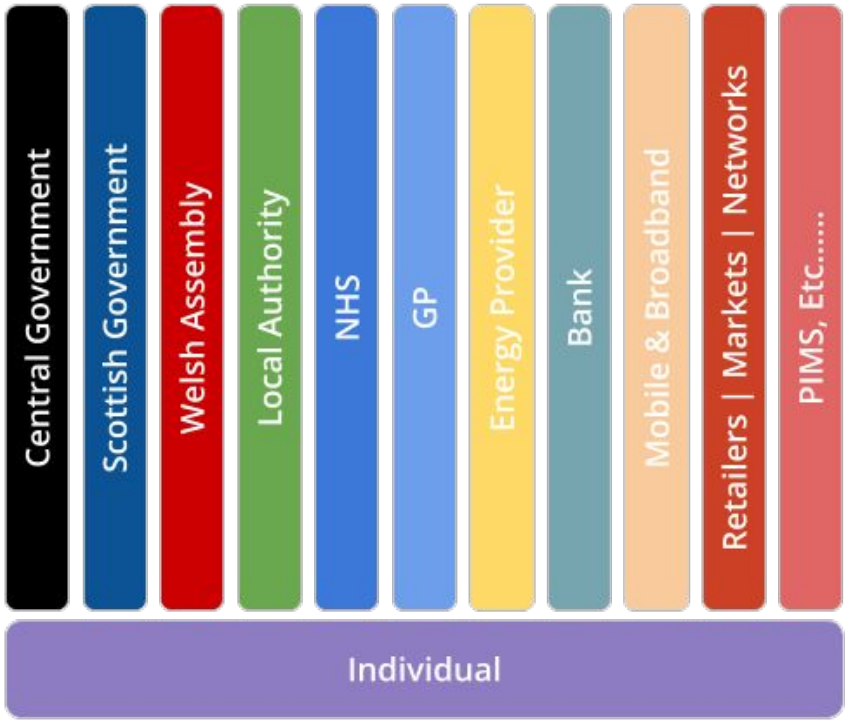
DIGITAL HEALTH & CARE
SERVICES.BEYOND.EXPECTATION

Addressing the current imbalances in the health and care ecosystem

David Alexander - Chief Executive
Mydex a Community Interest Company

Ideally we wouldn’t start from here

Today



Repetitive Tasks for individuals

- Identity Verification
- Logging in
- Managing passwords
- Form Filling
- Information Provision
- Providing evidence
- Updating information

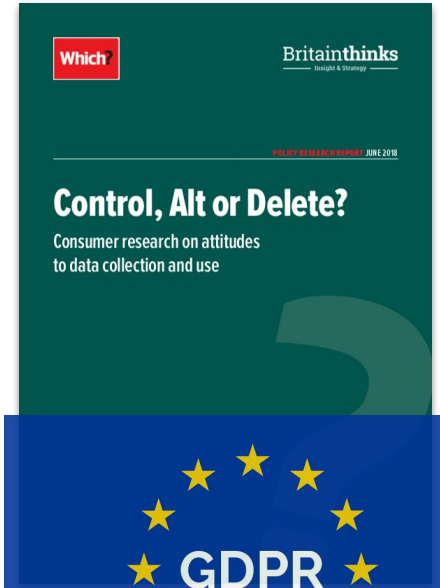
Current Issues for all

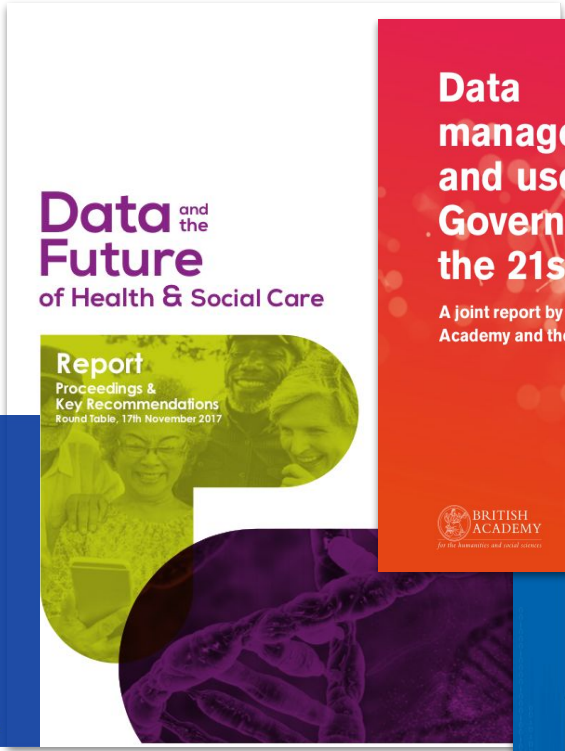
- Friction
- Effort
- Duplication
- Level of Risk, lack of security & imbalance of power
- Cost, complexity, lack of interoperability
- Lack of agility & Resilience

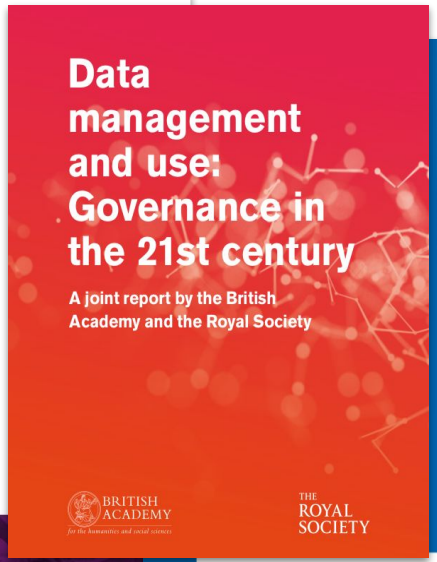
Wellbeing, health and care needs data from almost every aspect of your life to be truly effective, sustainable

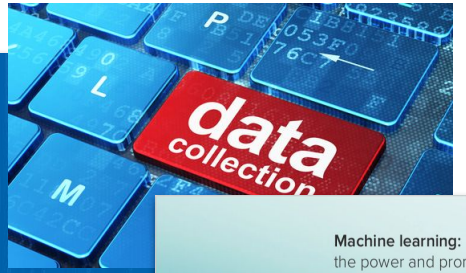
Practical on the ground work delivering improved outcomes and impact

