

# Data & Security

Nation States, Organisations, and Individuals

 **accenture**

**FIIA**

FINNISH INSTITUTE  
OF INTERNATIONAL AFFAIRS



Puolustusministeriö  
Försvarsministeriet  
Ministry of Defence



Sotataloudellinen Seura  
Krigsekonomiska Samfundet  
Vuodesta 1956

# TL;DR: Systemic change

It is everyone's **individual responsibility** to take in to account how our dependency on technology and data impacts on citizen, organisation and state levels.

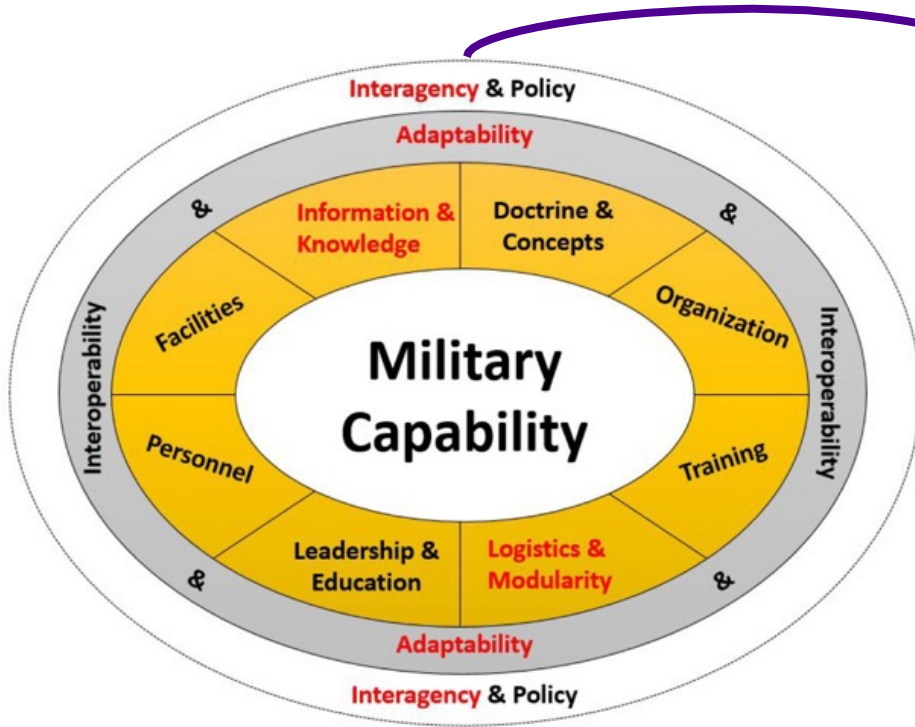
It cannot be outsourced.



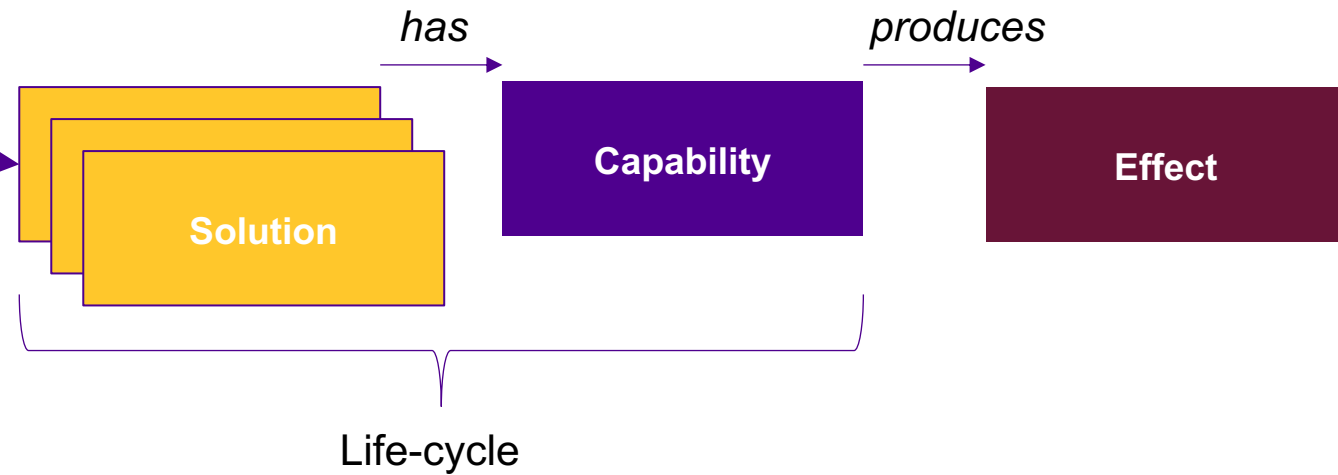
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# Context: interoperability and effect

