

Personal data spaces – Workshop 3 – Meeting Minutes

Personal Data Spaces - Workshop 3 - Agenda
<ol style="list-style-type: none">1. Coffee and networking2. Welcome & introduction3. Retrospective to workshop 1 & workshop 24. Plenary5. Coffee break6. World café7. Lunch8. Roadmapping9. Summary & next steps10. Networking drinks

Full meeting minutes

Topic	Discussion
9:30 - 10:30 Coffee and networking	
10:30 - 10:45 Welcome & introduction	<p>Sven Schade:</p> <ul style="list-style-type: none">• JRC expressed their satisfaction with the organisation of the second meeting in Ispra.• Personal data spaces are a new topic for JRC.• The series of workshops was useful for the European Commission. It shows how active this community is and how it is coming together.

	<ul style="list-style-type: none"> ● The main goal of this series of workshops is to shape the roadmap for continuing the ongoing discussions to make interoperable personal data spaces a reality in the future. ● There are investments needed to reach a minimum common understanding (e.g. common vocabularies and models). There are already some vocabularies and models coming from W3C and DSSC. Further actions will be needed to tackle this. SEMIC will play a role in this, continuing to bring its experience as a convener and facilitator for reaching consensus and ensuring interoperability. ● Some actions have already been identified as propositions for today. It is a bottom-up exercise, listening to this community today and in the future. ● Workshop on DGA, to highlight issues on inclusive data governance. Policy report upcoming for publication from JRC. Another report is the data spaces cookbook, this can be used as a tool to meet some of the challenges that have arisen to build data spaces. <p>Viivi thanked Sven for the valuable work done by the JRC and DIGIT.</p>
<p>10:45 – 11:00 Retrospective to WS2</p>	<p>Max Leonard, representing Inrupt, provided a retrospective on the second workshop of the series. The primary objective of this workshop was to explore how current and prospective personal data space technologies can ensure semantic and technical interoperability through practical application to a specific use case. The use case was designed to identify critical building blocks that demonstrate how personal data space technologies can be utilised to create an architecture that adheres to the principles of MyData. These building blocks encompass various aspects such as identity, data modelling, service management, access control, governance, and logging.</p> <p>Max gave a short insight on each of these building blocks:</p> <p>Identity</p>

- There is a need for scalable networks of trust in order to make identity interoperable and to be able to move our identity around players in a much wider ecosystem.
- Bilateral relations between actors in the identity domain remain important.

Access control

- Today, a small number of foundational technologies are being used.
- A fundamental set of capabilities has surfaced, allowing for seamless migration between different data stores without the need for rebuilding.
- There is still a significant amount of work that needs to be done to further improve this process.

Data models

- Broad agreement that linked data is used in many use cases. However, there are scenarios where linked data is not appropriate.

Governance

- Individuals rarely have complete control over their data.
- Strong governance will remain important during the development of interoperable personal data spaces.

**11:00 – 11:30
Plenary**

Viivi explained the world cafe, afterwards the individual session leaders pitched the content of their session.

Paul Theyskens - Why personal data spaces

Paul explained that during his session they will be working on the “why”, why we work on business, legal, operational, functional, and technological interoperability at the same time. The goal of this workshop is to get ideas on how to solve some of the problems in the [BLOFT framework](#).

Viivi Lähteenoja - Concept of personal data spaces

Viivi elaborated on her session about the concept of interoperable

personal data spaces. As personal data space still has different interpretations, this workshop aims at clarifying the concept at a conceptual level to establish a common understanding. Viivi added that interoperable personal data spaces will not be one EU personal data space but an individual in control of his/her data in a data space.

Marcello Grita - Sustainable business models

Marcello explained the purpose of his session regarding the different business models of personal data spaces. The focus lays on unlocking value out of personal data spaces, with an emphasis on the service flow rather than the data flow. Three distinct business models have been identified upfront, and the end user is divided into two categories, namely the data rights holder and the data rights user. One of the objectives of this session is to explore whether there are any additional business models that have not yet been identified. Additionally, Marcello will examine how intermediaries or governance structures can sustain the ecosystem and their own business.