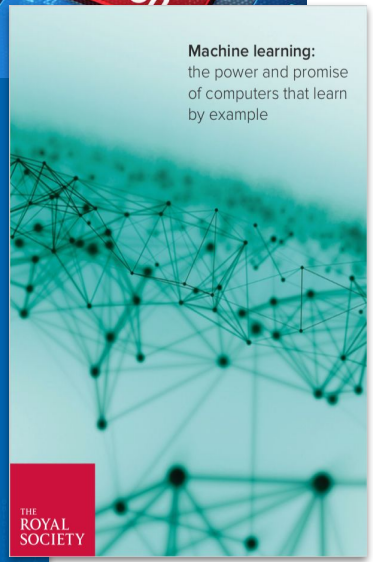
Research, Policy and Regulation as well





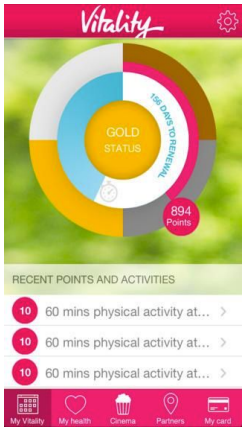




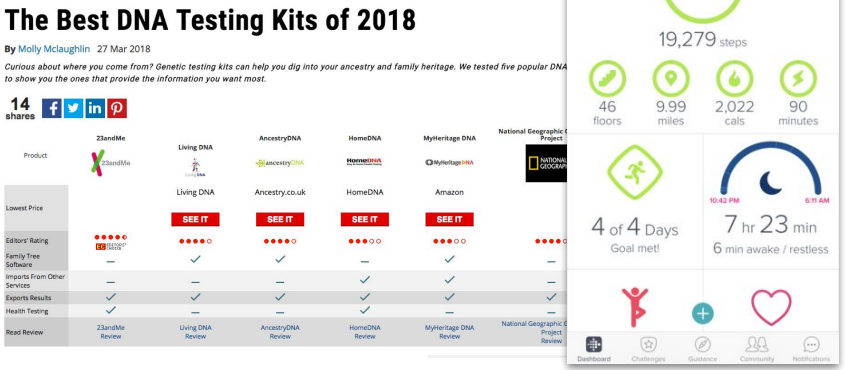


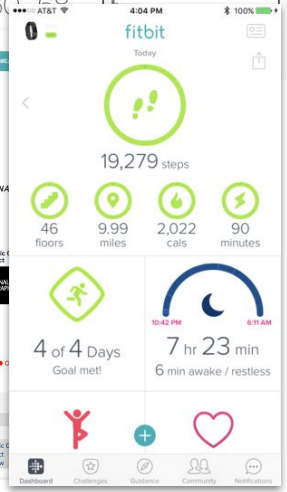
Commercial interests abound

HealthKit



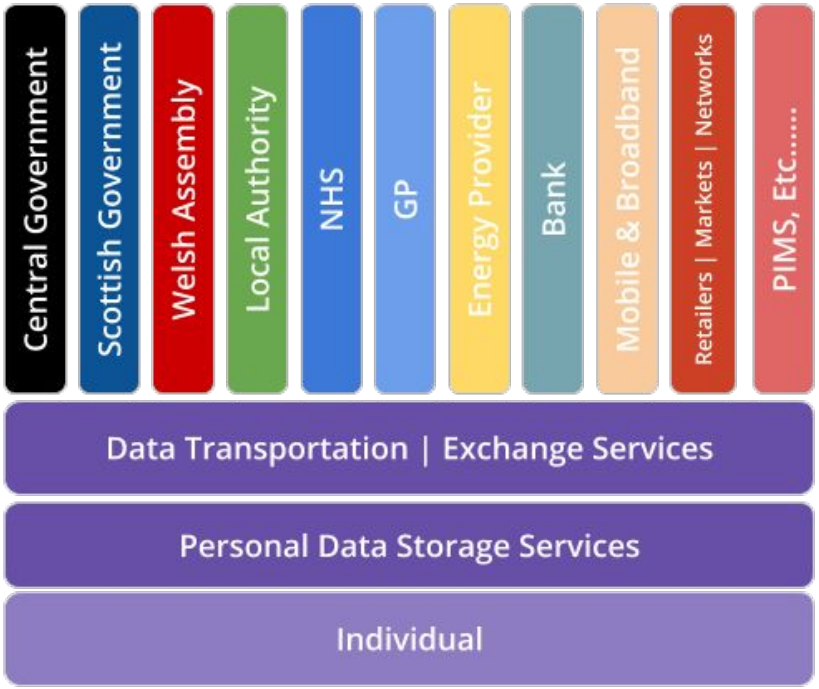
IBM Watson Health
Empowering Heroes.
Transforming Health.





DeepMind Health

Tomorrow



Outcomes for all

- Seamless access
- Automation
- Streamlined processes
- Data captured once
- Data assurance built in

Benefits for all

- Reduced Friction and Effort
- Reduced Risk through increased trust and security
- Reduced Cost through automation
- Higher success rates in transactions
- Better outcomes - productivity, efficiency, impact
- Improved public services
- Accelerated Economy via adaptability & innovation
- Increased satisfaction

