

# UNLOCKING THE VALUE OF DATA TOGETHER

THE CASE FOR COOPERATIVE DATA ECOSYSTEMS

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# A NEW DATA ECONOMY BUILT ON ECOSYSTEMS

## Cooperative ecosystems

Organisations work together to solve global problems and advance individual goals

## Trust-building mechanisms

Cooperate on ad-hoc basis in low trust scenarios, and evolve cooperation with trust

## Value-driven relationships

Relationships form beyond simple profit motivation, focusing on additional value, to solve global challenges with social responsibility in mind



# THE POWER OF DATA SHARING

## Umbrella expression

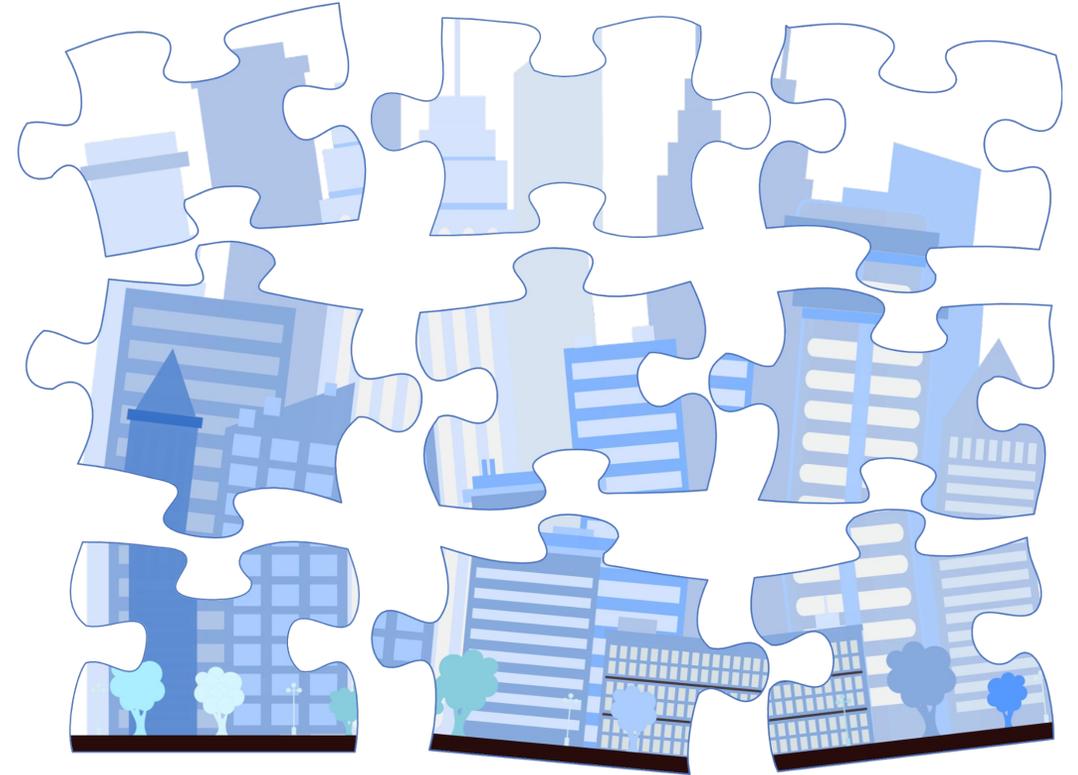
- Raw data
- Information (processed data)
- Insights (contextualised data)

## Diverse data sources, owners & organisations

- Government
- Private sector
- Academia, ...