**11:30 – 11:45
Coffee Break**

**11:45 – 13:00
World café**

Paul Theyskens on the motivation for personal data spaces, the “why”

To effectively address the challenges posed by climate change and the sustainable development goals (SDGs), one should approach personal data spaces from multiple perspectives. One possibility is the BLOFT framework. This is due to the need to transition towards a more sustainable economic model that can support our climate and SDG objectives. The urgency of this transition is underscored by the looming 2030 deadline for meeting our climate and sustainable development targets.

Business

Collaboration is essential for creating a data utility that benefits all. Telecom providers may experience a significant drop, but they still

play a crucial role as providers. As we navigate this transition, the actors must work together and keep in mind the urgent need for climate action.

The success of personal data spaces depends on whether we should proactively introduce it to citizens or wait for them to request it. The DUC (Data Utility Company) is at the forefront of this field. Citizen involvement is crucial and offering valuable data services can incentivise them to share their data. On the other hand, the need for industry retooling to provide valuable data services was stressed. Various initiatives, such as Gaia-X, that support personal data spaces were highlighted.

During the discussion, it was pointed out that the problem statement is missing in the current scenario, and there was a belief that governments are the primary beneficiaries of the work being done. It was suggested that defining problem statements is easier in specific domains/verticals. It was noted that the discussion is missing the viewpoint of economists, and the importance of having a clear answer on how this work will make people's lives easier was stressed. Concerns were raised about who will benefit and pay for it. The EC is funding 46 billion euro for the next seven years, but the ownership of actions identified is a problem across the BLOFT framework.

Legal

There are numerous ongoing initiatives to establish the foundations of responsible data governance. Given the lack of accountability among big tech companies, the Data Governance Act (DGA) proposes the establishment of certified data intermediaries to ensure accountability and build trust. However, the effectiveness of this proposal may be hampered by a lack of resources available to privacy authorities to enforce the Data Privacy Act (DPA). To address these concerns, the Data Market Act (DMA) has been introduced, which provides a regulatory framework for the data market. Furthermore, the AI Act sets up a regulatory sandbox to facilitate the development and deployment of artificial intelligence while ensuring ethical standards.

During the discussion, it was suggested that efforts should be made

to make the DGA more tangible and translate the legislation into something advantageous for individuals. It was mentioned that currently, the legislation is 15 years behind on technology, which is a big issue because there is no framework, and the regulatory system is not aligned with the technological capabilities. One way to mitigate this is by using an AI sandbox. The topic of personal data spaces was also discussed, pointing out that data spaces do not want personal data. The Flemish use case shows that, as soon as personal data gets mixed with data from a data space vertical, it is all considered personal data. There is pushback for personal data, as mayors do not want the responsibility concerning the data of their citizens. Finally, one could state that there is a paradox here, on the one hand, people keep sharing their data, but on the other hand, people do not want mayors to share their data.

Operational

The implementation of the Data Utility Company marks the first official step towards the implementation of data utility by the Flemish government. Currently, people are not actively managing their data, as on average, they give consent 1500 times per month without proper knowledge of who is accessing their data and for what purpose. In response, the European Data Innovation Board has launched a new initiative, [EDIC](#), that aims to establish a European infrastructure for data utilities through collaboration among multiple Member States. This initiative is expected to promote greater transparency and control over personal data and encourage individuals to actively manage their data.

Functional

The process of giving consent to individuals who offer benefits is not straightforward. An example of a GDPR implementation is the Flemish public transport company 'De Lijn', a company that serves millions of users, where only 28 users requested access to their data, most of whom were Data Protection Officers. To address this issue, we need to provide a service where individuals can give their consent once to their government data utility, which will then take care of their data needs.

