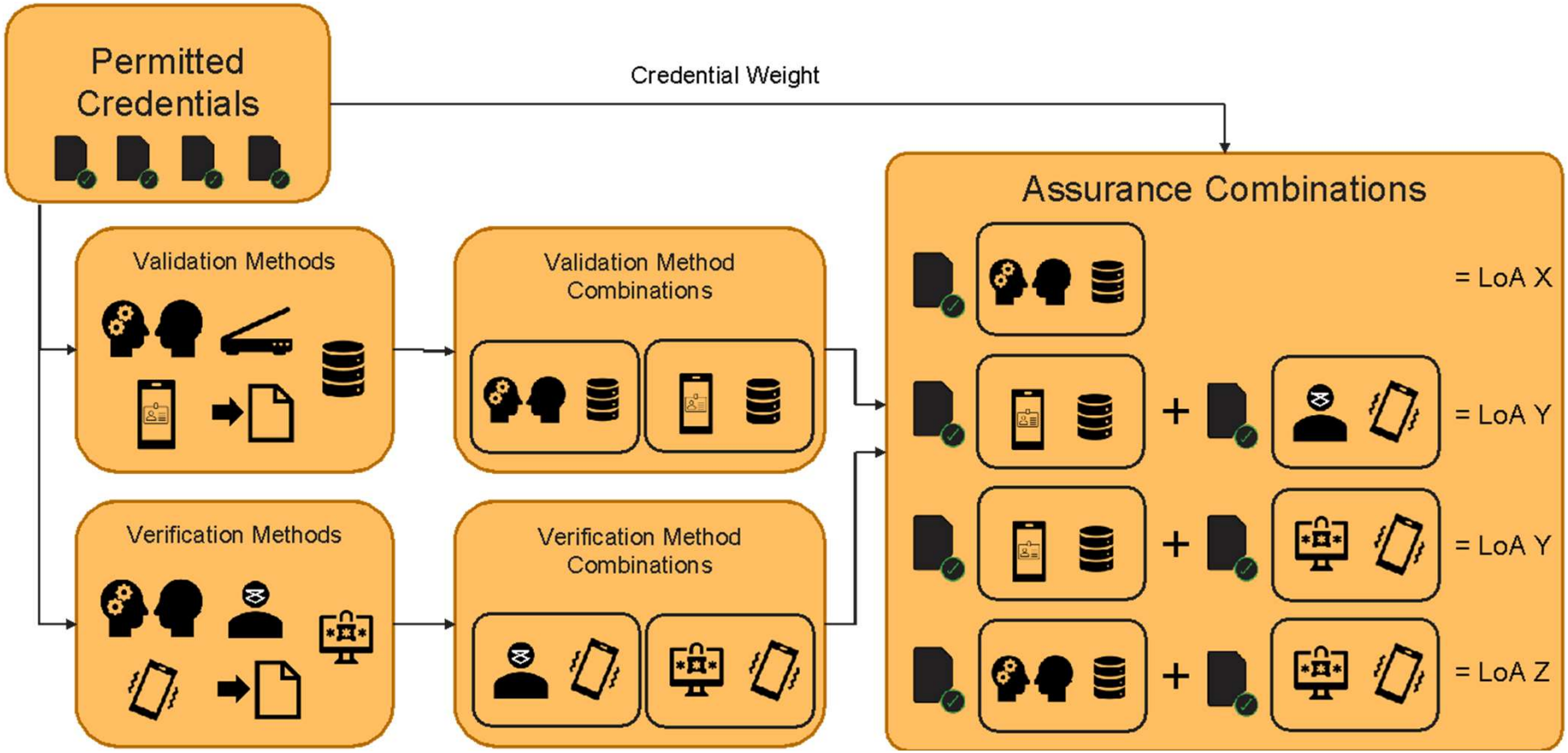
# OPREF - Level of Assurance Methodology

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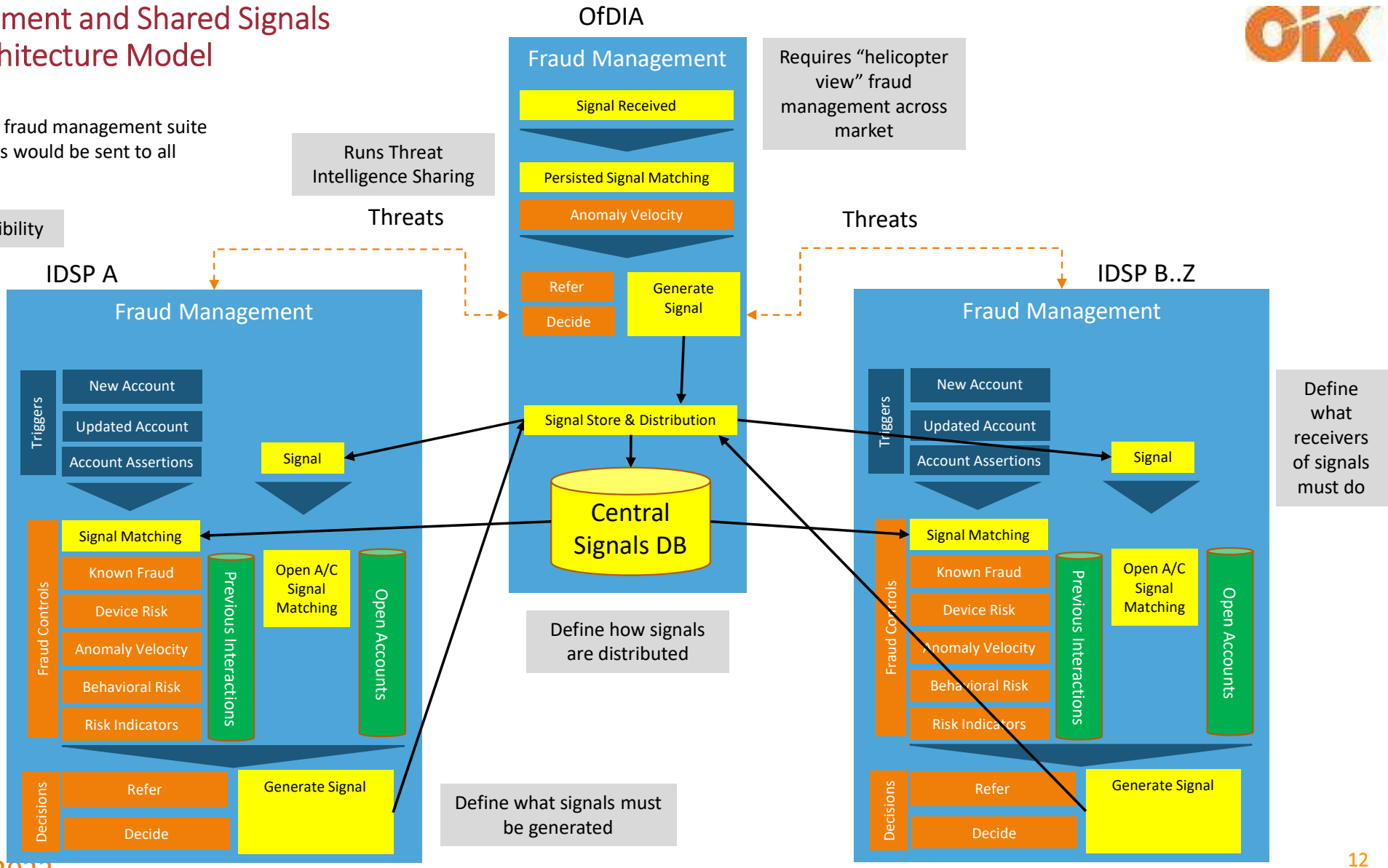
# Fraud Management and Shared Signals
# UK Logical Architecture Model