## Diverse boundaries

- Geographical
- Legal
- Organisational



# THE POWER OF DATA SHARING

## Selective data sharing

Strategic sharing with privacy preservation and tailored to the use cases

## Data sovereignty

Retain control and ownership over data, and metadata, to balance cooperative needs with compliance

## FAIR data principles

Findable, Accessible, Interoperable and Reusable:  
lower barrier to value across multiple contexts



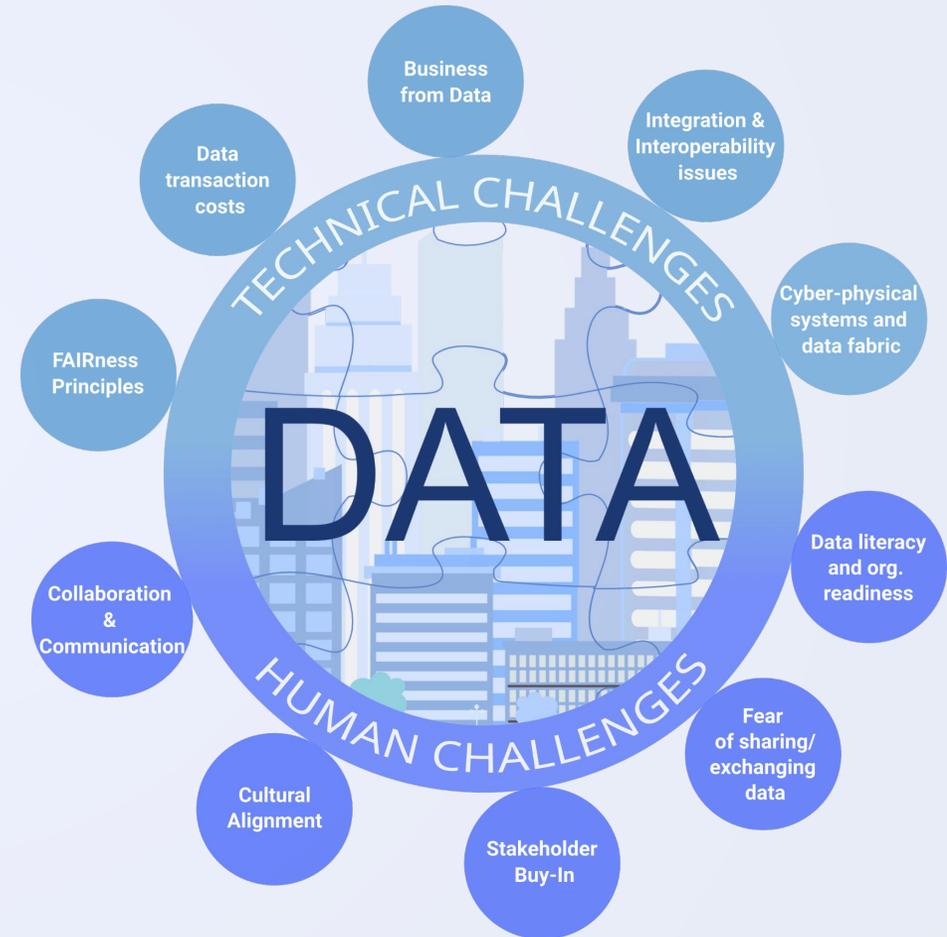
# SOCIO-TECHNICAL CHALLENGES

## Evolution of TRUST

Gradual development of confidence in technology and parties within the ecosystem

## Technology

Innovate with what we have, to address technical challenges and enable the solution to human challenges



