



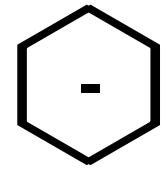
HUMAN COLOSSUS
FOUNDATION

Data Governance

Beachhead of decentralized
data management technologies

Philippe Page - Stem Cell at the Human Colossus Foundation - ISWG presentation. - Tuesday August 3rd 2021

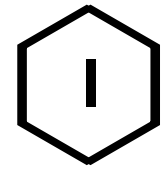




Key take away of today

- **The legal framework of the “Theory of Spheres” provides**
 - ➔ **a natural & solid link between Technology & Legal domains**
 - ➔ **Data Governance Authority a component of DDE Data Sharing Engine**

- **Data Governance in the humanitarian sector is**
 - ➔ **an urgent necessity**
 - ➔ **a strong guide for new data governance paradigms**



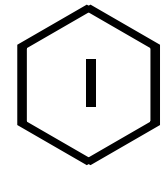
From “String Theory” to “Sphere Theory”

Building a bridge between Technology & Legal

On why we need to go back to first principles.

... a warm up exercise...

$$1 + 2 + 3 + \dots = ?$$



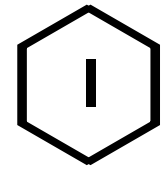
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$$1 + 2 + 3 + \dots = \zeta(-1)$$



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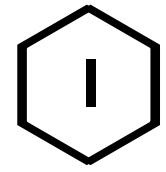
Building a bridge between Technology & Legal

On why we need to go back to first principles.

... a warm up exercise...

- ✓ **To reach meaningful results one needs to apply First principles in a consistent manner end-to-end**

$$1 + 2 + 3 + \dots = -\frac{1}{12}$$



From “String Theory” to “Sphere Theory”

Building a bridge between Technology & Legal

On why we need to go back to first principles.

... a warm up exercise...

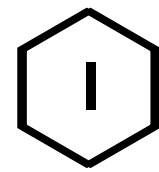
✓ To reach meaningful results one needs to apply First principles in a consistent manner end-to-end

➔ Is there a “Legal” first principle ?

Heinrich Hubman,
Das Persönlichkeitsrecht, 1967

“Der Mensch ist nicht ein
Exemplar seiner Gattung,
er ist immer ein Exemplar seiner
Selbst....”

Man is not a specimen of his species,
he is a specimen of himself



From “String Theory” to “Sphere Theory”

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On why we need to go back to first principles.

... a warm up exercise...

✓ To reach meaningful results one needs to apply First principles in a consistent manner end-to-end

✓ Is there a “Legal” first principle ?

➔ **No, but the legal theory of sphere has surprisingly strong ties with human centric decentralized data management.**



Legal Doctrine

Individual unicity

Distinct Spheres
(Intimate, private, public)

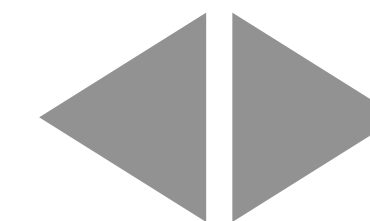
Lawfulness & Consent
(Intimate, private, public)

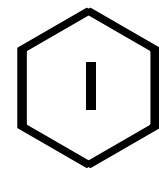
Decentralized Data Principle

Data authenticity
(self-certifying identifiers)

Context
(decentralized semantic)

Data Governance Authority
(decentralized governance)