Our health and wellbeing is core to the future of society

Prof. Sir Harry Burns

Chief Medical Officer, Scotland

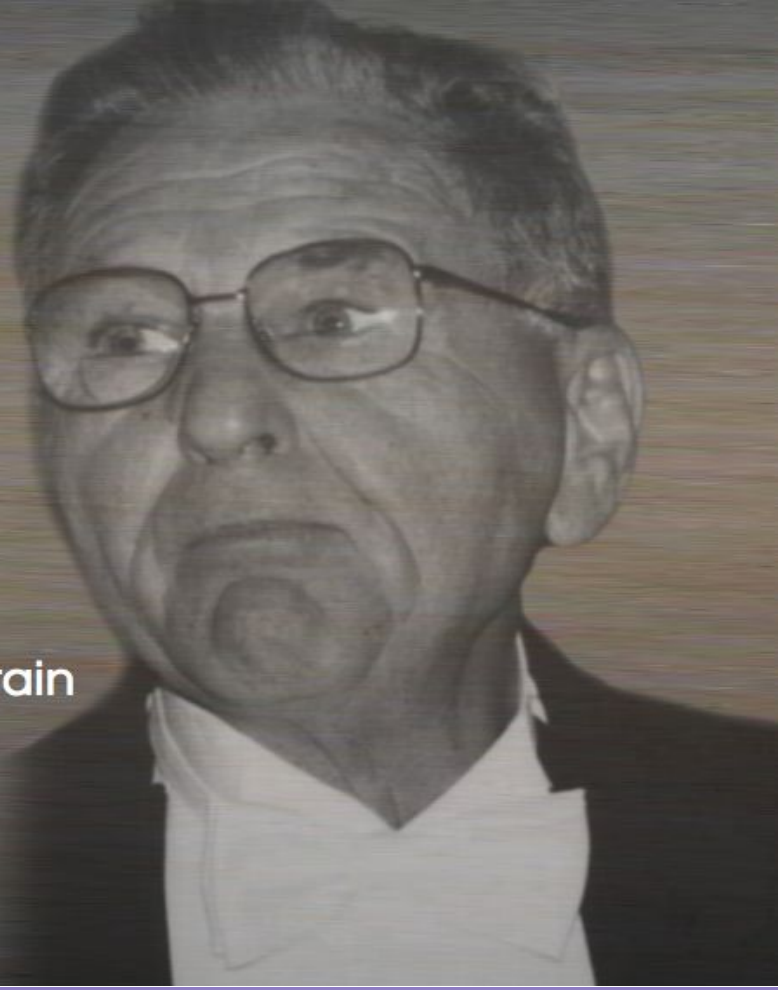
Professor of global public health, University of Strathclyde

Wellbeing, context and personal control

"People who do not feel in control of their lives struggle … the system does things to them."

https://www.youtube.com/watch?v=yEh3JG74C6s

Aaron Antonovsky (1923-1994)



"...health is not the absence of disease, but rather the process by which individual's maintain their sense of coherence."

salutogenesis

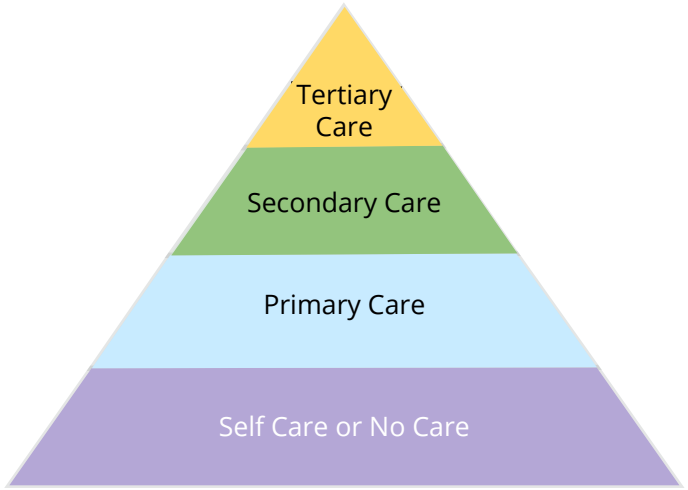
Pathogenetic Emphasis "Cure"

Salutogenetic Emphasis "Prevention"

Unlike Minds

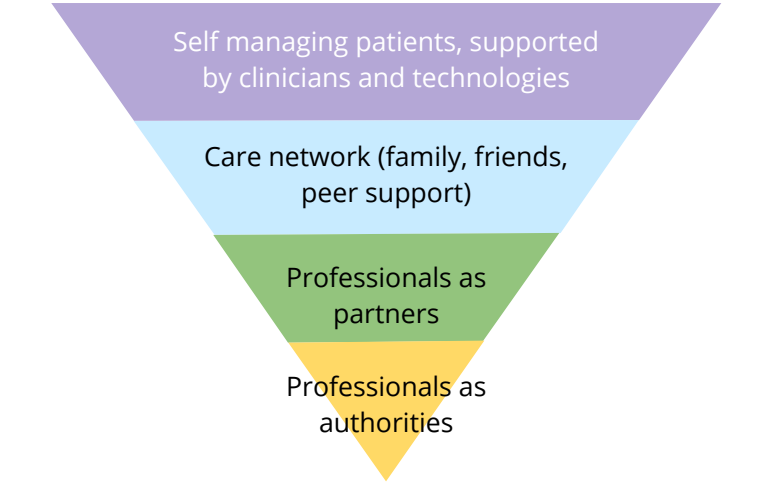
i-Space Navigator

Viewed as better care



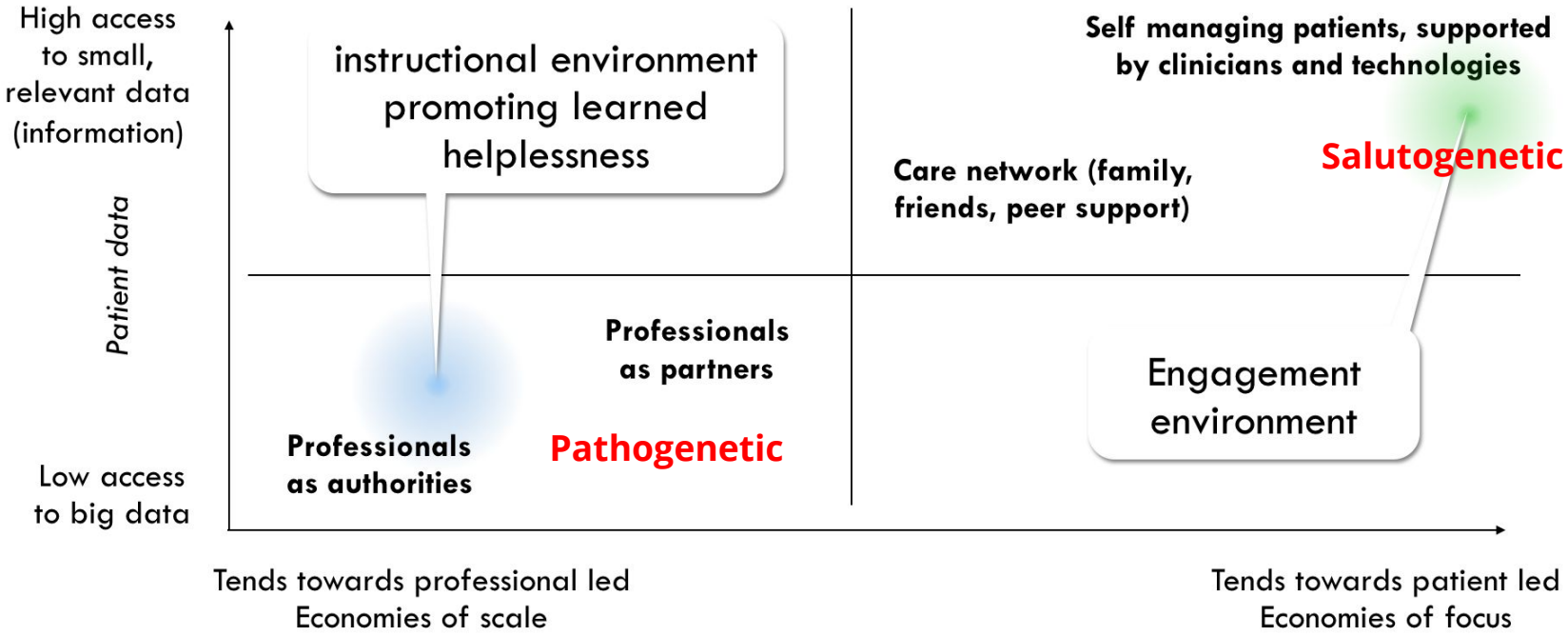
Industrial Age Healthcare
Today?