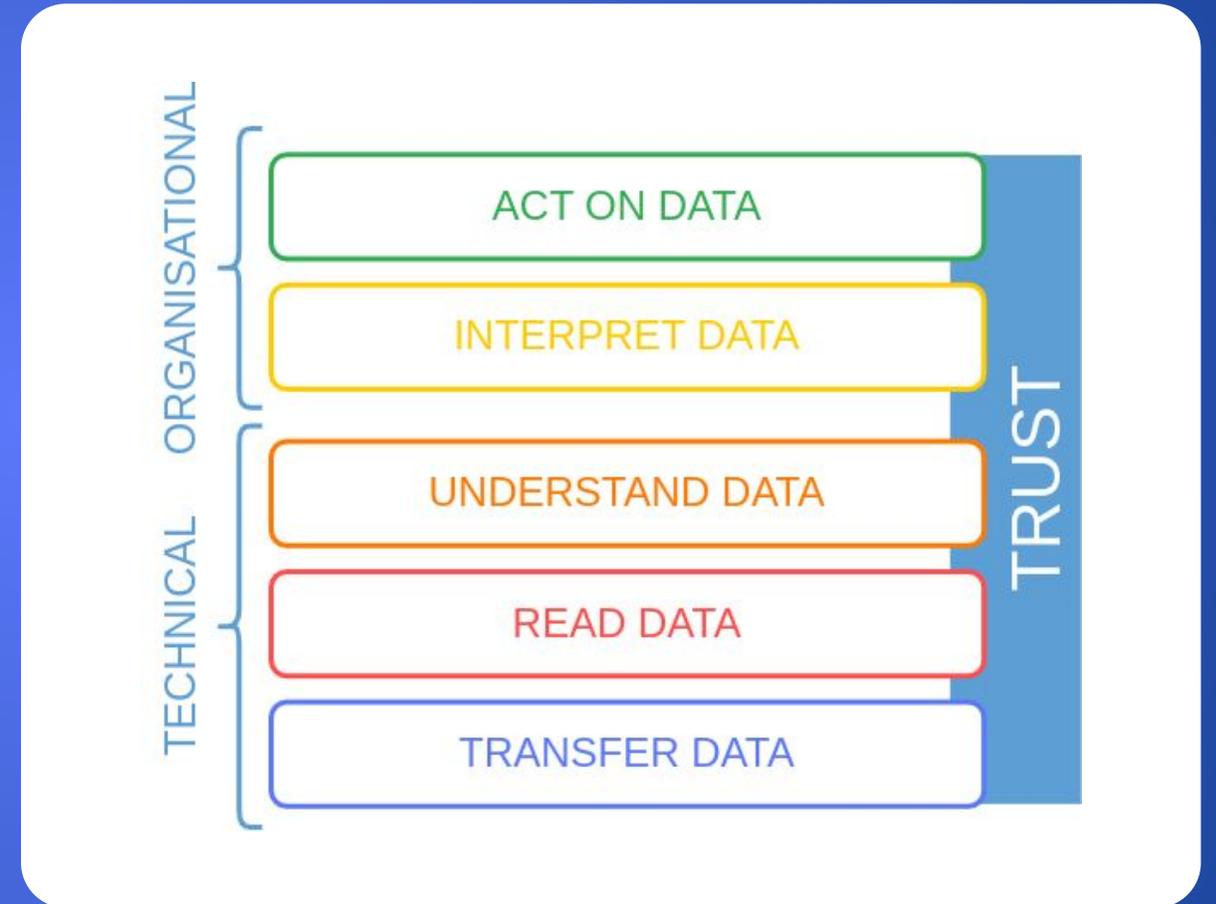
# THE INTEROPERABILITY IMPERATIVE

Establish trusted and  
autonomous interoperability

Enable any type of ecosystem

Lower barriers to entry

Address human challenges



# THE INTEROPERABILITY IMPERATIVE

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## Virtualisation

Decouples access to data sources to alleviate sharing concerns

## Sovereignty

Grants control over data ownership