There is more than one fraud management suite in the market. All signals would be sent to all signal consumers

Key DCMS responsibility

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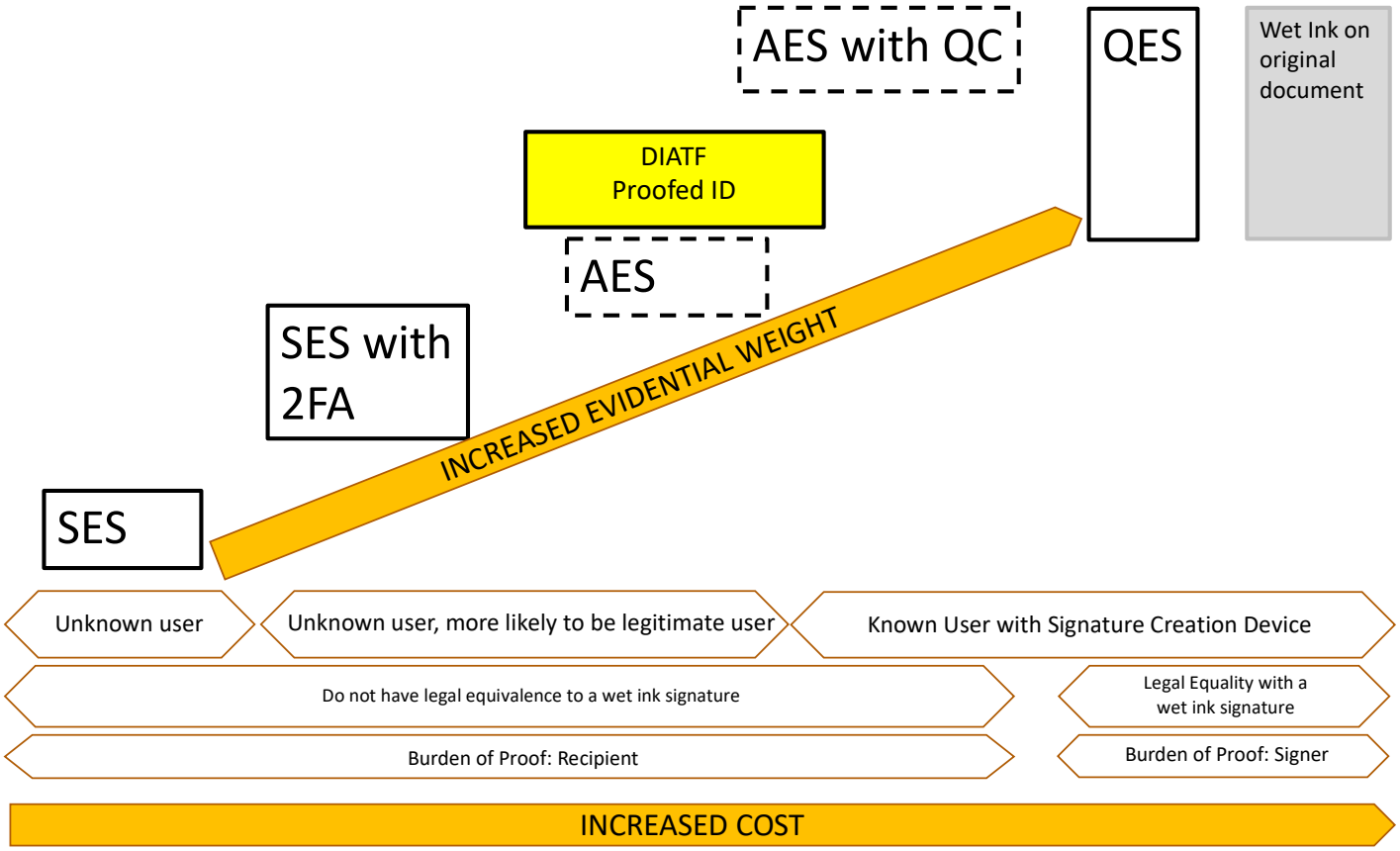
# eSignature working group

The TISA / OIX eSignature working group is exploring how Digital ID can give SES and AES signatures more Evidential Weight

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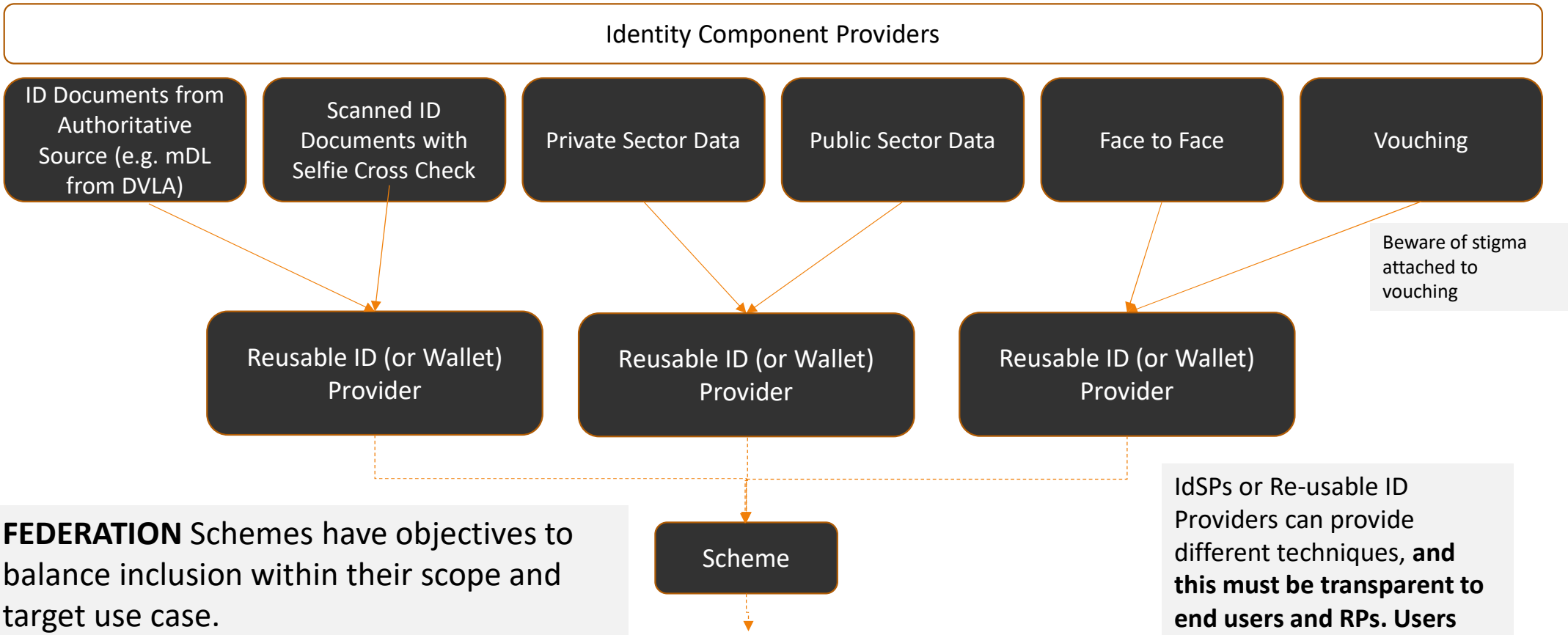
# Scheme role in Inclusion