Viewed as worse care



Information Age Healthcare
Tomorrow?

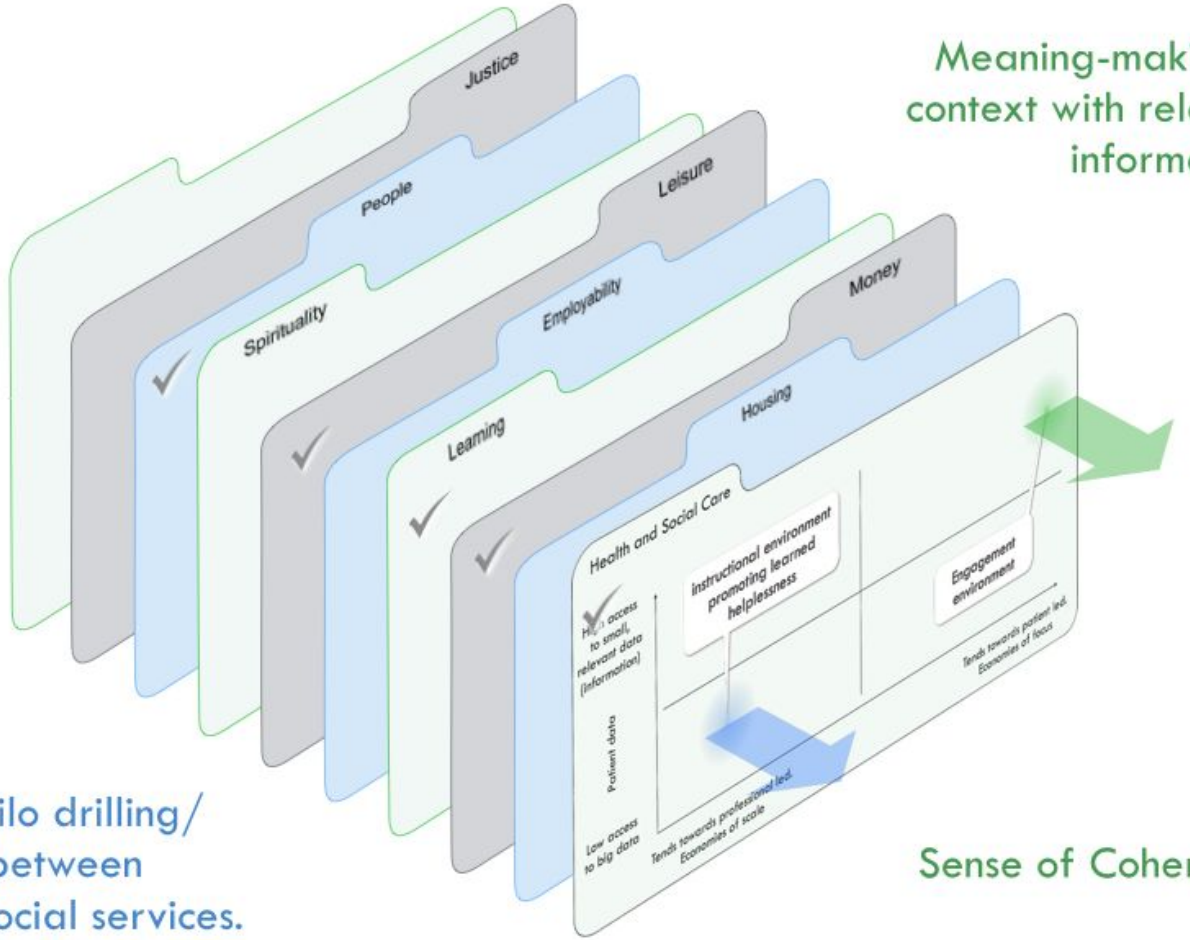
Health and Social Care: individual's relationship with data/Information



Social prescribing?

Unlike Minds

i-Space Navigator



Meaning-making in context with relevant information.

Professionals silo drilling/ bridging e.g, between police, NHS, Social services.