Technological

In the future, contextual personal data could be a critical component. The success of technology relies on its user-centricity and ability to adapt to personal contexts. Relevant contextual personal data is crucial for the effective functioning of AI. Governance requires a multi-stakeholder ecosystem to provide context for data. Additionally, the human validation of data should be emphasised, as mathematical models alone are not sufficient.

Viivi Lähteenoja on the concept of personal data spaces

Keywords mentioned that are crucial to create effective personal data spaces:

- Skills
- Trust: very important, transversal
- Transparency
- Best practices models
- Re-use
- Auditability
- Participation
- Sovereignty
- Agency
- Data portability
- Participation
- Value flow
- Value proposition

Further elaboration on the concept of personal data spaces:

- In Europe, personal data spaces have a societal concept that prioritises data protection, security and privacy.
- This lies in contrast with the American concept that often focuses on the commercial value of personal data.
- By using personal data spaces in Europe, individuals can gain greater control and ownership over their personal data.
- Most people use software without considering transparency and the ethical usage of their data because they prioritise the value of the services.
- Trust is not just a differentiator but a reason for change.

- Personal data spaces prioritise the convenience and user needs, putting them at the core of their design.
- By organising personal data spaces around people, they can better serve the interests of the individual, allowing for greater participation and value flow.
- A value proposition that is convenient and meets people's needs is essential, requiring organisations to be committed to serving their customers.
- To fully represent a person as a holistic individual (virtual/digital twin), it is essential to go beyond the current capabilities by leveraging data to enable new use cases.
- Human agency is important to ensure self-sovereign reasoning and decision-making translated into permission setting. Proactiveness of the individual.
- To enhance human agency, it is imperative to employ AI or virtual agents that are adaptable to individuals' preferences and attitudes, as the willingness of people varies greatly. (active-explicit/passive-implicit consent, granular/aggregated consent).
- Consent management should be context-aware. Link to behavioural reasoning.
- Is there a need for a centralised virtual agent?
- Debate about the need for AI to self-learn and propose or even take decisions for the individuals.
- The counterpart of human agency is a protection mechanism, establishing common principles for sharing data (limits for what is allowed).
- There is a risk to building a value proposition for some people which cannot be applied to every citizen (different levels of maturity).
- Protection can also help to make consent decisions for the people, with the ability, as a fall-back option, to go further into the details. This requires trust in the decision-maker.
- Who will decide what the rules are regarding personal data handling? Need for more steering from the EC (according to Slovenia).
- Case of The Netherlands where such protection rules could be taken by an association of consumers.
- It's important to ensure security by design and prevent a single point of failure.

- One effective approach to introducing personal data spaces is to highlight how they differ from the currently available personal data space options.

Marcelle Grita on how parties in a personal data space can sustain their operation

Marcello led the discussion on the different types of sustainable business models.

Business-to-consumer

- This is a basic business model.
- There is a need for an ecosystem of applications to create value for the end user. The business model's interoperability aspect is of utmost importance.
- The end user pays for the service provided by the data space enabler. This is analog, for example to a current mobile phone description where you pay for the transfer of data.
- Data storage could be part of the business model, with or without an additional service. It is all about the action applied on the data.
- The relationship with the data rights holder & end-user is direct.
- A data space enabler storing my data, similar to the services Dropbox is providing.
- The Data Utility Company (DUC) provides the end-users with their Pod. Nevertheless, other players in the ecosystem provide the application. The individual does see the intermediary, here Digital Flanders (My Citizens profile).
- In this business model, the service is directly provided to the right holder, who pays for the service (e.g. the business model of CozyCloud).

Business-to-Business-to-Consumer (B2B2C) or Business-to-Government-to-Consumer (B2G2C)

- A distinction between both scenarios is made because of the level of regulations a government is prone to.

