IOTICS

How can we share and manage big ESG data?

“Humanity has a choice: Cooperate or perish”

United Nations Secretary-General
Antonio Guterres – COP27

"…interoperability is good when looking through the lens of an individual organisation, it is not when looking through the lens of a common UK geospatial data supply network."

The future is uncertain

We must embrace complexity

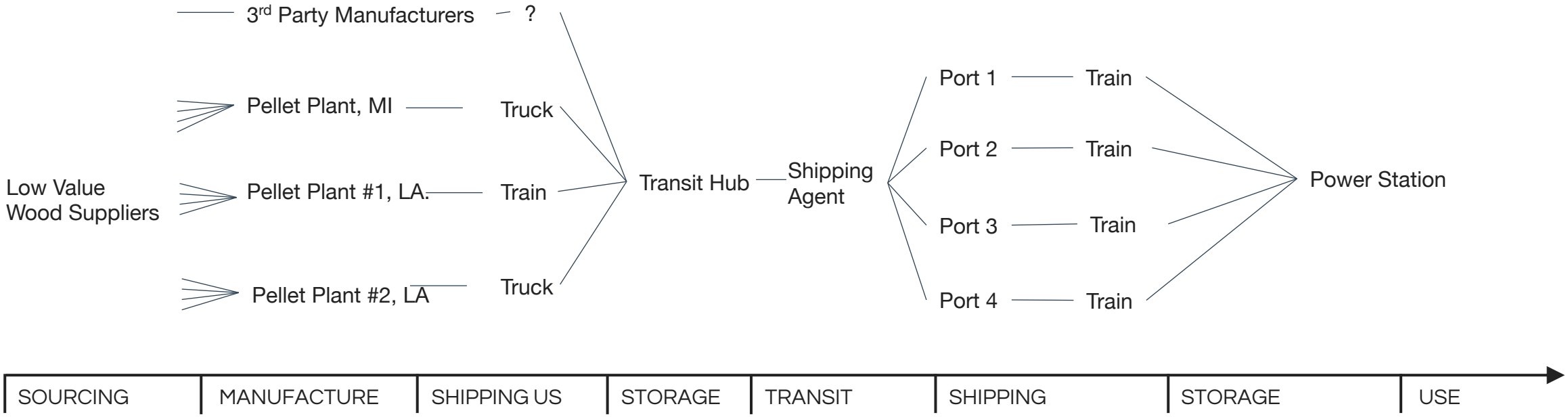
- Need and ownership of asset information are disparate
- Stakeholders are diverse and fractured
- Information is siloed functionally and technologically
- Security fears prevent necessary innovation

70% of Business Partnerships fail

(Harvard Business Review)

Simplified Supply chain

(with assumptions)



Lifecycle of a pellet

(or batch of pellets)

ENVIRONMENTAL MONITORING
ENVIRONMENTAL MONITORING
ENVIRONMENTAL MONITORING
ENVIRONMENTAL MONITORING

SUPPLIER(S)
TELEMETRY
SYSTEM OF RECORD
OPERATIONAL PERFORMANCE
OPERATIONAL PERFORMANCE
SYSTEM OF RECORD
OPERATIONAL PERFORMANCE
SYSTEM OF RECORD
IOT/FIELD DATA
OPERATIONAL PERFORMANCE
SYSTEM OF RECORD

LOGISTICS PLANNING
LOGISTICS PLANNING
IOT/FIELD DATA
EMS
IOT/FIELD DATA
TELEMETRY
IOT/FIELD DATA
EMS
LOGISTICS PLANNING
SUPPLIER(S)
TELEMETRY
EMS
LOGISTICS PLANNING
TELEMETRY
IOT/FIELD DATA
EMS
IOT/FIELD DATA

Low Value Wood Suppliers
Pellet Plant, LA.
Train
Transport Hub
Shipping Agent
Port
Train
Power Station

SOURCING	MANUFACTURE	SHIPPING US	STORAGE	TRANSIT	SHIPPING	STORAGE	USE

Time

SHAPE of ports

PIP first Net Zero port by 2050

Maritime operations are crucial

Significant contributors to GHG emissions

New technologies offer potential

But what are the barriers?