Identity Component providers would specialize in a specific technique or demographic




**FEDERATION** Schemes have objectives to balance inclusion within their scope and target use case.

IdSPs or Re-usable ID Providers can provide different techniques, **and this must be transparent to end users and RPs. Users can then make an informed choice.**

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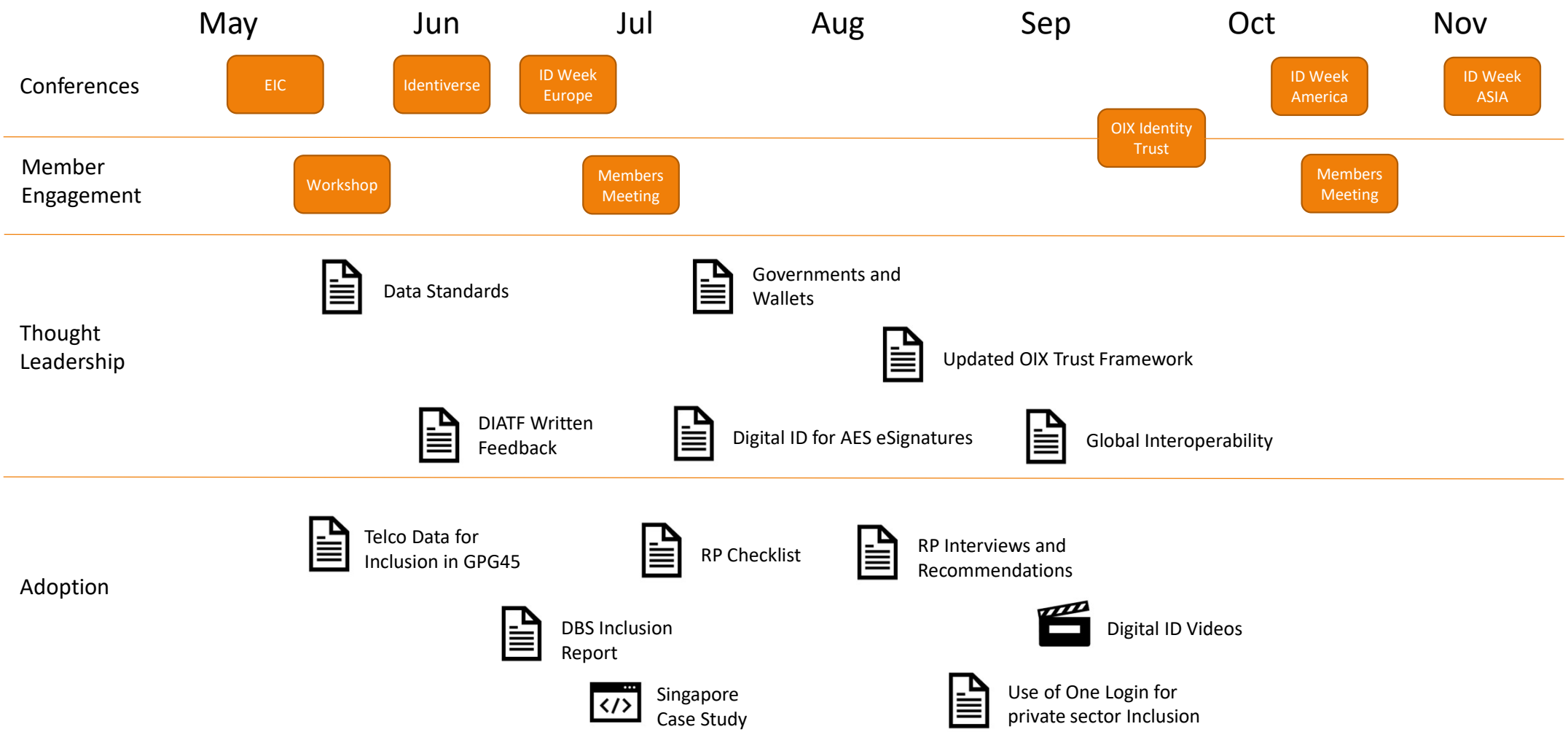
# Timeline for Papers / Conferences

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# Digital identity wallets in practice

*David Goodman, Director, Identitas Consulting &*

*Lal Chandran, Co-founder and CTO, iGrant.io*

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# An Update from the Open Wallet Foundation

*Daniel Goldscheider, OWF*

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# An update from NIST

*Ryan Galluzzo,*

*Digital Identity Program Lead for the Applied Cybersecurity Division - NIST*

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# Making Digital ID a Success

## Tea / Coffee Break

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Making Digital ID a Success

# OFCOM's Approach to Age Assurance

*George Billinge, Online Safety Policy Manager, OFCOM*

# Age Assurance: Ofcom's approach

George Billinge

Online Safety Policy Manager @ Ofcom

making communications work **for everyone**

# Why does Ofcom care about age assurance?

# The VSP guidance on age assurance

If a UK-established VSP has pornographic content on it's platform, it should:

Have robust access controls that verify age and prevent under-18s from accessing pornographic content

This is a priority for platforms that specialise in pornography

In our Harms & Measures guidance, we set out:

- Measures we would ***not*** consider to be robust age assurance
- Factors we would take into account when determining if a VSP specialises in pornography

# Age assurance and the Online Safety Bill

The draft Bill requires services to have proportionate systems in place to

prevent users from encountering illegal content

mitigate the risk and impact of harm from content to children (including pornographic content)

As part of this, Ofcom has the power to recommend the use of measures such as age verification.

# Age assurance in the Online Safety Bill

Age assurance measures are explicitly mentioned in the Bill (as currently drafted), including in Part 3 and Part 5

## Part 3

A duty to operate a service using proportionate systems and processes designed to—

(a) **prevent** children of any age from encountering primary priority content that is harmful to children (for example, by using age verification, or another means of age assurance);

(b) **protect** children in age groups judged to be at risk of harm from encountering other content that is harmful to them (for example, by using age assurance).

This relates to user-to-user services

## Part 5

A duty to ensure that children are not normally able to encounter content that is regulated provider pornographic content in relation to the service (for example, by using age verification).