- In the B2G2C scenario, it is still the taxpayer and thus end-user who is paying for the system.
- One can see an application as the data intermediary.
- The middle party may combine multiple services.
- There might be multiple Data Space Enablers. A Data Space Enabler might exist out of multiple service providers.
- A data intermediary is a gathering of multiple Data Space Enablers, like a job board.
- A data intermediary is building and providing the service directly to the end-user.
- Use Case: Notary who aggregates data and provides a DropBox where an end-user can retrieve the required data.
More information: [IZIMI](#)
 - It is a professional organisation, paid by the notaries, not by the government.
- The business model of a data intermediary is infrastructure (technical).
- How can a middle party sustain their business?
 - Government: Paid by tax money in order to provide a societal service.
 - Private: Need for an end-to-end model where the end-user is willing to pay, i.e. a transactional model. Every actor in the ecosystem will earn some money.
Everyone can provide these services.
- This model applies for every data space. What does this mean for a personal data space?
- If a person is a data intermediary, they can manage their data and add to the data value chain.
- The Data Utility Company (DUC) provides a direct relationship to the end-user, they are a Data Space enabler as in scenario 1. If there is a middle party, the (DUC) is a data space enabler in scenario 2.
- The data intermediary has the relationship with the end-user and might have a relationship with the data space provider and might have a relationship with data rights holders.
- The City of Helsinki has the rights of ownership over citizens data. Therefore, they provide services, as a data intermediary, to the citizens of the City of Helsinki. The City does also define rules by which extent the data might be used by which types of stakeholders.

- The City of Helsinki would pay money to stakeholders who provide services to stakeholders who prevent, for example, health issues.
- A government would need to receive a service from a stakeholder. The aggregation (access, control, sharing capabilities, ...) happens by the governmental body.
- How does an intermediary sustain this business model?
- An example of a data intermediary is a bank. They do not have the infrastructure, but they provide the service to the end-user. The bank is the only party an end-user sees.
- If the role of the intermediary is infrastructure, are they an intermediary or a broker? From a DGA point of view, if the intermediary has to buy or pay for data.
 - Data intermediary pays for the infrastructure, not for the data.
- Who is legally responsible for a data leak?
 - Not heard the answer
- Not all MyData operators who provide infrastructures can be intermediaries in this setup.
- In Gaia-X, you have the infrastructure providers.
- If you are facing the customer, you are a B2C. If not, you are a B2B.
- The DGA defines that you may act in the name of the data holder.
- Relationship is described clearly in article 12 of the DGA.
- The data space needs to have a function of control.
- Meeco is an intermediary. The data space enabler is not clear to this group, because Meeco is also provided the infrastructure.

Data intermediary business model

- Can a data intermediary receive money from the right owner?
 - To some extent yes, to some extent no.
 - The European Commission has identified that they cannot receive payments from the right users.
 - Request a payment from the data receiver (data provider).

	<ul style="list-style-type: none"> ○ Request a payment from the data holder (more controversial).
<p>13:00 – 14:00 Lunch</p>	
<p>14:00 – 16:45 Roadmapping</p>	<p>Florian explained the roadmapping session. The objective of the roadmapping session is to determine specific, tangible actions to be taken in the short, middle, and long term. This involves establishing priorities, identifying key milestones, and creating a timeline for implementation. The resulting roadmap should provide a clear and actionable plan for the future, guiding decision-making and resource allocation.</p> <p>Raf Buyle:</p> <ul style="list-style-type: none"> ● There are already different initiatives investing in defining roles such as IDSA, DSSC, Gaia-X, MyData,... ● The different roles require a lot of work from the Member States, namely trying to implement these roles. ● The idea is to do a first exercise, make a document, create a diagram with an overview of different roles and the links between the roles and the legal frameworks. ● This document is a starting point for the different member states, and for them to contact the EC. ● The mapping exercise is based on existing initiatives. ● Please share information, we will create a wrap-up in the form of a provocation document. ● The exercise will include an online workshop by the end of April during which the provocation document will be discussed. ● After the workshop, a human and machine-readable summary will be shared. <p>Paul Theyskens:</p> <ul style="list-style-type: none"> ● Training of DPOs to view the personal data spaces as an opportunity.