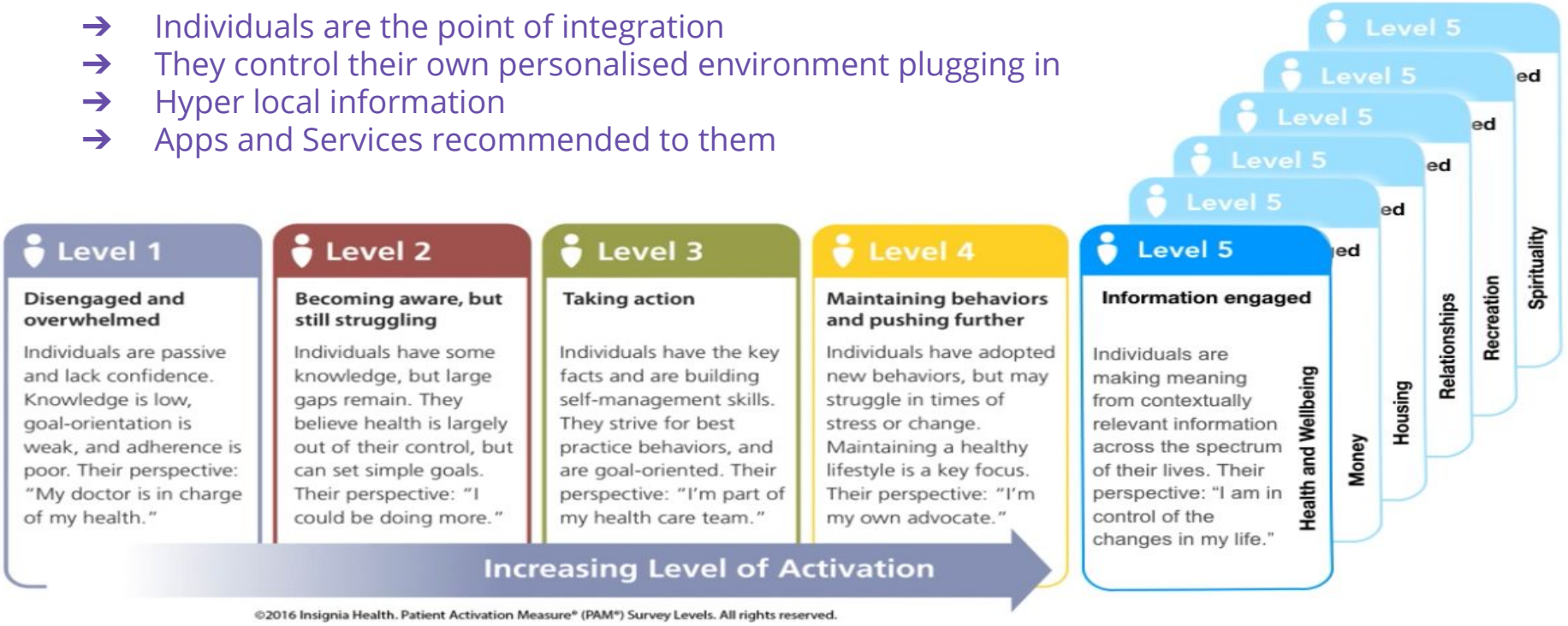
Sense of Coherence

Patient Activation Measures

?

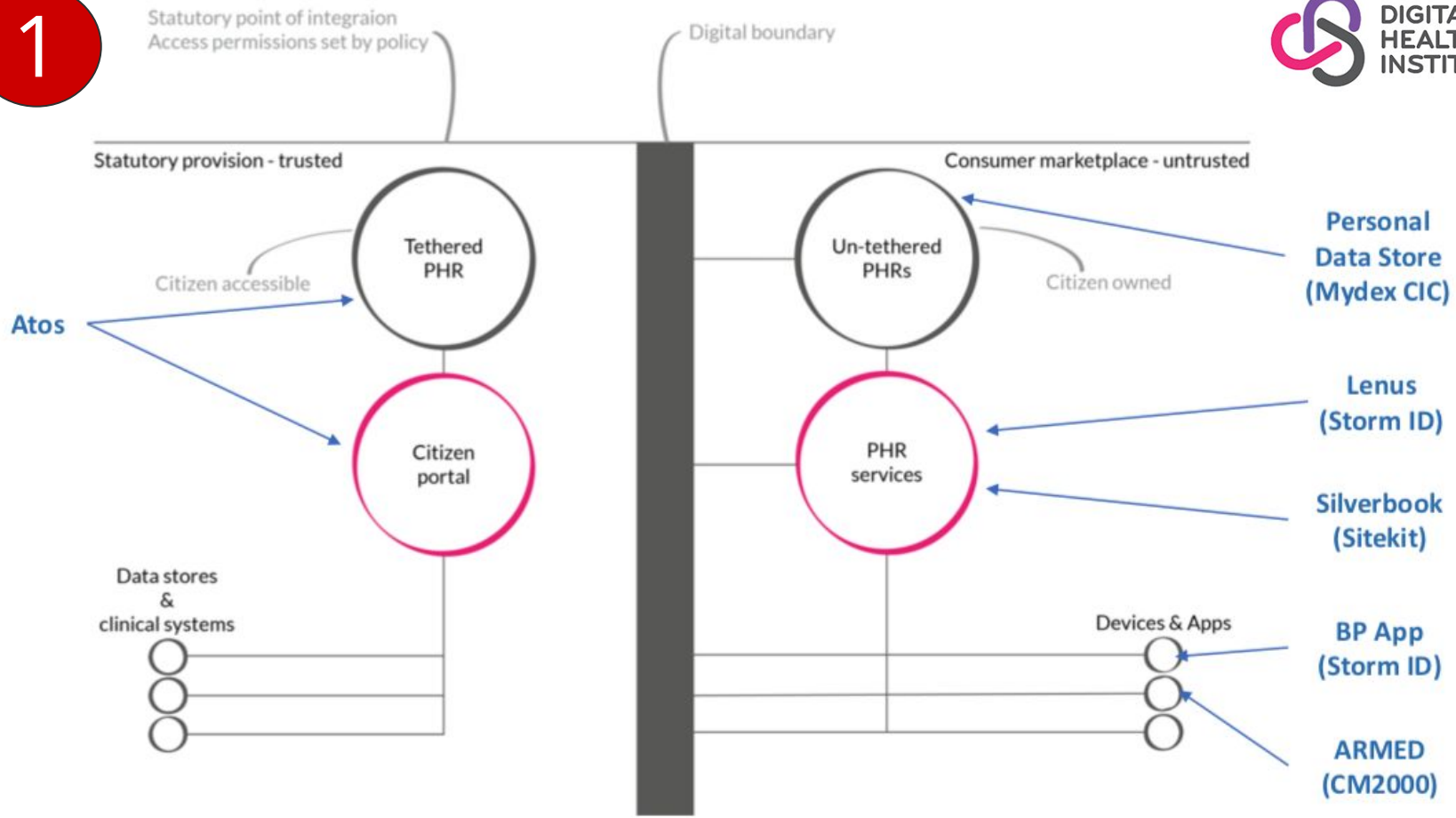
There is a 5th element

- Individuals are the point of integration
- They control their own personalised environment plugging in
- Hyper local information
- Apps and Services recommended to them