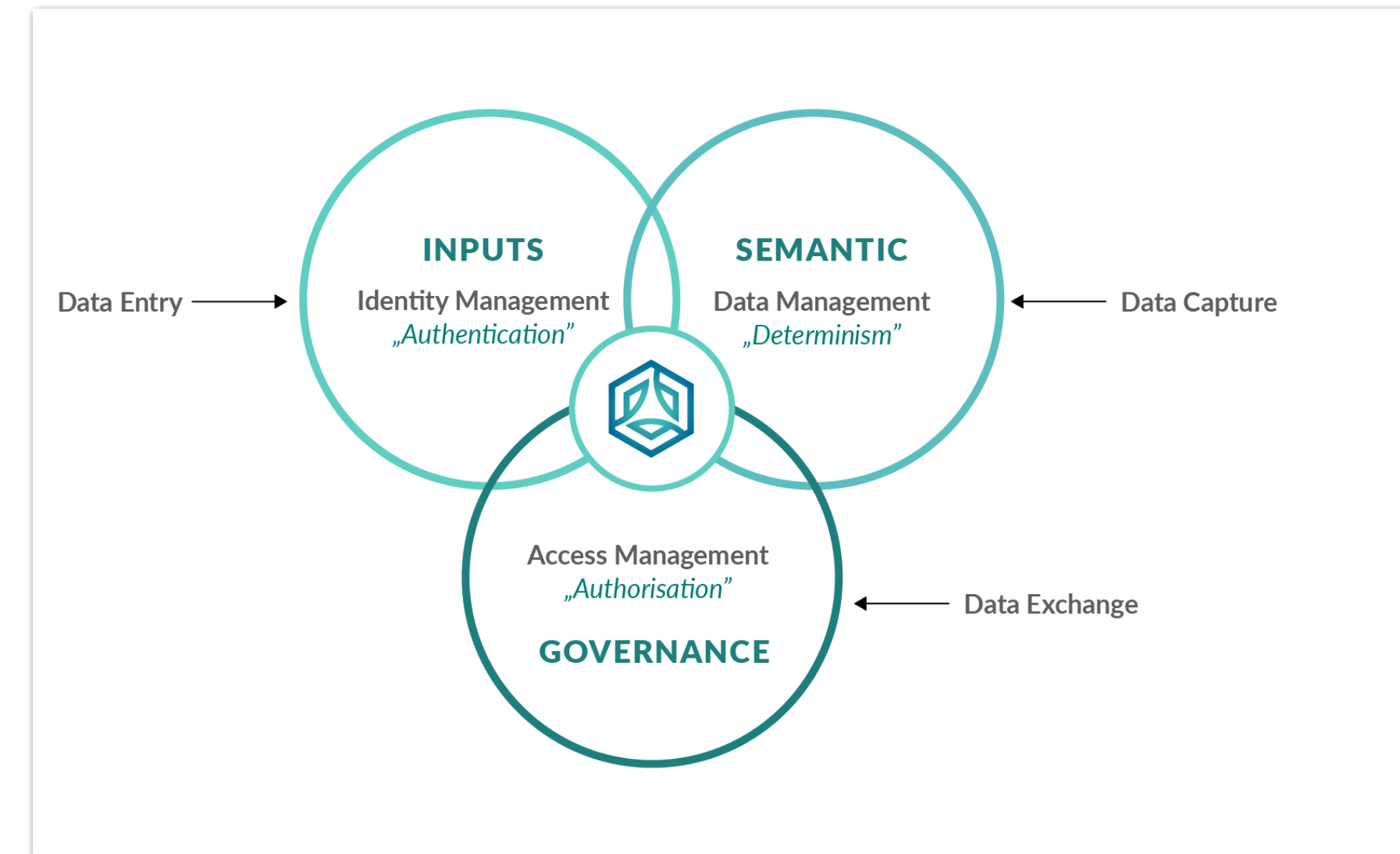
From “String Theory” to “Sphere Theory” to “Dynamic Data Economy”

Building a bridge between Technology & Legal

On why we need to go back to first principles.

... a warm up exercise...

- ✓ To reach meaningful results one needs to apply First principles in a consistent manner end-to-end
- ✓ Is there a “Legal” first principle ?
- ✓ No, but the legal theory of sphere has surprisingly strong ties with human centric decentralized data management
- ➔ **DDE can be seen as a functional instance of the legal “Sphere Theory”**

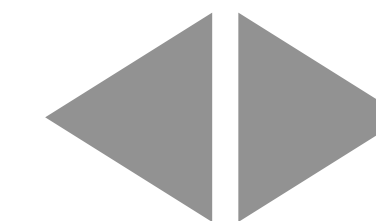


Legal Doctrine

Individual unicity

Distinct Spheres
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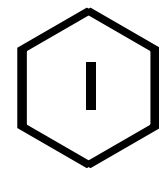