## Symmetry

Fosters equitable data-sharing relationships

## Decentralisation

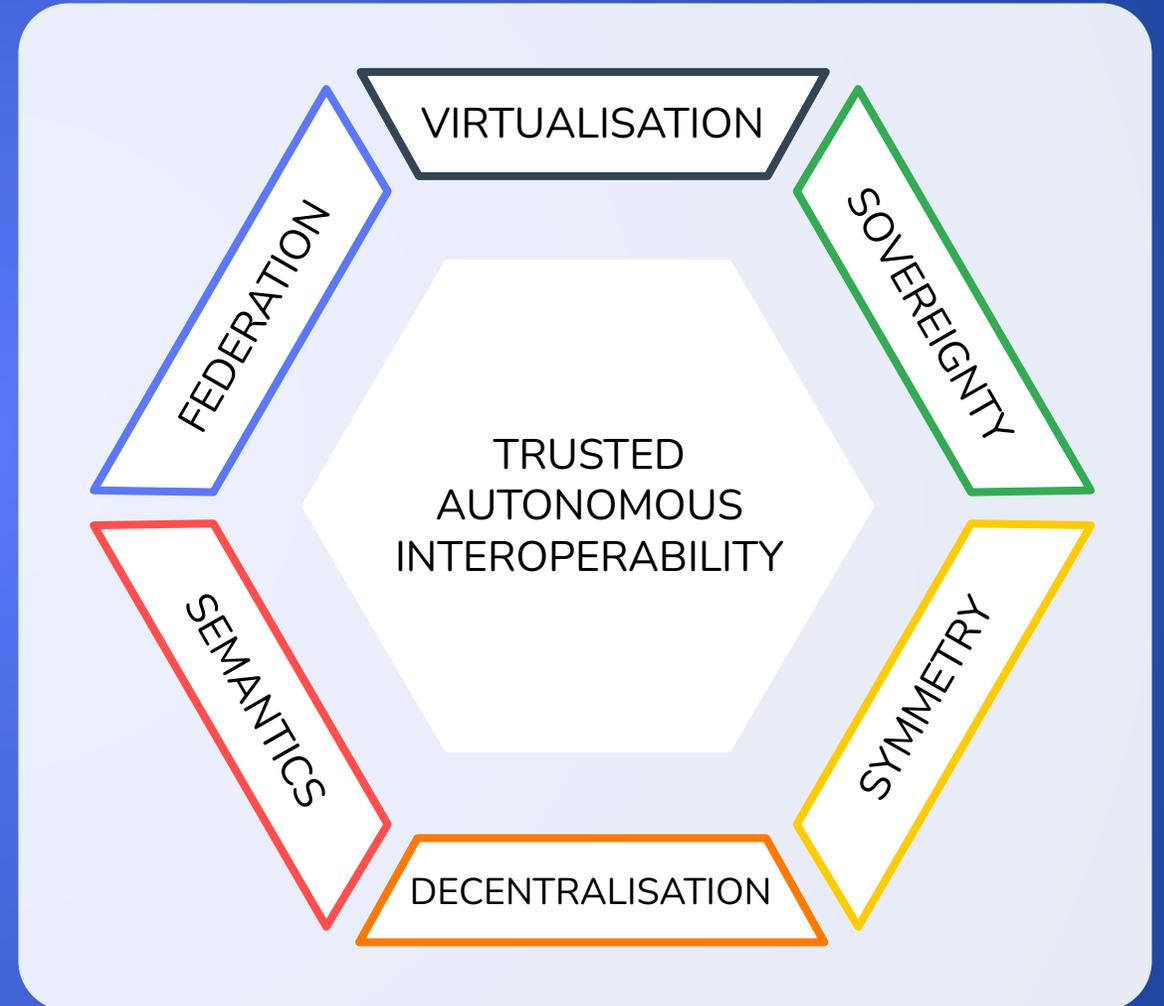
Empowers distributed data governance

## Semantics

Ensures M2M autonomous interoperability

## Federation

Unites data-sharing entities for collective strength



# EXPANDING TO A NETWORK OF NETWORKS

Mimicking socio-cultural patterns

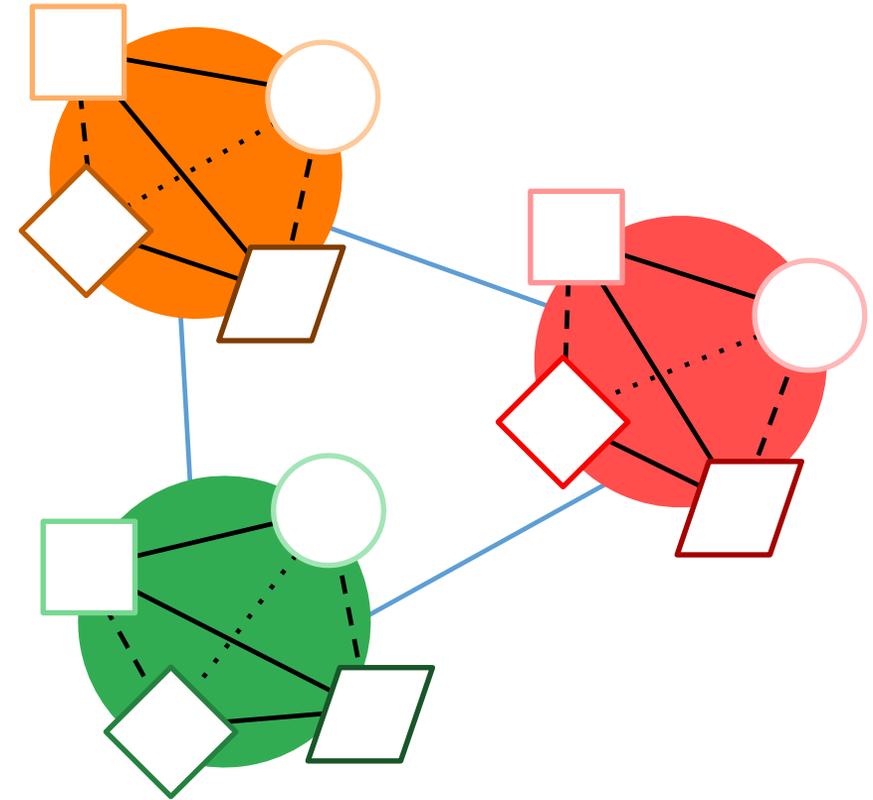
Small and trusted interconnected communities