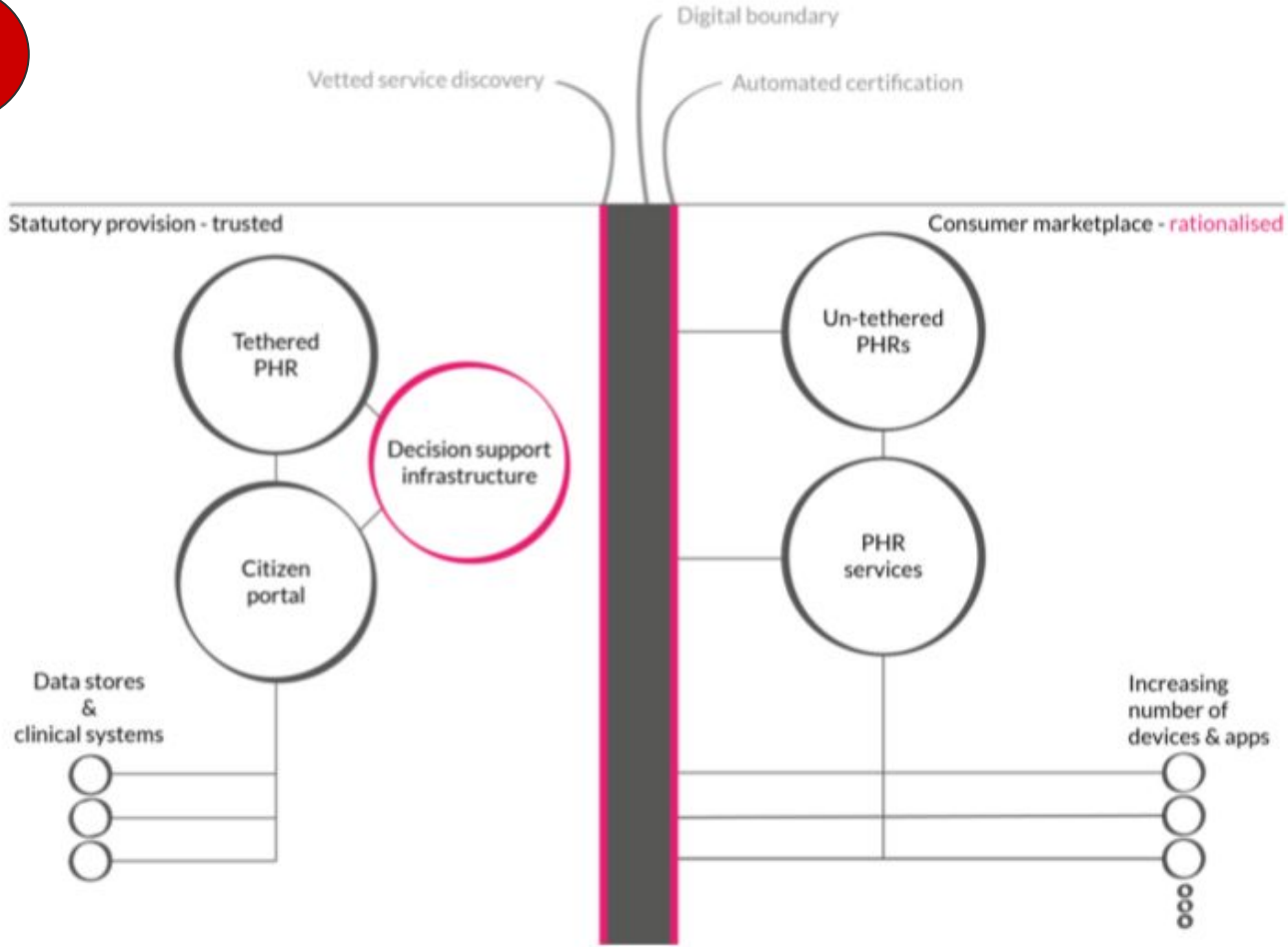
1

DIGITAL HEALTH & CARE INSTITUTE



2

DIGITAL HEALTH & CARE INSTITUTE

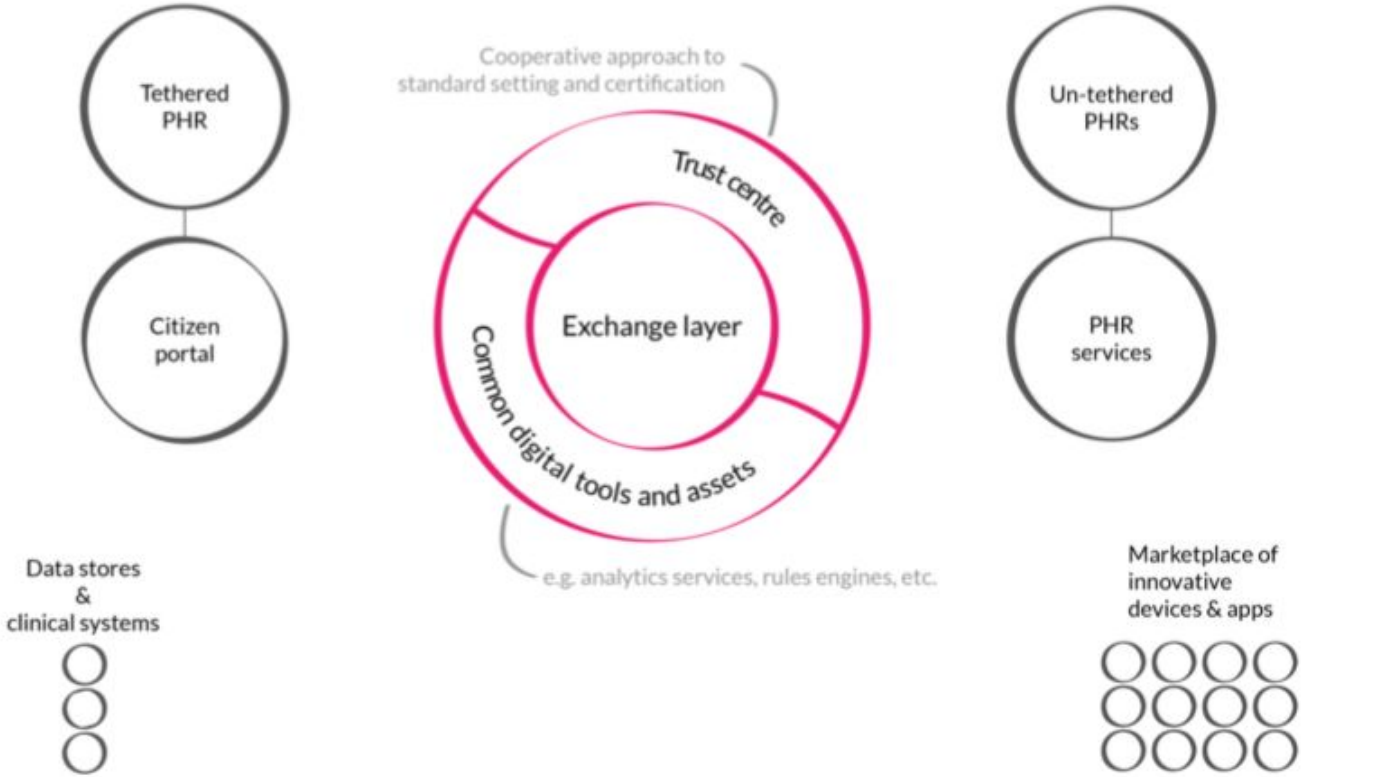


3

Statutory provision - trusted

Consumer marketplace - trusted

DIGITAL HEALTH & CARE INSTITUTE



Person Centred Data Exchange Hub

WE ARE MACMILLAN. CANCER SUPPORT

Secure GDPR compliant

Personal Data Store
ISO27001 | FairData Certified
Data stored in UK
Encrypted in storage and transit
Individual data controller
Free service to individual
Standard API's

mydex
Trust Framework and Platform API Services

Glasgow City Council

The Scottish Government
Riaghaltas na h-Alba

advice direct scotland

age Scotland
Love later life

Beatson cancer charity
DETERMINED TO BEAT CANCER

Cancer Support Scotland

carr gomm
Supporting People & Communities

NHS Greater Glasgow and Clyde

DWP Department for Work and Pensions

GHA

Improves
Data Quality
Citizen Journeys
Responsiveness
Efficiency

Reduces
Friction
Effort
Cost
Risk

Increases
Satisfaction
Success rates
Trust
Confidence

Personal Data Store
Certified copy of data