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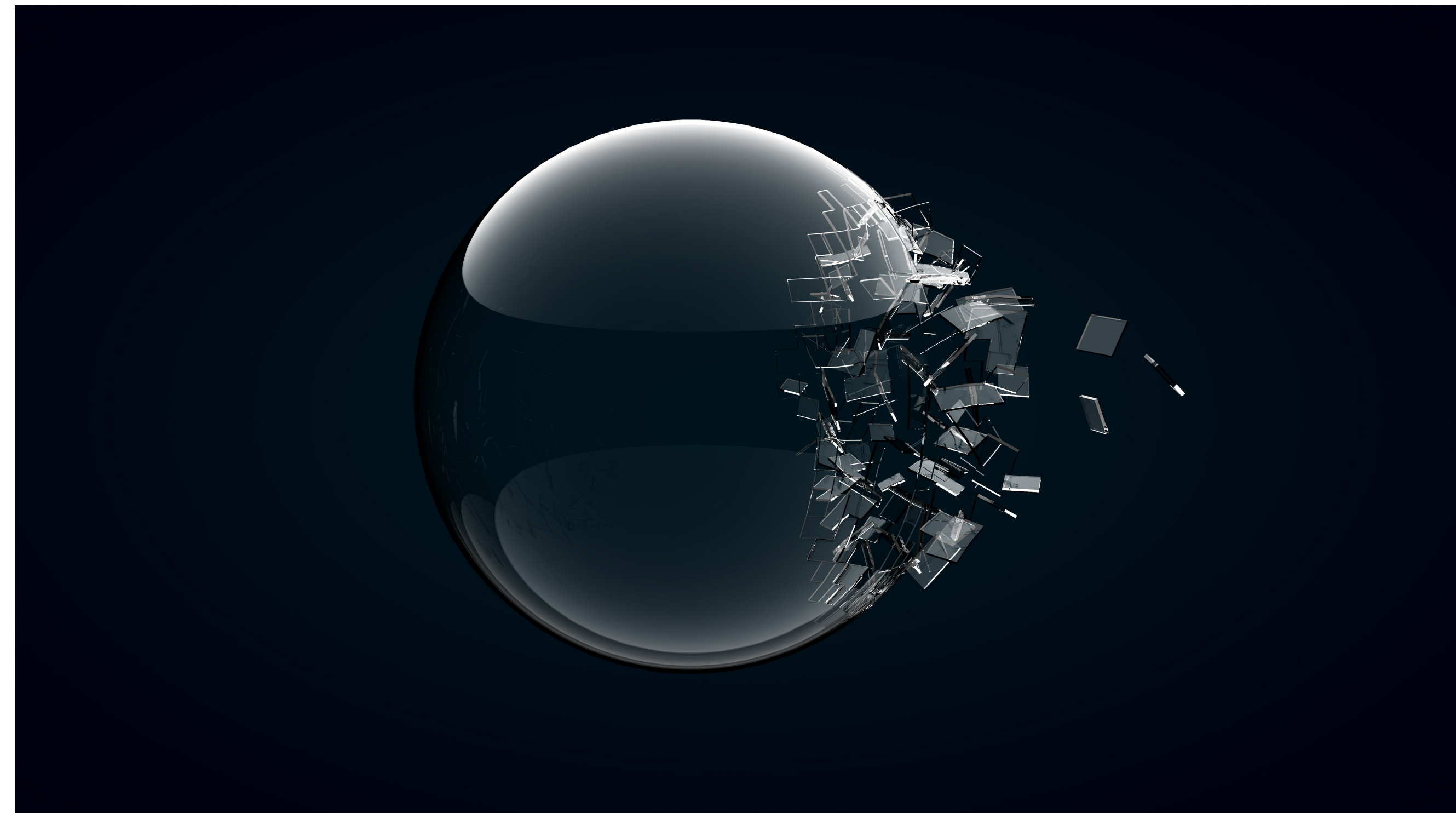