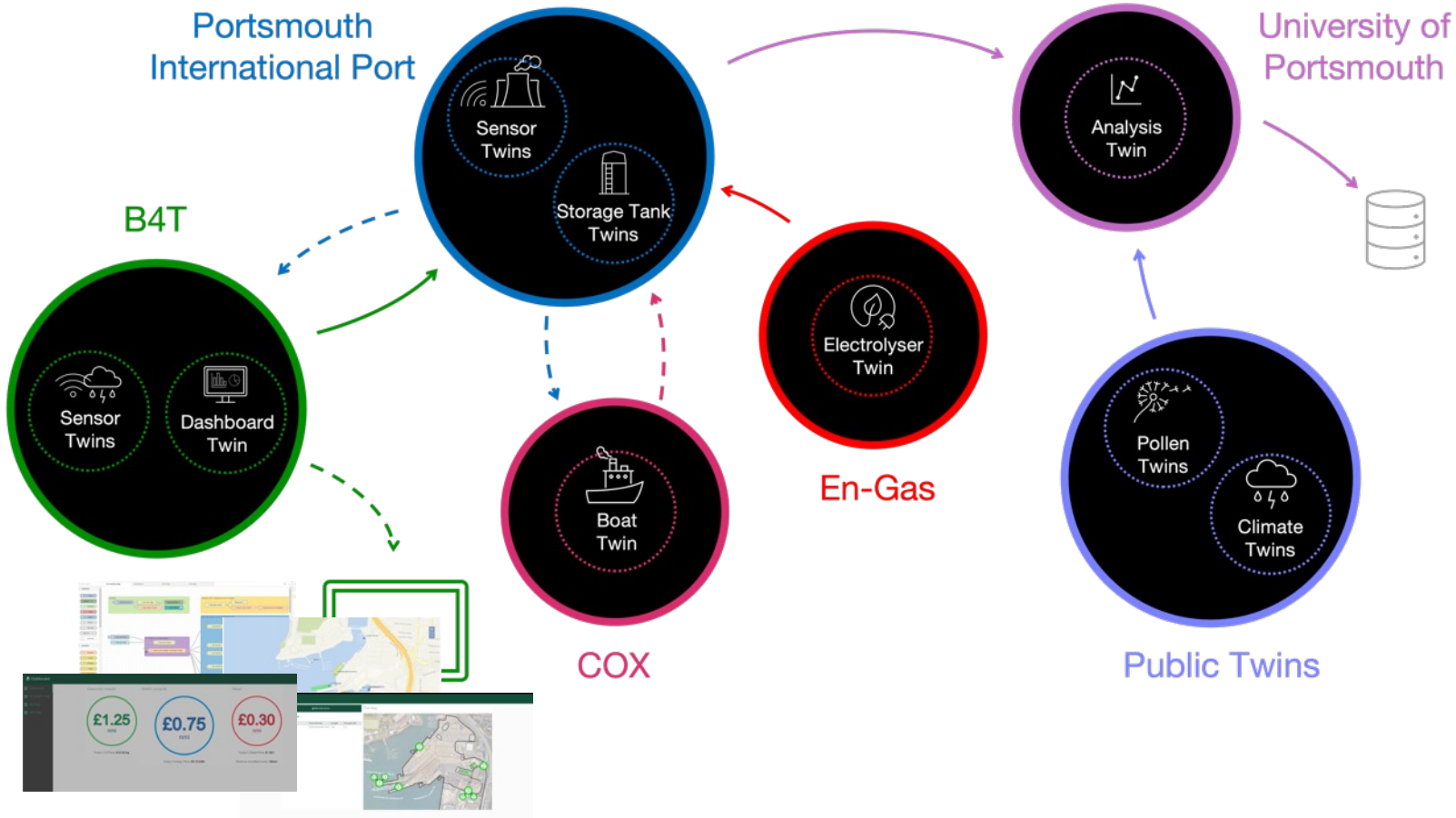
Which intervention will deliver the greatest impact?

Deliver a modular green hydrogen generation system & digital decision support tool for ports

Learn at scale

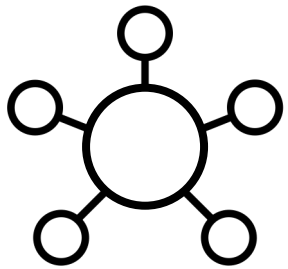
Digitally optimise

Transform business



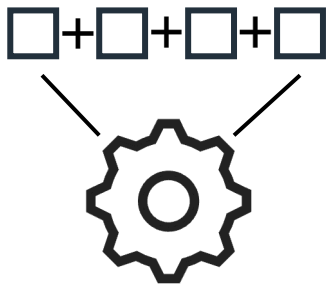
Why words matter

Collaboration ≠ cooperation



Collaboration

Shared ownership
and/or interests



Cooperation

Separate ownership
and/or interests

Let’s be clear

- Trust
- Confidence
- Flexibility

Trust

- Open is vital…but
- Low trust/no trust ecosystems
- Work the way people do
- Prove and move

