

SMART CITIES AND COMMUNITIES TRACK

The DataVaults Personal Data Space



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DataVaults Facts

Topic: ICT-13-2018-2019 Supporting the emergence of data markets and the data economy

Start Date **01/01/2020**

17 Partners
Coordinator: Fraunhofer FOKUS

A platform that has personal data, coming from diverse sources in its centre

40 Months

9 Countries

Offering secure, trusted and privacy preserving mechanisms to individuals who can:

Innovation Action

5 Demonstrators

Miv Se Andaman ? 🍎

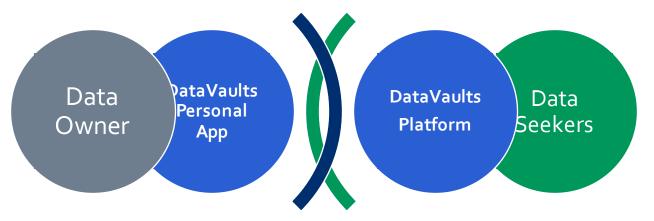
- take ownership and control of their data
- share them at will, through flexible data sharing and fair compensation schemes with other entities



DataVaults* in a NutShell

- A "data marketplace" driven by Individual (Data Owners) who collect their data, place a price tag on them and share them with Intersted Parties (Data Seekers)
- Very high Control of what is shared, how, with whom (setting data access policies) and under which conditions (encrypted, anonymised, aggregated as part of larger sets, etc).

A twin ledger approach, with an intermediate entity



*A "mini" Personal Data Space https://www.datavaults.eu



Our Main Stakeholders

Data Owners (Providers)

 Individuals who are able to extract, collect and securely store their <u>personal data</u> and <u>share</u> them, <u>taking control</u> of their usage.

Data Seekers (Consumers)

 Economic Operators who can <u>explore extracts or metadata</u>, <u>request access</u> to personal data and <u>perform analyses</u>



Value in DataVaults

A personal data space can generate value for both ends of the chain

- **Data Owners** (individuals) can enjoy value either as direct compensation (monetary or not), or indirect (e.g. better/more personalised services as a consequence of having their data analysed)
- **Data Seekers** can use these data for building new services or improve existing ones, and build new products/services, tartgeting both individuals and other enterprises as well
- **Data Space Operator** (broker), who can get a <u>commission</u> for each transaction <u>and offer added value services to data seekers</u> (e.g. ready made analyses, data aggregations, etc.)

Business Model build around this logic



Functionality/Technology

Data Interoperability and Privacy, as well as Auditable Transactions are very valuable for the users

- Data Sourcing and Interoperability:
 - Data Fetcher able to transform data from external APIs into structured data assets.
 - RDF powered DataVaults Schema that can be extended
- Trust Generating Services:
 - Anonymiser for increasing Data privacy
 - Access Policy Editor and Engine compliant with ODRL
 - Combination of Private and Public Ledger using the GoQuorum ledger implementation

Definition of Value of Data to be traded?

- How can prices be set?
- How can we track the value a data asset is generating in the "secondary" market or in products/services that use it?

What we need for such data spaces

- Tools/Methods to track the value they generate and propose fair value of datasets
- Ways to incentivise to share more data







Lessons Learned so Far

- Sourcing Data is a Challenge!
- Trust and Security Aspects are the cornerstones of such a Data Space
- Compliance with legislation is equally important (and mandatory)
- Definition/Assessment of the value of Data is hard





Thank you!

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