The inherent centralised characteristic of current data exchange models

Have forgotten the “individual” aspect

The privacy sphere is too often breached

With an armada of organisation to the rescue



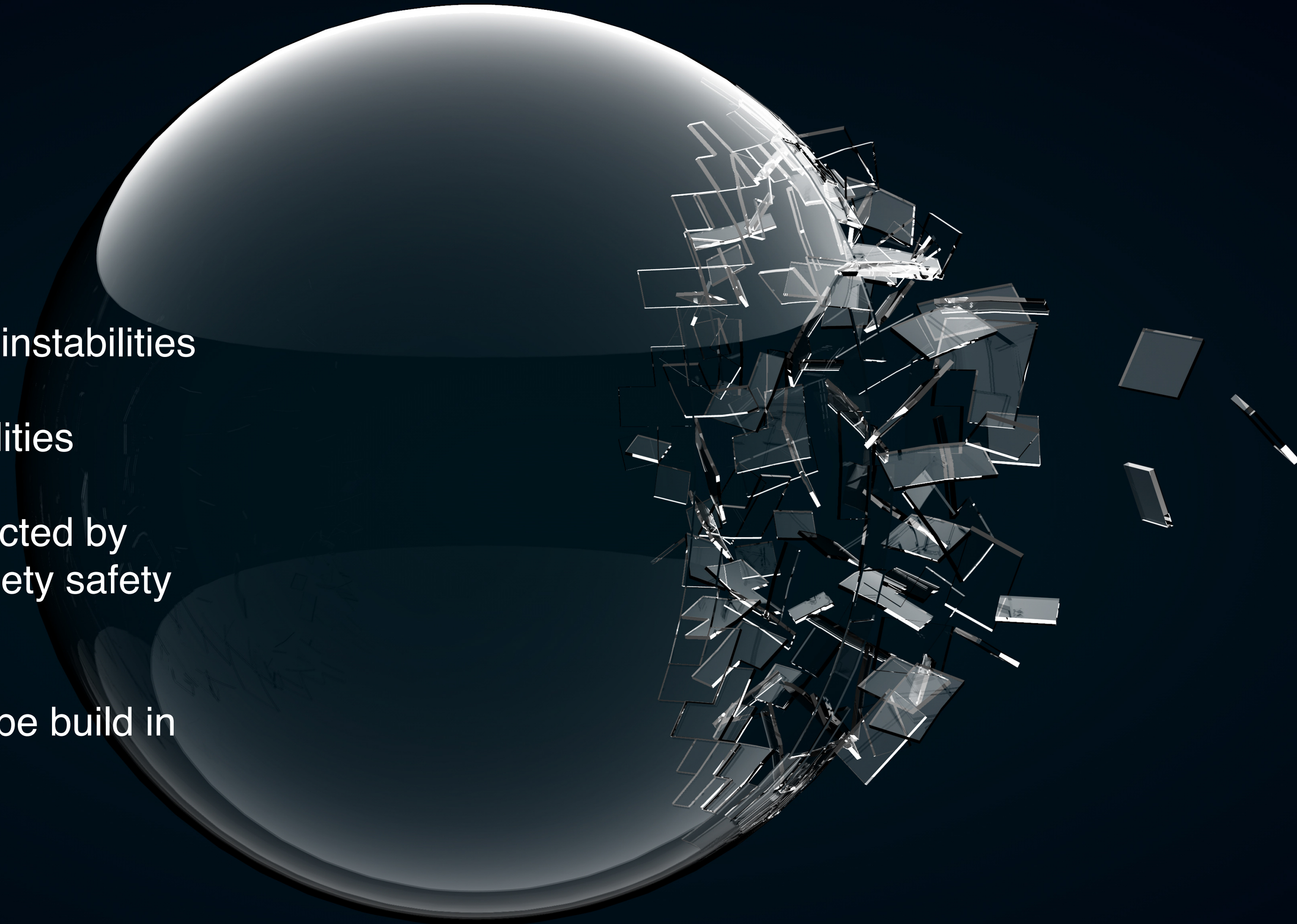
Data Governance in the Humanitarian sector