Confidence

- We agree what we're talking about
- Machines interoperating with machines
- Right data, right time to right people
  - Not absolute velocity/veracity

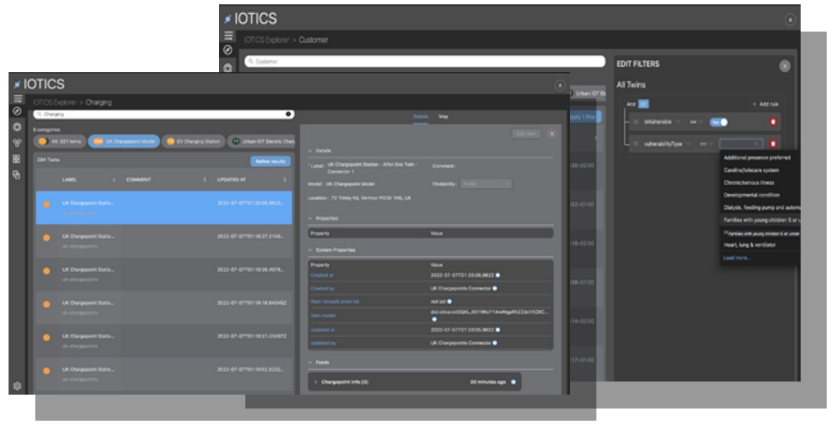
Flexibility

- Patchwork data
- Patchwork partnerships
- Evolving requirements

So...

Security fears delaying/preventing
Silos - functionally/technologically
Diverse stakeholders
Need/ownership of assets is disparate

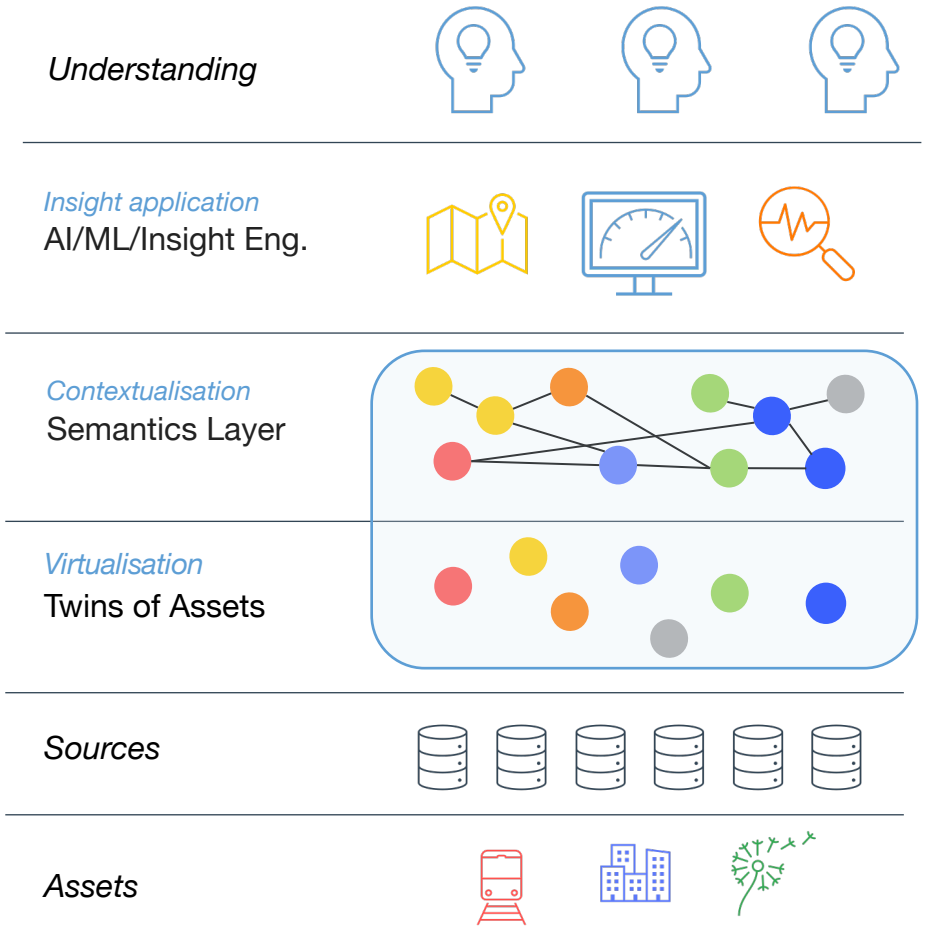
✓ Virtualise assets and their interactions
✓ Semantics enable machines to interoperate
✓ Decentralise federated architecture
✓ Owners retain control of their information



What does that mean?

