

Relevant Research Questions For Decentralised (Personal) Data Governance

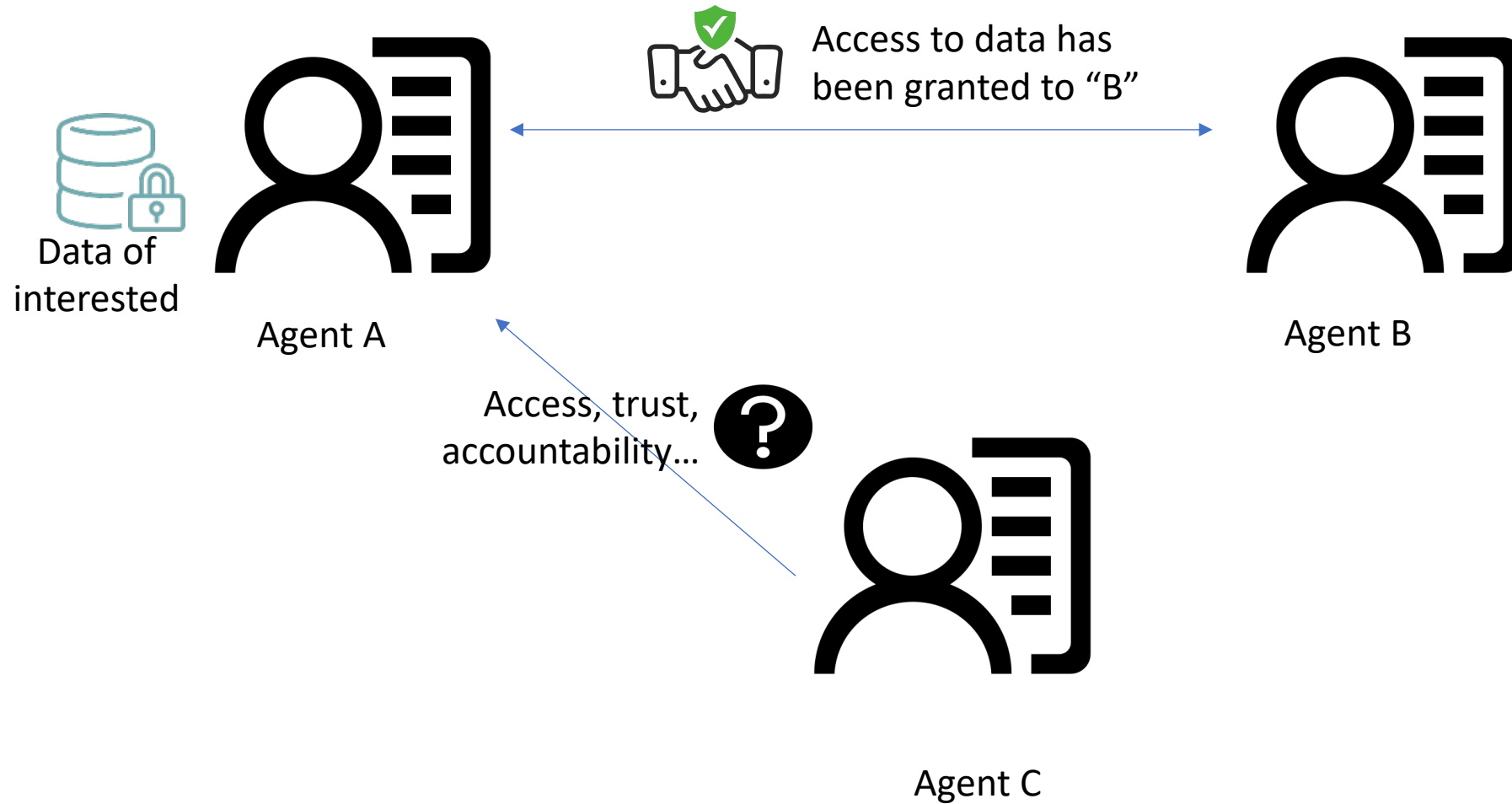
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Q1. Data Discovery

How will we know what data exists with agents A, B, and C?
How will we know whether these agents can operate on it?

Q2. Identity

How to trust an identity between agents A, B, and C if there is no common identity provider?

Q3. Security in/after Transit

How can A be assured that its data communicated with B and then later with C will be secured while being transmitted and being used/stored)?

Q4. Minimising End-user Cognitive Overload

Decentralisation may mean more decision points:

Here A and B and C may each have to make decisions about each other, which may result in more work to inspect and thus raise more concerns of mistakes, coercion, and fraud.

Different notion of 'trust'.

Q5. Accountability

Decentralisation also means more entities and therefore increases the accountability necessity.

- How will A hold B and C accountable?

It is not possible to have trusted secure environments in all operations - so how to establish accountability?

- How to connect with legal framework for protection and prosecution?

Q6. Preventing Legal Obligations from becoming a Hindrance

Confusion about:

- How does GDPR apply?
- Who is the controller?
- What does the data subject have to do?

Misinterpretation between text of the law and spirit of the law.

GDPR is not built with decentralisation in mind - hypothesis allows us to plan GDPR+ to fix this.

Q7. Digital Infrastructure

Decentralisation is a big word (literally and figuratively) so:

- How do we define it using specific case studies and patterns? The EU's idea of "Data Spaces"?
- Is infrastructure available?
- What can be reused?
- What needs to be developed?
- We need clear methodological framing that leads to practical research and development.
- What are the potential use-cases and roles for A, B, and C?
- What other diagrams/interaction flows are possible? What are they doing?

Q8. Automation Potential

To take advantage of things that are possible or made better with decentralisation we need *agreement on commonality* - which is currently lacking.

Step 1: What needs to be standardised?

Step 2: When do we want that standard? Can we plan it for the next 5 years?

Step 3: How to extend the standard in use-case specific applications? –

This is where you develop the special sauce. A, B, and C thus can communicate and interact, while doing their own special thing.

Conclusions – Decentralised Data Governance

We need to think about several “good enough” ways for:

- Managing data and access to it
- Building trust (identity verification, compliant data processing etc.)
- Preserving privacy (e.g with PETs)
- Ensuring legal compliance (how the system is built, how it functions etc.)
- Supporting interoperability (and at what level?)(between entities in the same data space and cross data spaces)
- Supporting end-users using decentralised systems (exercising their GDPR rights, comprehension of consent and decentralisation)

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