In harsh environments:

- Political / Economical instabilities
- Environmental instabilities

Individuals are not protected by traditional legal and society safety nets

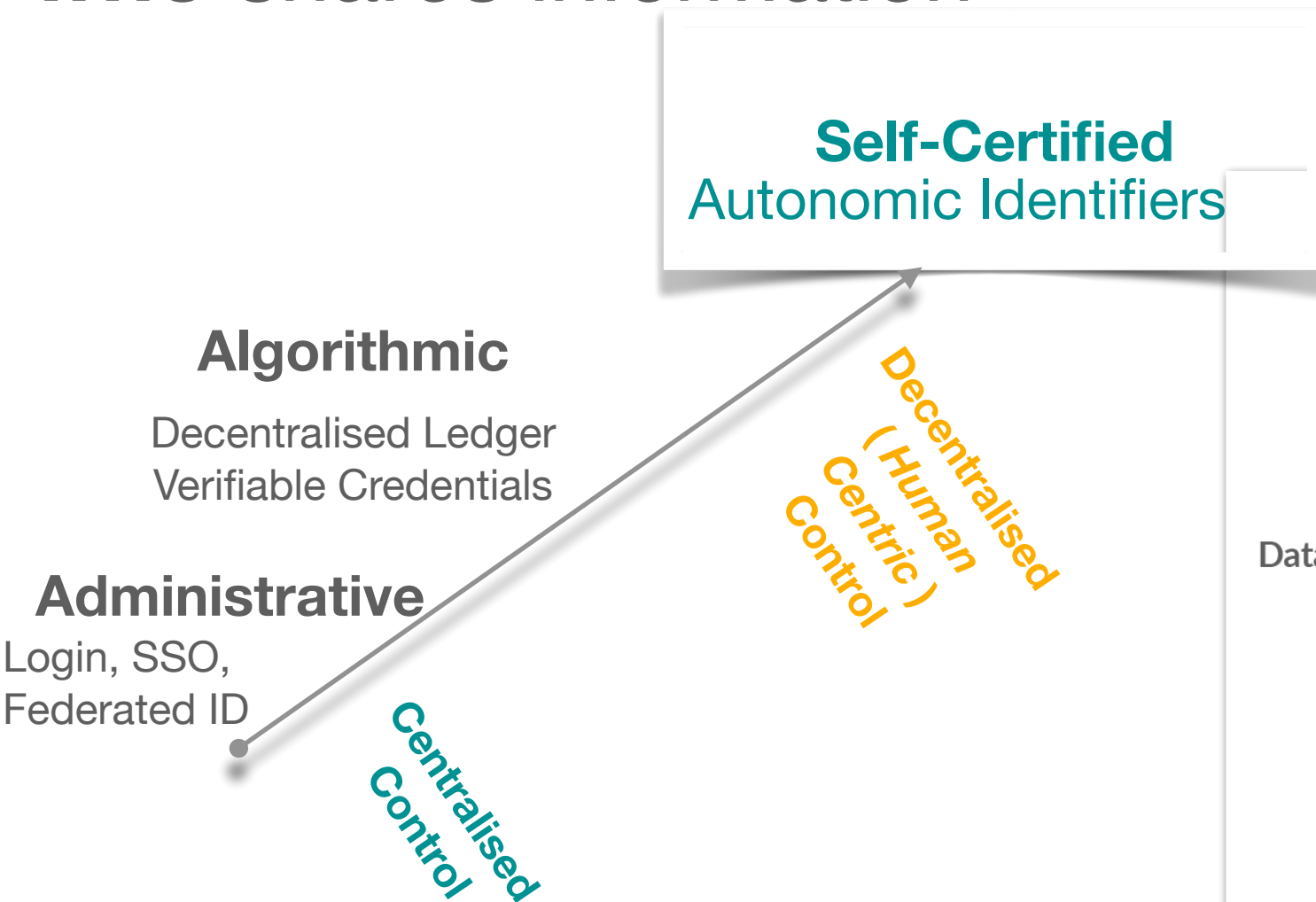
Data Governance must be build in the system