**Components of military capability (DOTMLPFI)**  
 Interagency and interoperability are critical to reach intended effect



**FDF military capability conceptual model**

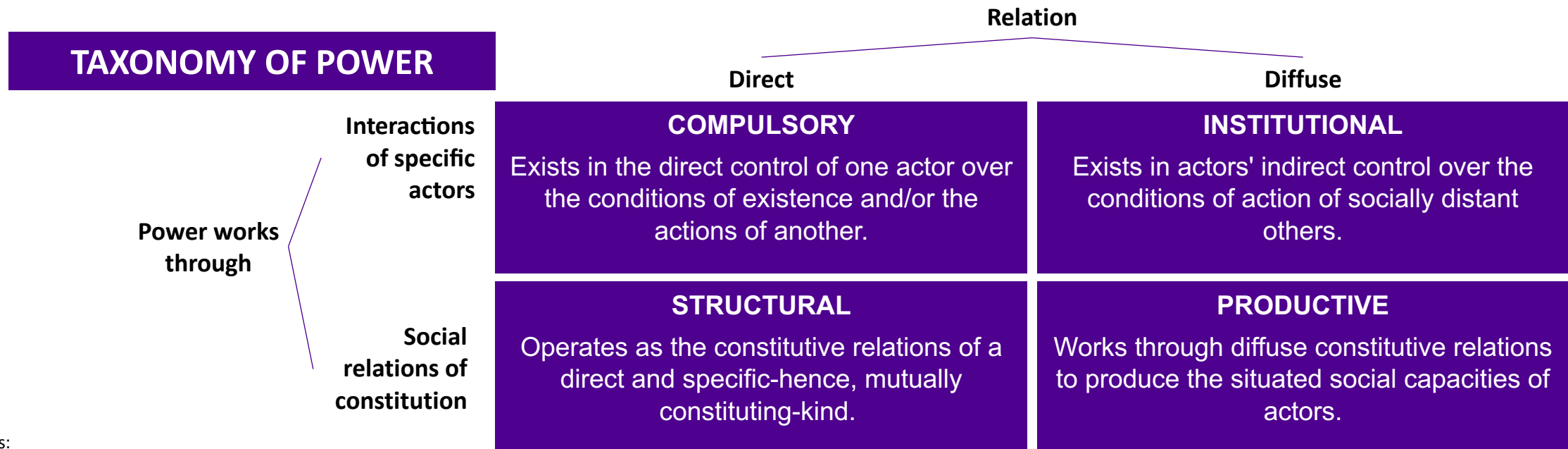


Sources::

1. Correia, João. Military Capabilities And The Strategic Planning Conundrum
2. Laitinen Visa. Hybriditeknologian hyödyt ja haasteet panssaroiduissa ajoneuvoissa

# “The ability to refine and utilize data increasingly correlates with the transforming global distribution of power.”

- Our western way of life is based on various technology-enabled transactions, or **flows**.
- Those who own the technologies, **guide and govern the practices** of **human interaction** and relative relations.
- **Paradox of data**: data makes us an empowered actor but also makes us a subject – and exposed – to the technology: its owners, collaborators and code.
- Multi-faceted, **serendipitous utilizations of power**



Sources:

1. Vuorisalo & Aaltola, 2021: Towards a data-centric great game
2. Barnett & Duvall, 2005: Power in International Politics

# Context

Expanding geopolitical thinking

Algorithms

Solutions and standards

*"We must become  
 standard-makers,  
 and not just standard-takers"*



**T. BRETON**  
 Commissioner for  
 Internal Market


**TPKanslia** ✓  
 @TPKanslia

Presidentti @Niinisto: Teknologia on erottamattomasti kietoutunut käynnissä olevaan suurvaltakilpailuun. Teknologia on sekä kilpailun näyttämö että yksi sen päämotiveista. Meneillään on kilpajuoksu siitä, kenen teknologia ja kenen standardit pääsevät valta-asemaan. #SLSK2021