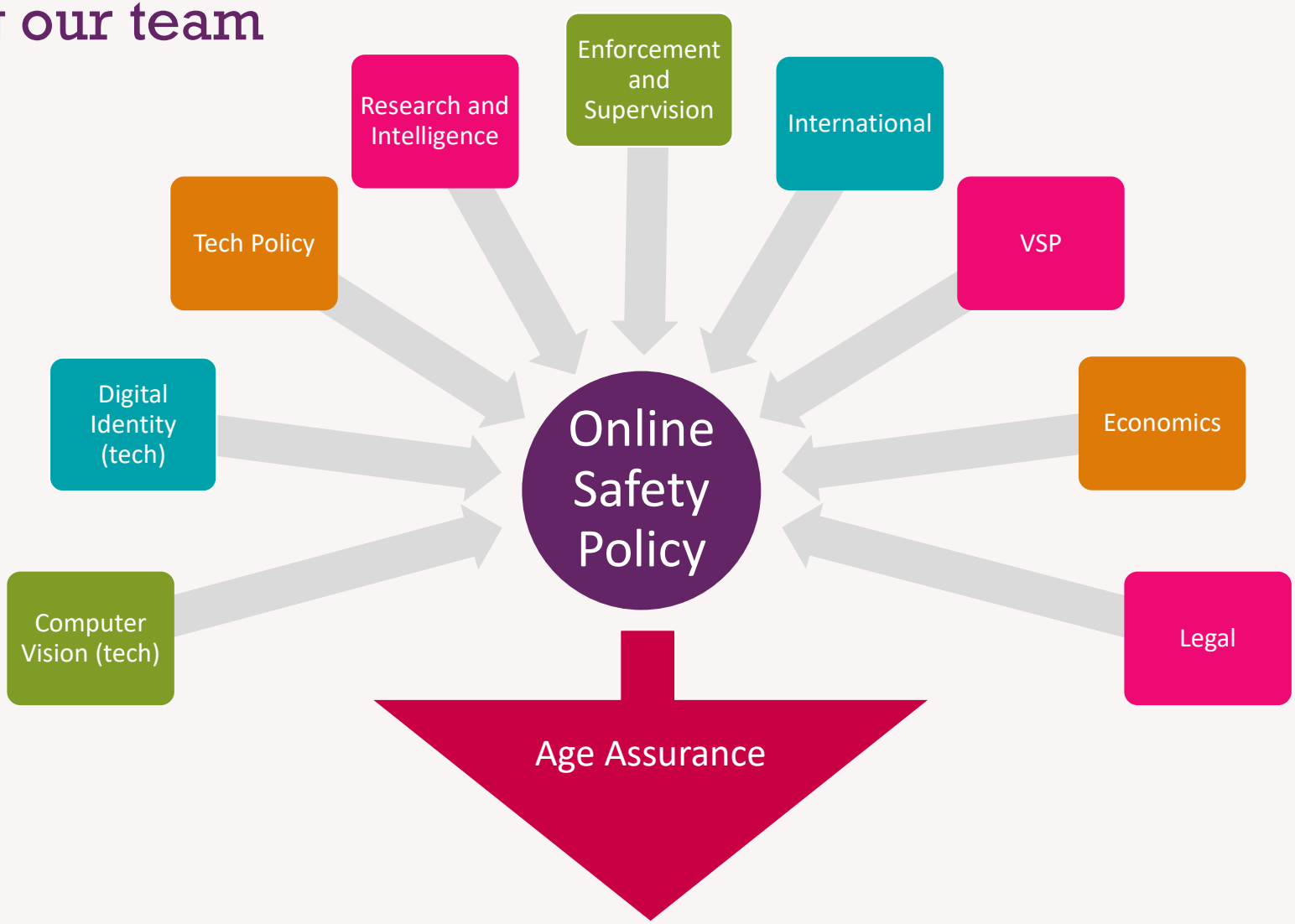
This relates to provider pornographic content

…but age assurance may also be deployed as a mitigation to other harms

# Our work so far

# *Building a team of experts*

# Building our team



# *Regulating Video-Sharing Platforms*

# VSP

We're using our VSP work to:

Build our evidence bases on the effectiveness of current 3AV technologies, jointly with ICO

Increase our understanding of how social media platforms are using age assurance

Learn more from OnlyFans' deployment of age assurance

Look into adult platforms' compliance with their duties through our enforcement programme

Collaborate through international engagement

# Learnings from our first year of VSP regulation

## Year 1

### Year 1 priority

Laying foundations for AV to prevent under-18s from accessing pornographic material on adult VSPs

### Key takeaways

- OnlyFans, the largest of the adult VSPs, has implemented AV for all new UK users following Ofcom's regulatory requirements
- In contrast, most of the smaller adult VSPs do not appear to follow Ofcom's guidance on AA or have robust access control measures in place to prevent children accessing pornography.

## Year 2

### Year 2 priority

Promote the implementation of robust AV to protect under-18s from harmful content

### Next steps

- Continue research and industry engagement to understand what is proportionate to expect from different VSPs
- Enforcement programme with adult VSPs
- Coordinate AA approach with other regulators within the UK and globally, looking forward to broader online regulation

# VSP enforcement programme

aims

1. Assess the 3AV measures implemented by notified adult VSPs
2. Identify whether there are other platforms that may fall in scope of the VSP regime but are not yet notified
3. Understand the challenges VSP providers face when implementing 3AV

output

The programme will seek to determine the scale of compliance concerns in respect of notified and non-notified adult VSPs and help us take appropriate action to improve 3AV measures in place.

# *Research programme*

# Methodology

*PROSPECTIVE FINDINGS ONLY*

**Technical engagement workshops**
Explored the main findings of Part 1 of the research to test relevance among technical experts

**Data gathering**
A questionnaire was issued to providers, followed by an invitation to self-declare testing data against the measures set out in the report

**Data analysis**
The project team's statisticians and data scientists explored options to achieving consistency

How effective is the proposed approach?

# Attitudes to age verification research

- Age verification is **accepted** where it is **expected**
- Most participants **support** AV to access porn but view it as a “hassle”
- Participants have **serious concerns regarding data protection** when verifying their age
- Participants have **very low trust** in porn sites
- Reassurance can be provided by **increased transparency** about data processing and retention.
- *See also: Families' attitudes to age verification (joint with ICO)*

# Call for Evidence: Protection of Children

In January, we published a call for evidence focusing on harms to children online and how these can be mitigated. This sought evidence on the use and impact of AV measures, and closed on 21 March.

We will take a consultative approach to policy development

# *International engagement*

# International engagement on Age Assurance

**Currently:**

We're using engagement to understand our international counterparts' experiences of regulating adult VSPs so that we can be prepared for our own regime, as well as share relevant technical information and research.

**Looking forward:**

We plan to expand international engagement and increase coordination to establish a common evidence base and best practice

We are a founding member of the International Working Group on Age Verification, alongside regulators from Belgium, France, Germany, and Cyprus. The Working Group published a joint statement in March 2023 outlining our shared commitment to protect children.

# Questions

making communications
work **for everyone**

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# Mydex CIC overview & Thoughts on Identity & Attributes

*David Alexander, Chief Executive and Platform Architect Mydex CIC*

# Mydex CIC overview
# &
# Thoughts on Identity & Attributes

David Alexander, Chief Executive, Mydex CIC
18th May 2023 - London
david@mydex.org

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# Mydex CIC is little different

- A **mission and asset locked** social enterprise in **Community Interest Company** legal form supporting individuals empowerment, inclusion and interaction with world around them
- An established **public services provider,** working across regional clusters in the UK
- **Designed for** citizens, public, private, social and third sector providers.
- **Live** with **16 years practical experience** on the ground **transforming** services and **innovating**

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## We are Independently Certified

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bsi. ISO/IEC 27001 Information Security Management

Fair Data™

Crown Commercial Service Supplier

Department for Science, Innovation & Technology

## We are active members of

Oix UNITED KINGDOM

tScheme Trust Services

MyData

OpenWallet FOUNDATION

OpenID®

OPEN BANKING

## We contribute to working group's and communities of practice in the UK and Europe



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# Why is Mydex CIC a member of OIX?