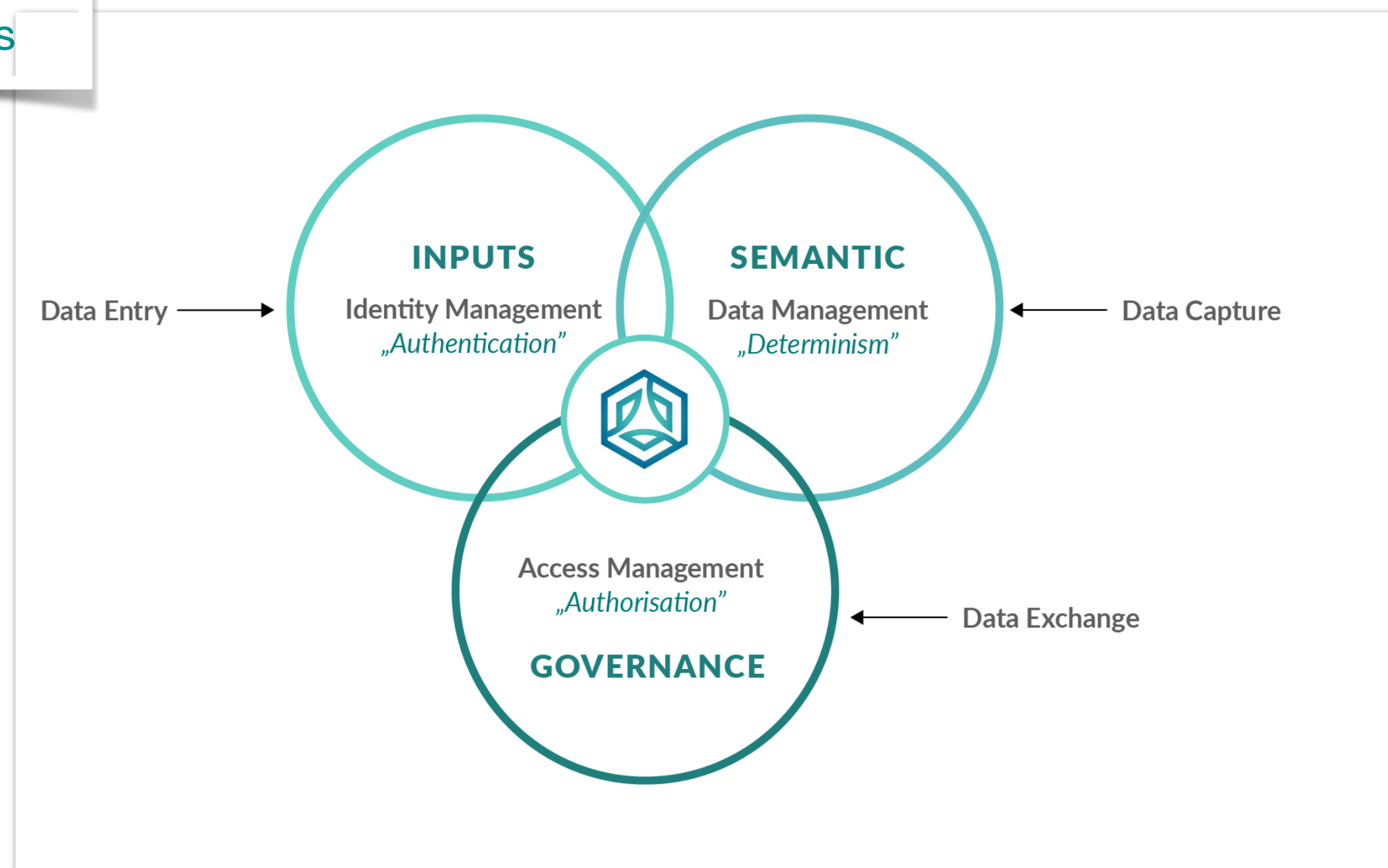


Authentication

cryptographic assurance to know **who** shares information

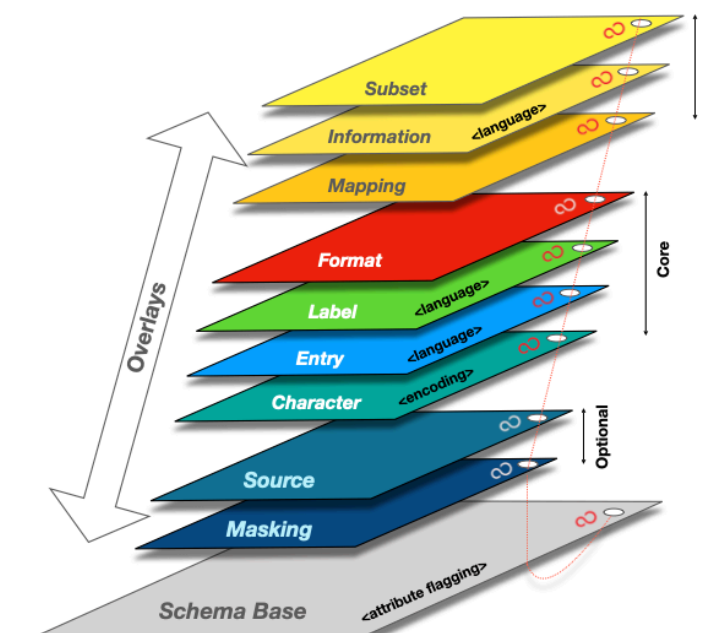


Identity Management without compromising individual safety