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**Valtteri Vuorisalo** @vvuorisalo · 14s  
 Replying to @TPKanslia and @niinisto

Tärkeä nosto. Muualla esim. UK:n 'Integrated Review' toteaa teknologian olevan yksi keskeisimmistä välineistä jolla valtio voi edistää taloudellisia, poliittisia ja turvallisuusintressejään - ja jolla muokata kv-normistoja. @MikaAaltola







Sources:

1. Aaltola, Mika. Poutasään jälkeen. Jyväskylä: Docendo, 2019.
2. Global Britain in a Competitive Age. Cabinet Office, 2021
3. Wigell, Mikael (et.al.). Geo-Economics and Power Politics in the 21st Century. Milton: Routledge, 2019.





**Valtteri Vuorisalo** @vvuorisalo · 10h  
 Data-centricity is key - from a military capability perspective, and from a larger context: the ability to refine and utilize data increasingly correlates with the transforming global distribution of power.

@MikaAaltola @jargumentscount  
 @EKytomaa @JarnoLim @AleksiJantti



10:13 PM - Apr 5, 2022 · Twitter for iPhone

# The role of technology and data is increasing

A data-centric approach is a central element in geopolitical competition.



“Primary & permanent asset”

-US Department of Defense



Alchemy of data

From passive to dynamic



Data as the new oil

Source of power, wealth, and fuel for actions

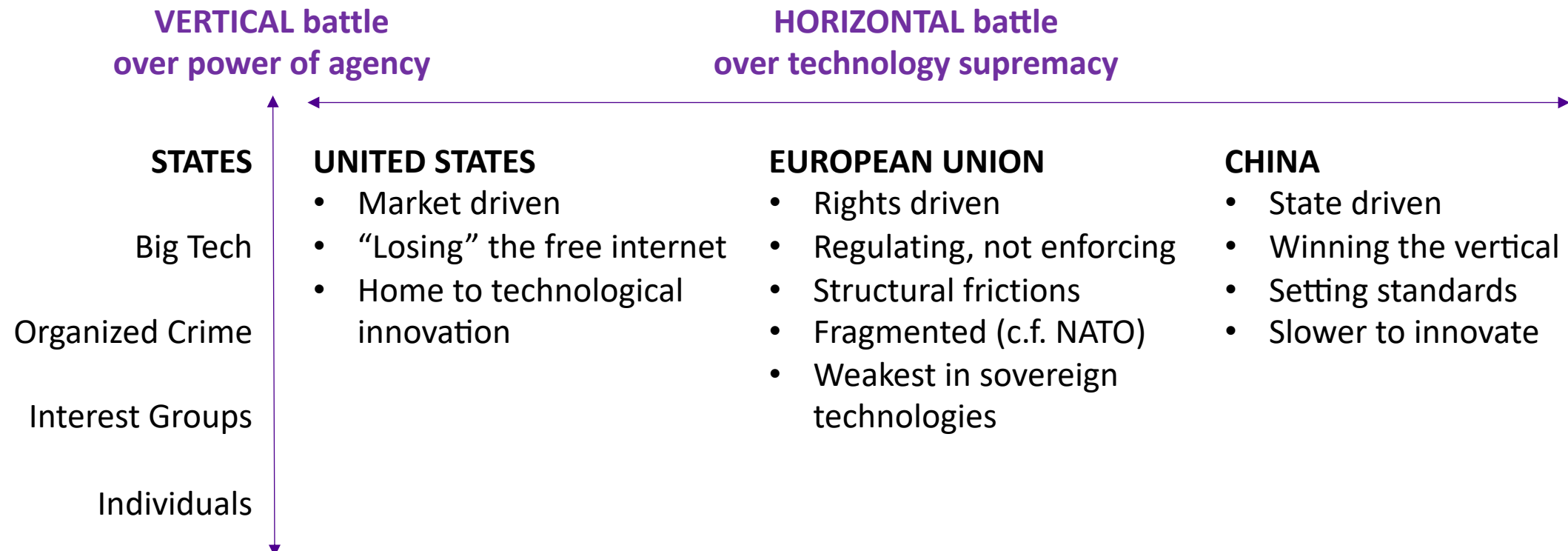
Sources:

1. NATO STANAG 4774 and 4778
2. US Department of Defense, 'DoD Data Strategy', 2020,

# “Battle for the soul of the digital economy is a battle over democracy”

-Professor Anu Bradford, Columbia University

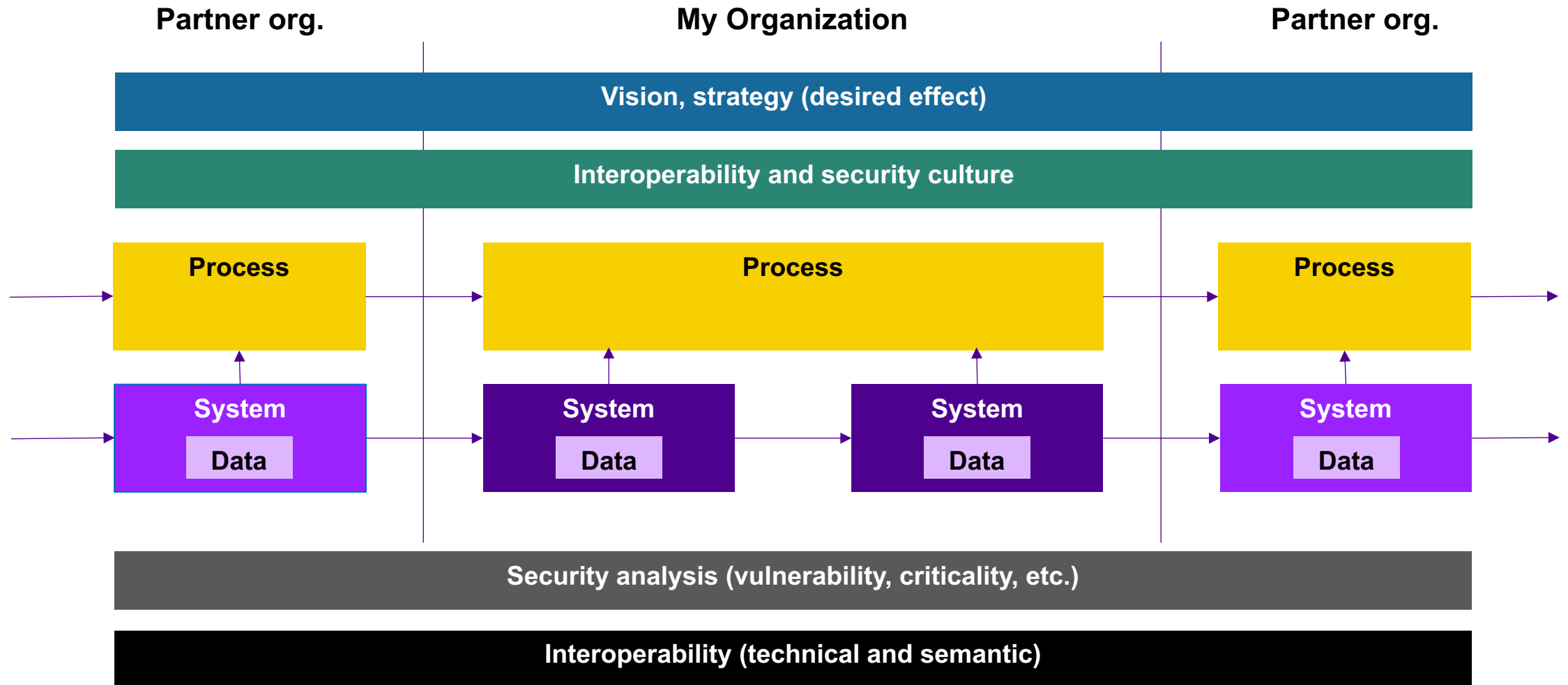
Both horizontal and vertical battles need to be won in all domains:  
culture, economy, policy, military



Sources:  
 1. Cf. Bradford, Anu. How Europe Rules the Digital Economy. Project Syndicate, 2020.  
 2. Bradford, Anu. Battle for the soul of the digital economy. Key-note, FISA Conference, May 2022.



# Interoperability and critical processes



# Multiple obstacles for dataflows – and thus a good situational picture.

## Technological obstacles are a minority

1. Data is not **technically or semantically interoperable**
2. Not all **actors in the data supply chain** are identified
3. Data **quality is insufficient**
4. Cultures and **attitudes towards data sharing**
5. Risks related to **losing trade/company secrets**, data confidentiality
6. Data **ecosystems not coordinated**
7. No **definition of success**
8. Shared **vision, mission, meaning, and values are not defined**
9. Roles of **various actors** not defined



# Thank You