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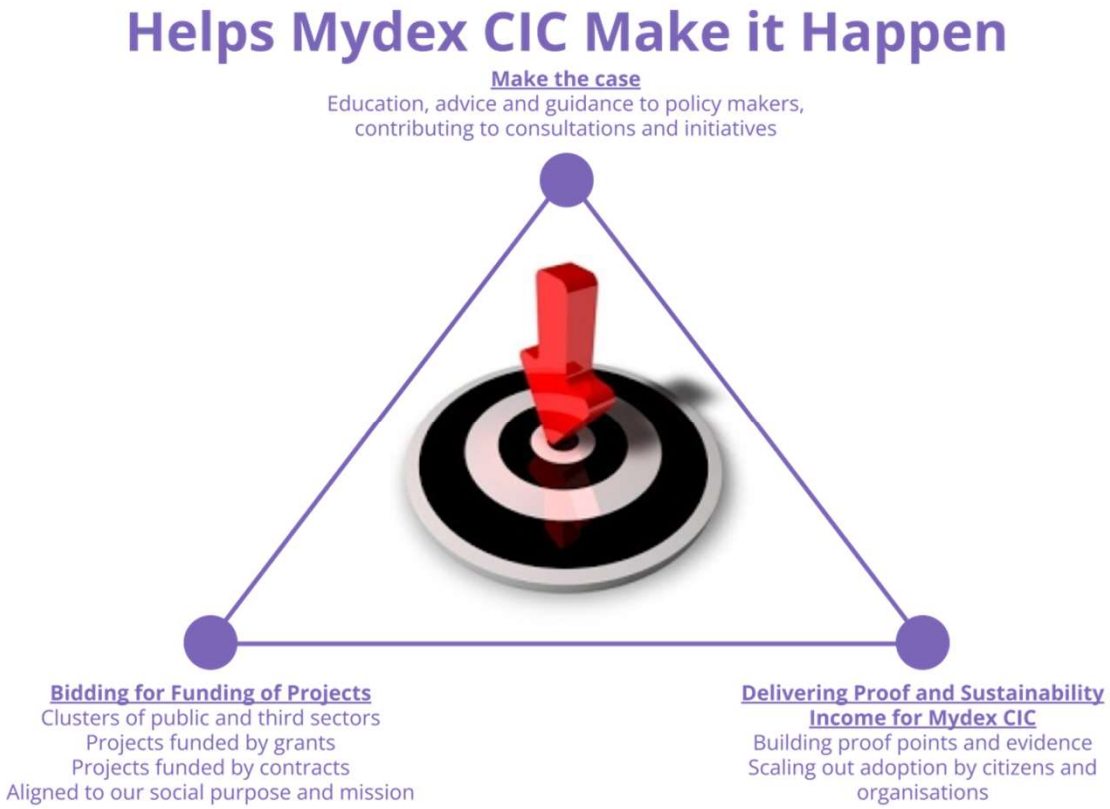
Insights
Intelligence
Inspiration
Influence





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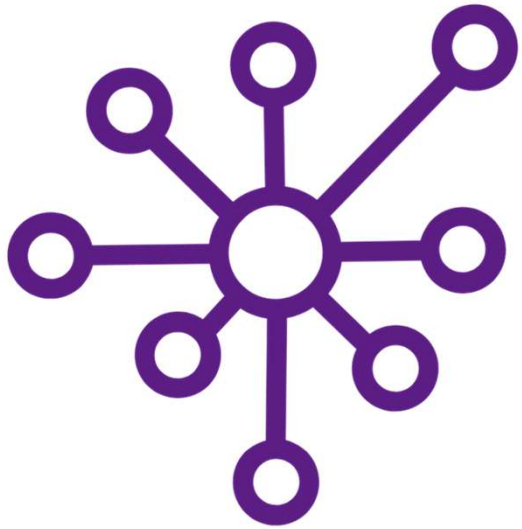
# Mydex works across sectors and many use cases in local clusters

- Public services inc benefits applications
- Advice Services - Debt, consumer
- Health and care services
- Housing
- Two way citizen engagement
- Personalised notifications





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# We provide our subscribers with

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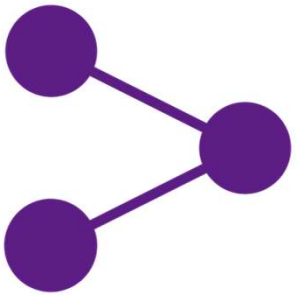
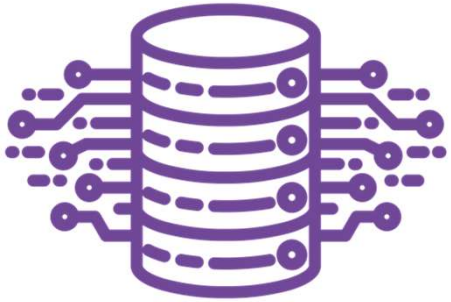
Personal Data Stores



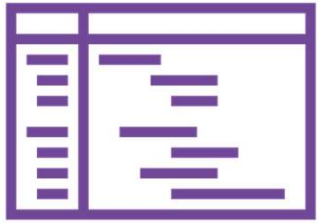
Personal Data Exchange / Logistics



Master Reference Data Services

Identity

Two way engagement platform



Implementation support

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# FERC



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# FERC the four evils of service

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Friction

Risk

Effort

Cost



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# FERC creates or increases

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Isolation

Exclusion

Delays

Stress

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| | Citizens | Service providers |
|---|---|---|
| Organisation -centric | | |
| Citizen - centric | - Costs reduced<br>- Capabilities enhanced<br>- Opportunities increased | - Costs reduced<br>- Capabilities enhanced<br>- Opportunities increased |

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# Examples of costs caused by current approach

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| | |
|---|---|
| **Wrong Data** | Time, effort and money wasted doing the wrong things.<br>More time, effort and money spent fixing the mistakes. |
| **Data not complete** | Delays caused because task cannot be completed.<br>Extra time, money and effort spent find the missing data<br>*OR*<br>Organisation resorts to guesswork generating errors as it acts on guesses instead of facts |
| **Data not reliable** | Effort imposed on individuals, asked to prove data is reliable.<br>Time, effort and money spent checking data with third parties |
| **Data unavailable at the right time** | Delays caused because task cannot be completed.<br>Extra time, money and effort spent chasing the missing data |
| **Data not available at all** | Task cannot be completed at all.<br>Time, money and effort spent chasing for missing data. |
| **Data not available at the right place** | Data held in separate silos forces duplication of effort, as the same data needs to be regenerated or recollected. Duplicated time and effort spent looking for and accessing data that is already held by other parties. |



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# Mydex CIC are FERC Busters



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# We deliver improvements in

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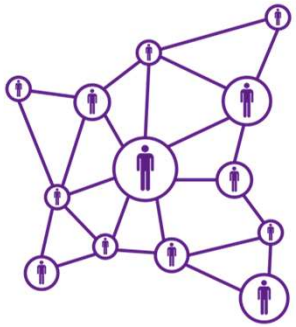
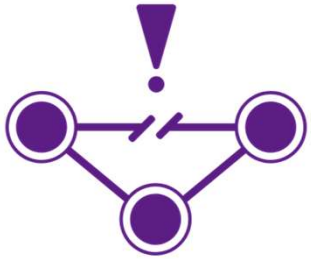
Outcomes