- eIDAS roll-out throughout Europe, seen as the enabler of data roaming.
- Silos of wallets not connected yet to the data vaults and pods.
- Need for connection of the different policy silos.
- DGA in contradiction with laws at national level, need for alignment between the different levels of legislation.

Max Leonard:

- A lot of work on the technological part was done as part of the second workshop in Ispra.
- As soon as we can, we should move from PoCs to pilots.
- As part of this community, we should consider how to make it possible to have multiple vendors involved without having the complexity of diversity amongst them.
- How can the European Commission help to encourage semantic interoperability?
- Data altruism: the practice of voluntarily sharing personal data for the common good.

Marcello Grita:

- The goal of the session is to collect all the thoughts and requirements. Find where demand is and incentivize demand.
- A lot of PoC end up in the drawer.
- When there is a lot of funding/subsidising, we have the false sense of an existing market that disappears when the funding is cut off.
- Look at the market and try to understand how value is being created today. Focus groups can be a way of doing so.
- To create sustainable business models, we should consider the business case.
- An option is to do a roadtour across Europe, which will initiate a feedback loop.
- Everything will have a digital counterpart in the future, getting divorced, married, born,...
- The tender should be more practical, rather than only a PoC.
- Upcoming is the DPP: Digital Product Passport.
- To increase the rate of adoption, it is necessary to reduce the integration costs (as was done in open banking).

	<ul style="list-style-type: none"> ● Personal data space stakeholders should make a distinction between inputted, generated, and inferred data.
<p>16:45 – 17:00 Summary & next steps</p>	<p>The inputs of the three different sessions were regrouped by the time frame during which they could be realised. A distinction was made between actions on short term (< 6 months), middle term (< 1 year) and on long term (< 2 year (before September 2024)).</p> <p>The idea is to start making connections between the identified action points and afterwards drill it down to the most actionable actions. A comprehensive list of specific actions can be found in the accompanying spreadsheet.</p> <p>Legal:</p> <p>Short term:</p> <ul style="list-style-type: none"> ● Mapping of roles. ● There is a need to involve different profiles with different backgrounds. <p>Middle term:</p> <ul style="list-style-type: none"> ● Raising awareness of the activities. People need to see the value. ● DPOs, decision makers, individuals should look at this from an opportunity POV. ● Grouping of practical interpretations/implementations in order to have a better understanding, also for new joiners in the field. ● Assessment of regional, national and European Law. ● Common ground: bringing actors together to agree on minimum level. <p>Long term:</p> <ul style="list-style-type: none"> ● Data subject to go from a passive role to an active role, in control of its own data. <p>Technological & functional</p>

Short term:

- Common requirements and capabilities; which ontologies, data models,...
- Continuing implementation of business use cases.
- [Prometheus-X](#)
- Data spaces involved in the Olympics, Paris 2024.

Middle term:

- Improve the cross-over between AI, language models, etc. and data spaces.
- Build bridges between data spaces and interoperability.
- Finding sponsorship.

Long term:

- Implementation in browsers.

Business & Operational

Short term:

- Visibility; promotion of our activities
- Clarity
- Creation of focus groups
- Highlighting success stories
- Lessons learned
- Create list of concrete issues + owners of the issues
- Stimulate MVP creation instead of PoC

Middle term:

- Proposal to have a road tour across Europe to identify solutions
- Promote the road tour to create awareness
- Create 360 degrees guide: technical, practical, and legal aspects
- Reduce cost of adoption by creating a common layer (technical, semantical,...) that everyone can relate to.
- DPP: Digital Product Passport

	<p>Long term:</p> <ul style="list-style-type: none">• The current market response for accessing data is often a data dump. In personal data spaces, accessing data is key and thus is data access control. To establish an interoperable data access control mechanism, legislative support will be needed.
<p>17:00 - ... Networking drinks</p>	