- Semantics
- Streaming data

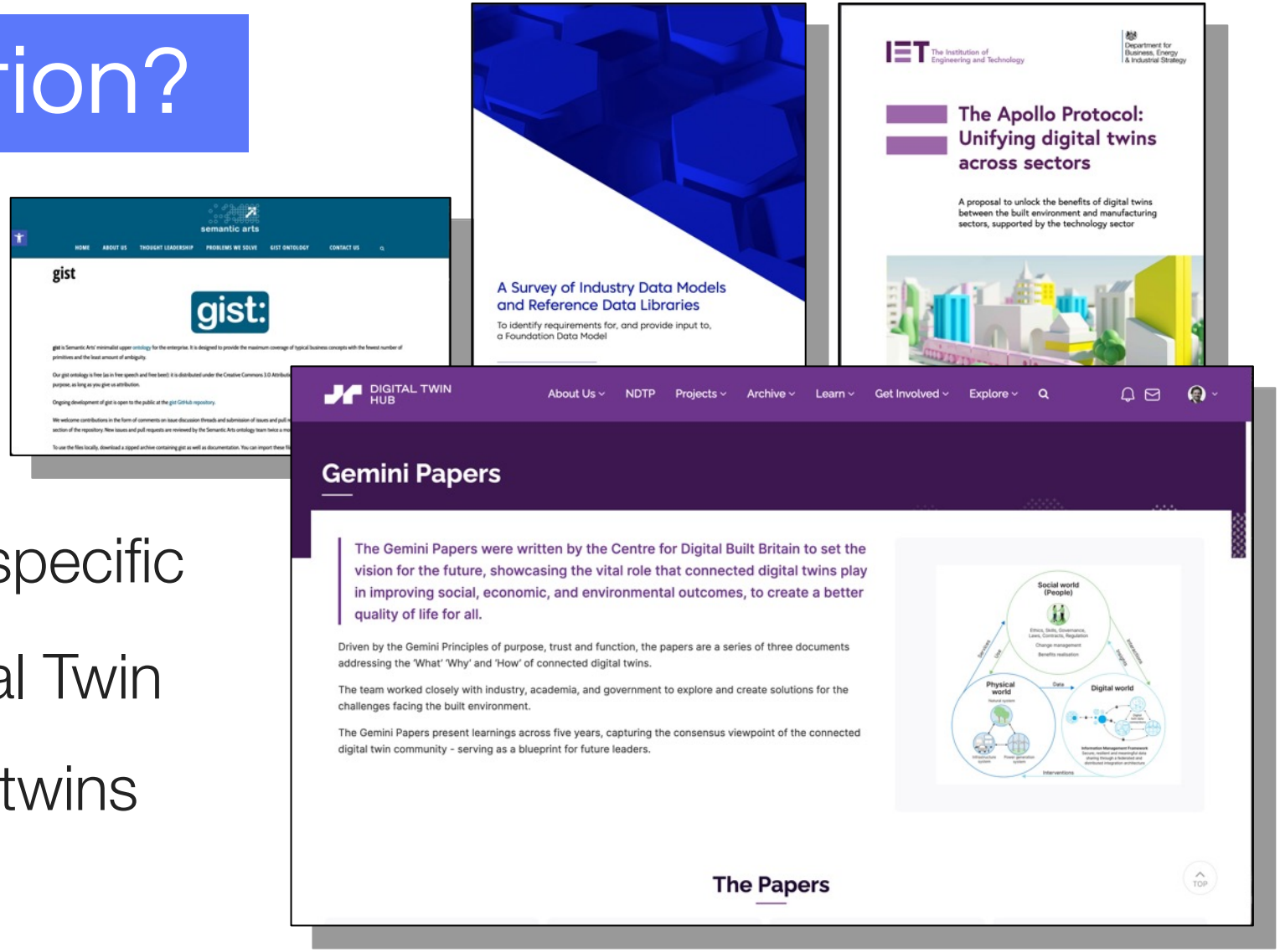
  (incl. bypass)
- Twins



Where is the action?

- FAIR
- Selective
- Finally not industry-specific
- Not a National Digital Twin

…a nation of digital twins



Summary

Digital Collaboration

Difficult data governance

Limited to original use cases

Time consuming

Hard to add new partners

For people

Digital Cooperation

Evolution of trust – your data your rules

Learn and adapt simply

Share in days not months

Easy to add and remove partners

For machines to benefit people

IOTICS

JOIN US

DELIVERING DIGITAL COOPERATION

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