Access



Social Value

Experience



Resilience

Efficiency



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# We deliver impact across seven spheres of economic transformation

| | |
|---|---|
| 1 | **A productivity revolution in service provision** |
| 2 | **Seamless integration of these services** around each individual's unique needs and circumstances |
| 3 | **Dramatic reductions in matching and connecting costs** |
| 4 | **A personal productivity revolution** |
| 5 | **New dimensions of service innovation** using new-to-the-world personal data assets that come from aggregating data about individuals in one place |
| 6 | **Turbocharged research and insight** from greatly reduced costs of accessing much richer data. |
| 7 | **Journey to net zero accelerated:** a circular economy based on using data to make and implement decisions better |

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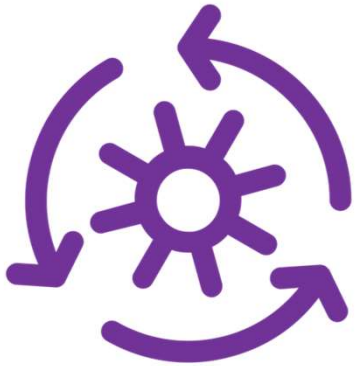
# Mydex's approach

**Individual at the centre**, acts as point of integration, for data sharing with organisations by equipping them to be an active participant easily, safely and securely



**Collect, receive and store data once and use many times**' approach to data solutions means we can eradicate form filling, duplication and ensure data accuracy and quality



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# Represents a shift in approach

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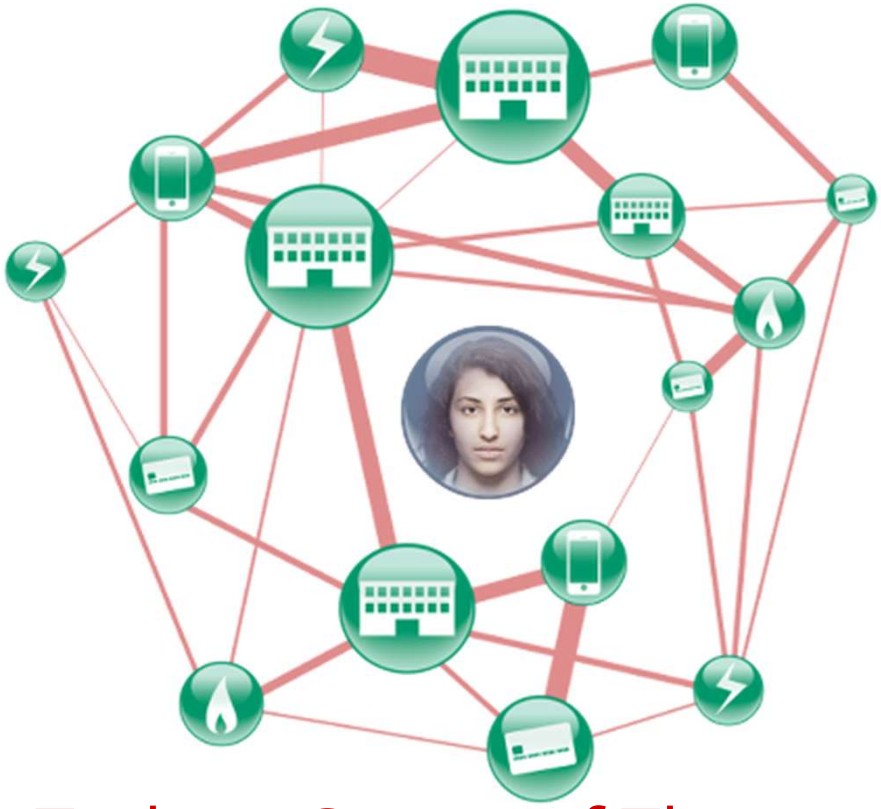
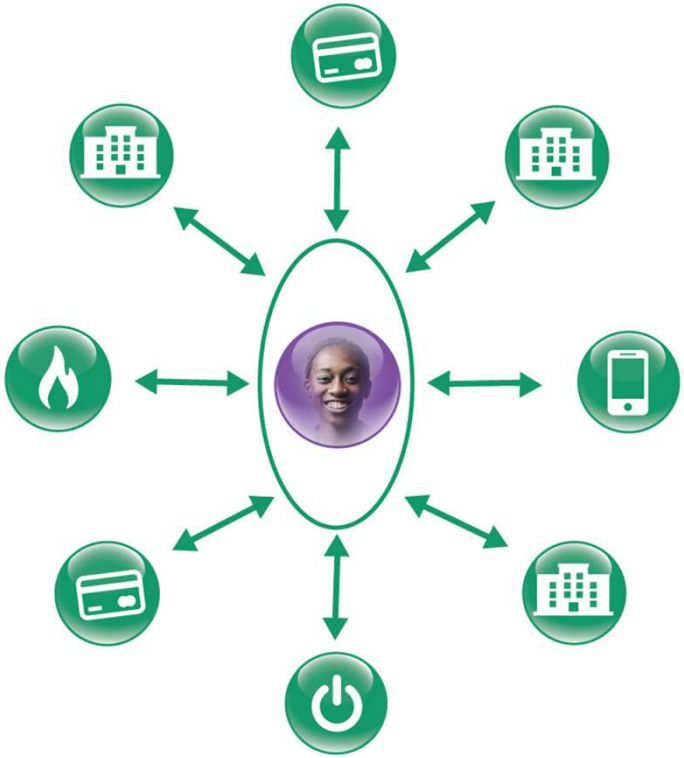


Today - Crown of Thorns
Organisation Centric



Person at the centre
Halo of Trust

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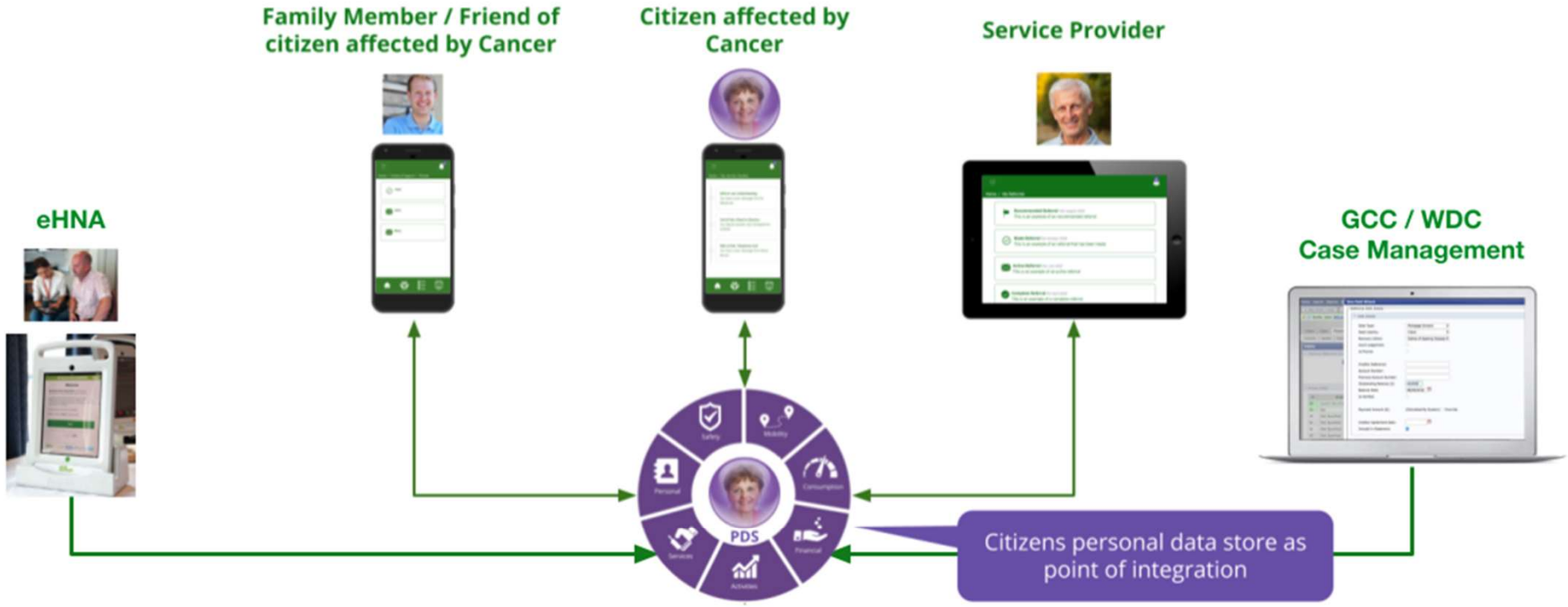
# Example - Improving Cancer Journey