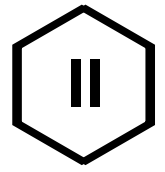


Data Harmonisation

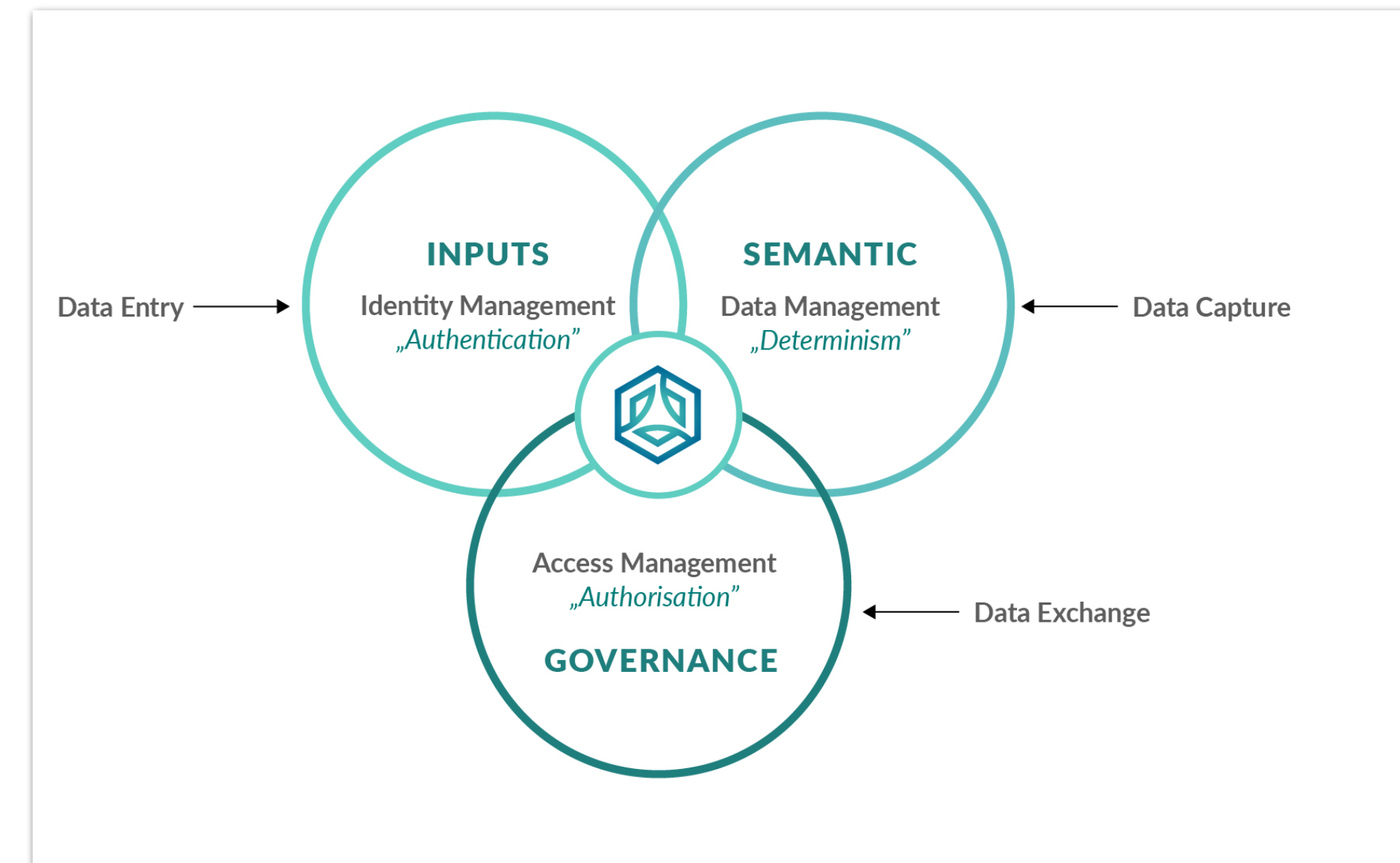
Deterministic semantic to understand **what** information is shared