- Stored
- Maintained

Combine data as needed
Share data as needed
Consent built in
- Purpose
- Timescale

End to end encryption
- Data Storage
- Data Exchange

Authenticated connection

Individual at the centre
- Point of integration
- Underpins whole life

Person Centred Data Exchange Hub

Secure GDPR compliant

Experience Content

pamis
promoting a more inclusive society

167
Changing Places toilets in Scotland
View CP Toilet Map

The Scottish Government
Riaghaltas na h-Alba

advice direct scotland

SOUTH LANARKSHIRE COUNCIL

Personal Data Store
ISO27001 | FairData Certified
Data stored in UK
Encrypted in storage and transit
Individual data controller
Free service to individual
Standard API's

mydex
Trust Framework and Platform API Services

NHS Lanarkshire

DWP
Department for Work and Pensions

Improves
Data Quality
Citizen Journeys
Responsiveness
Efficiency

Reduces
Friction
Effort
Cost
Risk

Increases
Satisfaction
Success rates
Trust
Confidence

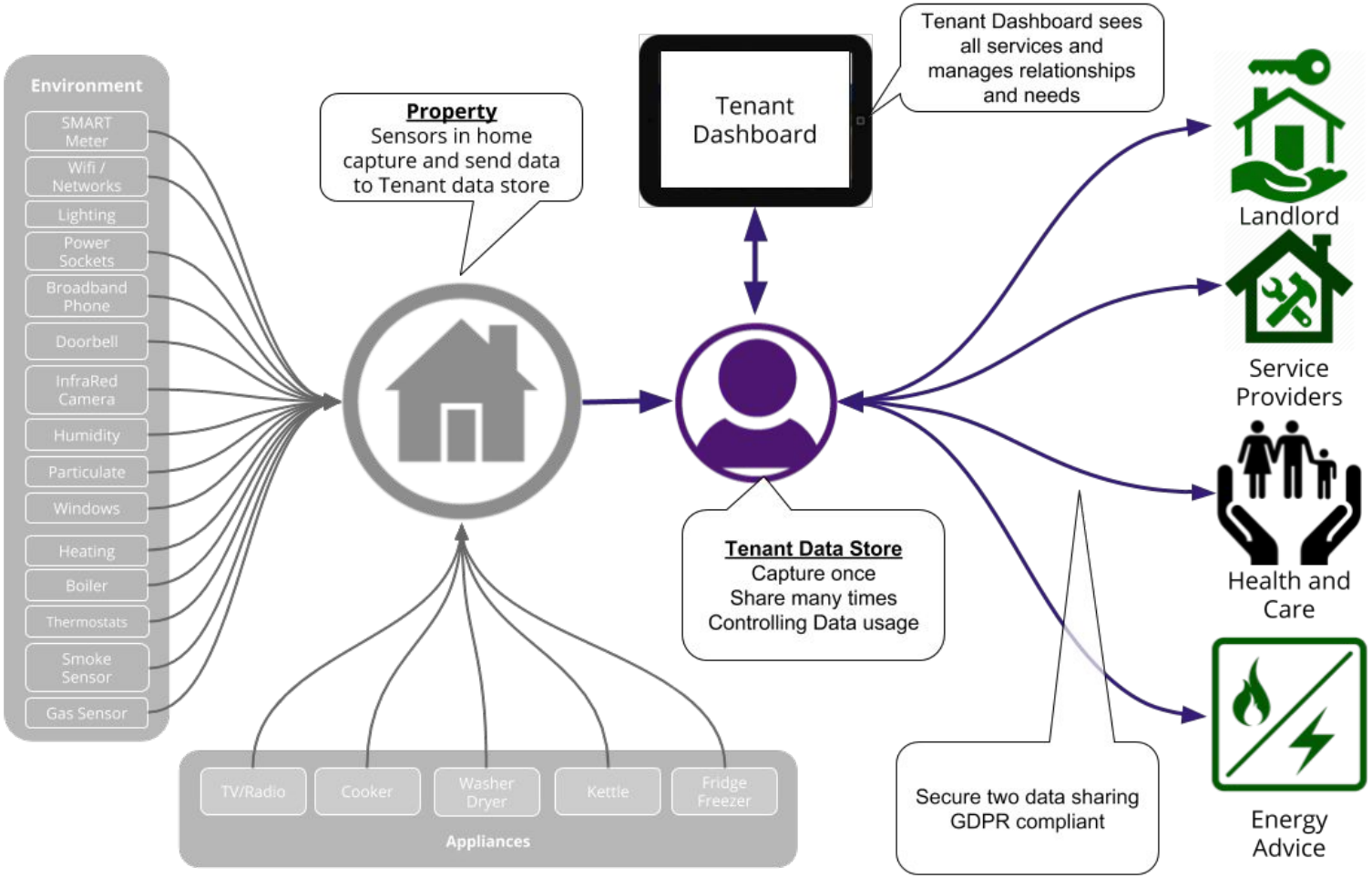
Personal Data Store
Certified copy of data
- Stored
- Maintained