Macmillan My Data Store



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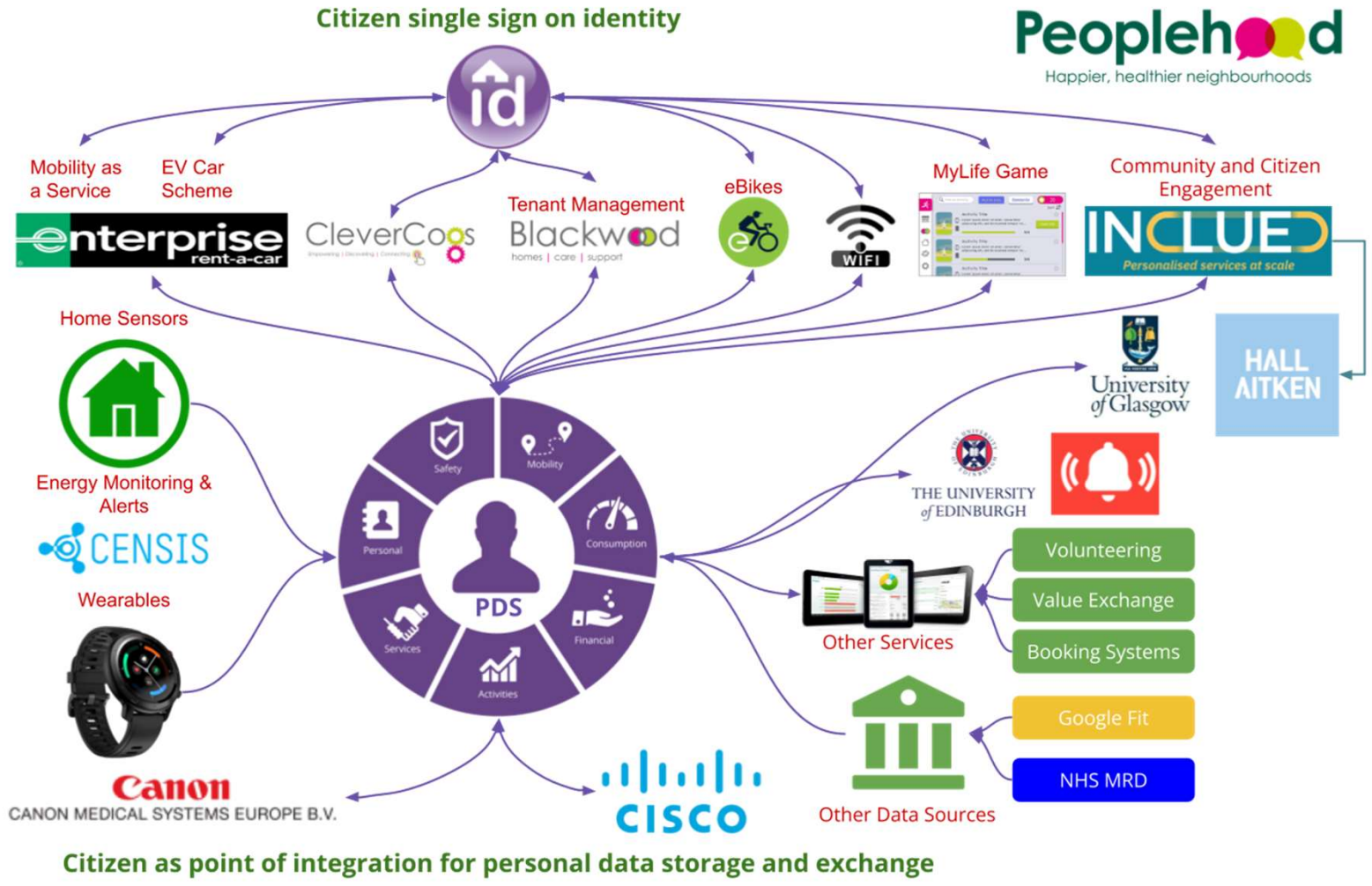


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Healthy Ageing
Independent living
3 communities

**Citizen point of integration**
Volunteering
Care Management
Low cost wifi
Digital Skills
My Life Game
Lifestyle Alerts
Tenant Management
EV Car & Bike schemes
Wearables

**Mydex provides**
IDaaS
PDX
PDS
MRD
Inclued

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# Identity and Attributes
# &
# Wallets and Personal Data Stores

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# Identity is just one use case for verified attributes



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# Many, many use cases for verified attributes