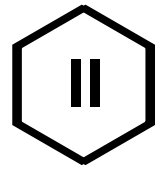


Context Management in adverse & critical conditions



Data Governance in the Humanitarian sector

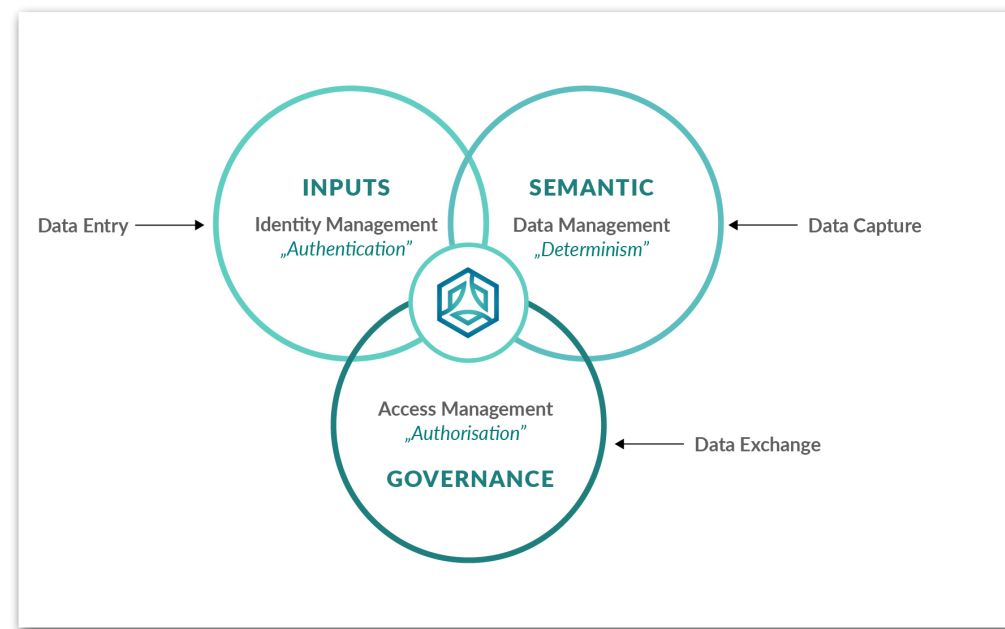




Data Governance Authority

Under **which** governance(s) is data exchanged ?

Call for an Humanitarian “Vertical” in ISWG



HCF “Social & Humanitarian Applications Program”