Cooperating trusted parties

Various entities in the ecosystem cooperate with-in/out the network

Evolving trust

As trust evolves interactions and connections evolve with it





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# CONCLUSIONS

## Data economy

To address problems at global scale in competitive environments

## Data ecosystems

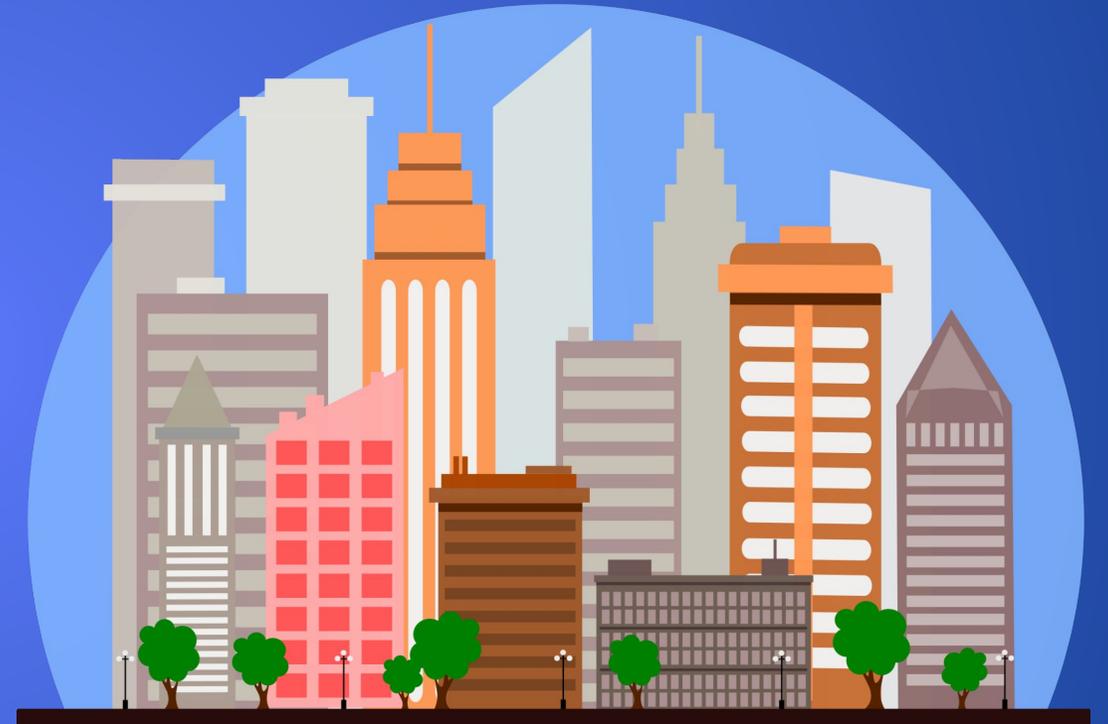
Environment for organisations to cooperate by sharing and exchanging data

## Human and Technical Challenges

To build and maintain data ecosystems

## Technology

Engineered to solve challenges and support the evolution of trust



THANK YOU

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