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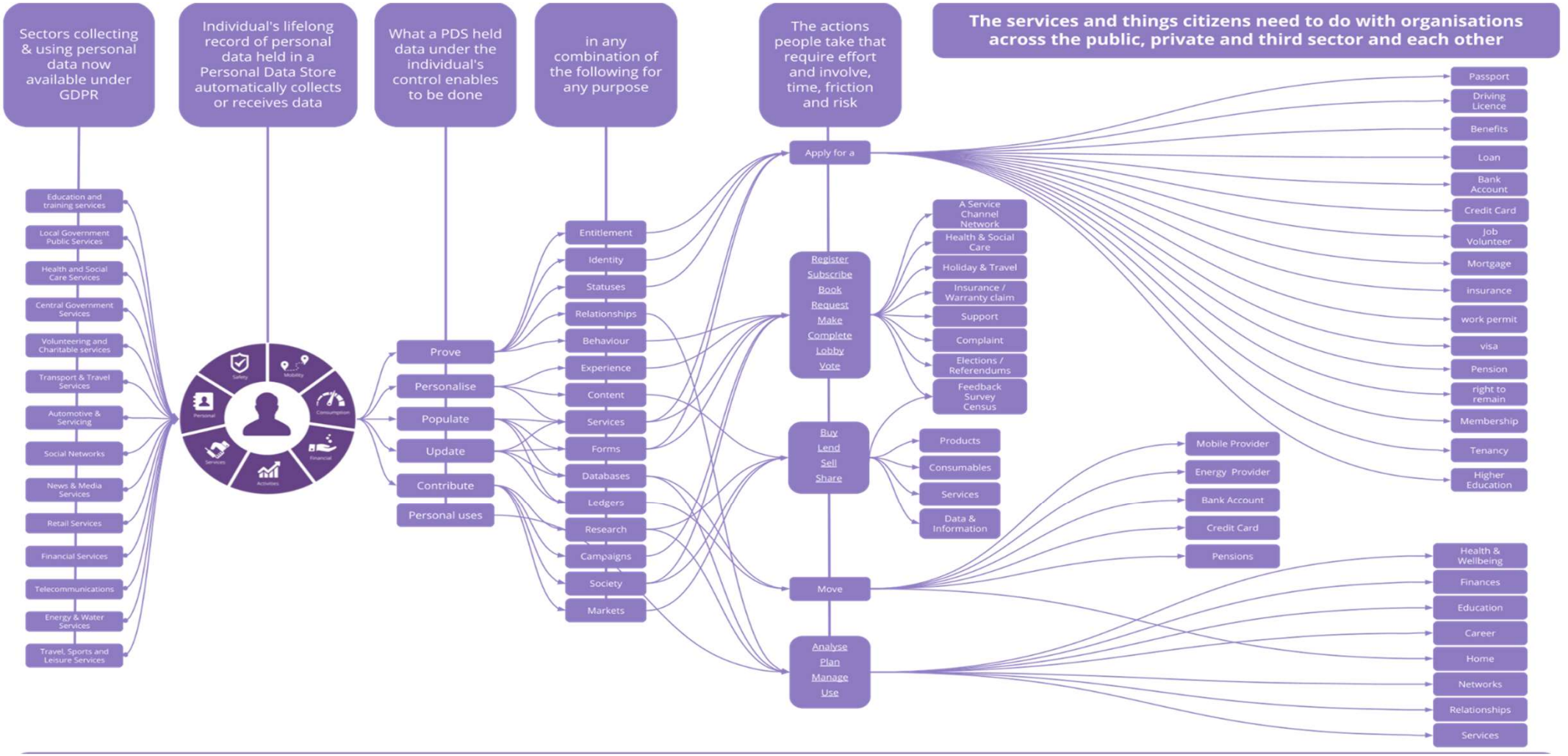


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# We deliver impact across seven spheres of economic transformation

| | |
|---|---|
| 1 | **A productivity revolution in service provision** |
| 2 | **Seamless integration of these services** around each individual's unique needs and circumstances |
| 3 | **Dramatic reductions in matching and connecting costs** |
| 4 | **A personal productivity revolution** |
| 5 | **New dimensions of service innovation** using new-to-the-world personal data assets that come from aggregating data about individuals in one place |
| 6 | **Turbocharged research and insight** from greatly reduced costs of accessing much richer data. |
| 7 | **Journey to net zero accelerated:** a circular economy based on using data to make and implement decisions better |

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# Wallets are not Personal Data Stores

# Personal Data Stores can offer the functionality of Wallets in the cloud

# Wallets can use and integrate with Personal Data Stores



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# Wallets

- Carry just what you need day to day
- Limited reuse
- Does not work unless you are there
- Can get lost
- Normally only use one at a time

- Carry just what you need
- Device can be lost
- Different Wallets for different schemes!!!!!!!!!!
- May handle payments as well
- May mint tokens
- Can integrate to a Personal Data Store



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## Filing Cabinet

- Physical Documents
- Physical storage
- Can be scanned into file store online
- May be downloaded from service providers
- Carries no real proof, can be mocked up

## Personal Data Store

- Cloud based, highly available 24 x 7, encrypted at rest
- Independent and under citizens control
- Holds a lifetime of personal data (Petabytes)
- Can store any aspect of human activity and records
- Holds verified attributes / proof points
- Controls sharing of personal data with third parties via API's
- All data encrypted in transit between citizens and subscribers
- Can receive and store data from service providers 24 x 7
- Secure API's - easy to integrate to
- Safe, secure, simple to maintain
- Can be integrated to feed device based wallets and collect from them


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# Interoperability is key

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Hybrid models are coming

Safe, secure, consensual data sharing and logistics unlocks the economy



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Contact: david@mydex.org

White Paper:
Hidden In Plain Sight: The Surprising Economics of Personal Data
(mydex.org/resources/papers/)

‘Data wallets’: a trap waiting to be sprung?
Blog: medium.com/mydex



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OPEN IDENTITY EXCHANGE

# Making Digital ID a Success

## Questions and Answers

OPEN IDENTITY EXCHANGE

Making Digital ID a Success

# Member Update

Emma Shaw
OIX Member Manager

May 2023

# The OIX Community

## Executive members

BARCLAYS

Deloitte.

EQUIFAX

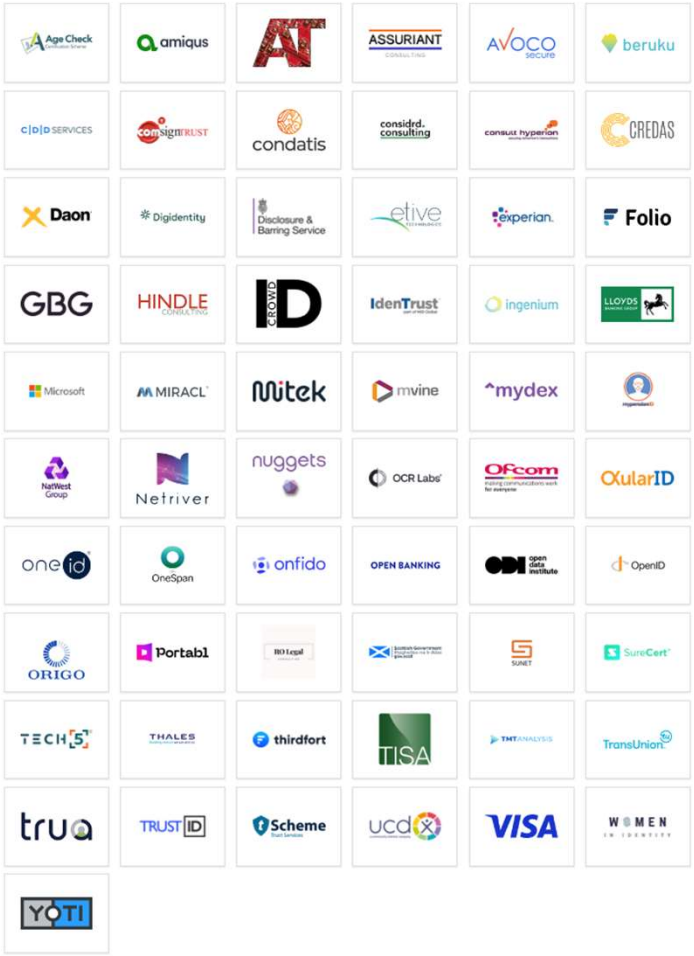
IAG INTERNATIONAL AIRLINES GROUP

LexisNexis RISK SOLUTIONS

sopra steria

SYNECTICS SOLUTIONS

## General members

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OPEN IDENTITY EXCHANGE

# #Identity Trust Conference 2023

## Building Trust in Digital Identity

**When:** Thurs 28th Sept 2023

**Where:** County Hall, Belvedere Rd, London SE1 7PB

& **Online**

# Thank You!

# Join Us!

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OPEN IDENTITY EXCHANGE

Making Digital ID a Success

# Open Wallet Foundation Launch

# Thank You!

# Join Us!

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