Combine data as needed
Share data as needed
Consent built in
- Purpose
- Timescale

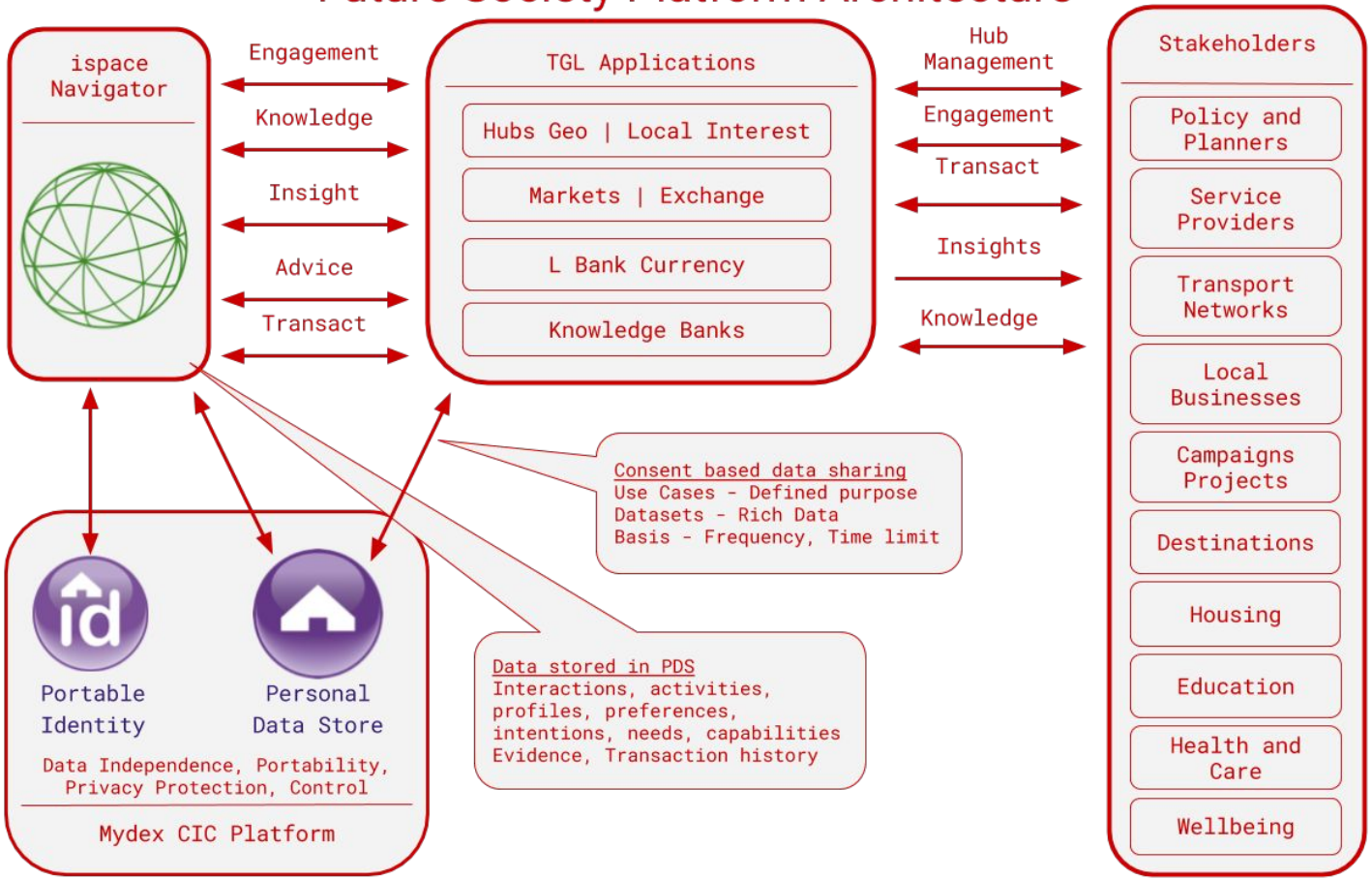
End to end encryption
- Data Storage
- Data Exchange

Authenticated connection

Individual at the centre
- Point of integration
- Underpins whole life


Environment
SMART Meter
Wifi / Networks
Lighting
Power Sockets
Broadband Phone
Doorbell
InfraRed Camera
Humidity
Particulate
Windows
Heating
Boiler
Thermostats
Smoke Sensor
Gas Sensor
Property
Sensors in home capture and send data to Tenant data store
Tenant Dashboard
Tenant Dashboard sees all services and manages relationships and needs
Tenant Data Store
Capture once
Share many times
Controlling Data usage
TV/Radio
Cooker
Washer Dryer
Kettle
Fridge Freezer
Appliances
Secure two data sharing GDPR compliant
Landlord
Service Providers
Health and Care
Energy Advice

Future Society Platform Architecture



We need a data infrastructure layer

- ➔ Public / social purpose mission - *public good, empowerment*
- ➔ Independent - *of state sector and factional interests, trustworthy*
- ➔ Neutral and Enabling - *serves all parties, individual controls*
- ➔ Distributed not centralised - *personal data stores*
- ➔ Zero Knowledge in its operation - *no access to data*
- ➔ Aligned incentives - *no monetisation of data*
- ➔ Separated functions - *focus, collection, storage, delivery*

Promotes Safe by Default

Removes, Friction, Effort, Risk and Cost