

Are users ready for this? The potential of Personal Data Stores in Flanders

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Personal Data Stores (PDS) have emerged as a response to the growing power imbalances over personal data between large (tech) institutions & individual users. One PDS framework called Solid (Social Linked Data) has garnered attention from both industry and academic organizations. So far, a lot of research has focused on the technical capabilities, but very little is known about the perception of PDS by (future) users. In this document, we summarize the results of the 2nd SOLIDMonitor, as presented at the 2024 Solid Symposium. The SOLIDMonitor is an annual report summarizing the results of a large-scale survey conducted with approximately 2,500 Flemings. The sample is representative of the population in terms of gender and age. It is intended to give more insight into the privacy and data-sharing attitudes of Flemish people and the adoption potential of PDS in Flanders.

Privacy- and data sharing

The survey reveals a significant level of concern among Flemings regarding online privacy. A staggering 65% express worry about their online privacy, highlighting a pervasive sense of unease. Eight in 10 Flemings find organisations to be insufficiently transparent about personal data collection, and seven in 10 feel they can exert little control over their personal information online. Flemings seem to have accepted to a degree that data sharing comes with a level of unease and uncertainty. A quarter shows cynical characteristics towards online privacy protection, reflecting feelings of resignation. Consequently, there is a strong expectation for robust legal protection against misuse and mandated obligations to safeguard personal data. These results underscore the urgent need for greater transparency, control, and regulatory measures regarding the use of personal data.

Distrust in Internet Companies is on the rise as 83% agrees that Internet Companies only care about their own gain and ‘they can do with our data whatever they want’ (64%). Hospitals and other healthcare providers are the most trusted organizations with personal data (80%). They also enjoy the highest trust (65%) as potential PDS providers.

Governmental institutions (Flemish and local government 65%; Federal 62%) took a knock, together with financial institutions (banks & credit companies 59%; insurance companies 52%). International Big Tech (13%) enjoy very little levels of trust, while Social Media Companies are considered the least trusted (5%).

Personal Data Store (PDS)

In the survey, respondents were asked to carefully read a representation text on Personal Data Stores. They were then asked questions on the characteristics of PDS and the attitude towards PDS use in general.

Overall, 7 out of 10 Flemings favor the use of personal data stores, while 5 out of 10 see them using it in the future. Flemish people still observe PDS as a story of privacy and data control as they rate this the most important feature of PDS. Storage and security ended up in second place closely followed by 'authentication'. Innovative applications made possible by PDS currently appeal the least to Flemings, but this may be explained by a lack of imagination in possible innovations.

Respondents were also asked to assess 2 use case scenarios (randomly assigned, but evenly distributed) out of a list of 6 use case scenarios. Domain-specific applications were presented for health, finance, HR, media, home, and mobility. Among these, the health use case garnered the broadest support, with 48% of respondents expressing approval. The home use case also saw significant endorsement, convincing 34% of participants. In contrast, the other use cases each received support from approximately a quarter of the Flemish population. These findings indicate a varying degree of acceptance and support for different domain-specific applications, with health and home use cases leading the way.

PDS Profiles

Finally, a (Bayesian) Gaussian Mixture Model was applied on the data to distinguish 4 groups of PDS Profiles. These were then assessed on 4 main characteristics: General attitude towards technology, attitude towards privacy, level of institutional trust and general attitude towards privacy. The 4 profiles can be described as follows:

- **Privacy Pioneers (25%):** This group has a positive attitude towards technology, is technically proficient, and welcomes innovation. However, they are critical of technology and concerned about online privacy. They are highly motivated to use Personal Data Stores for greater control over their personal data.
- **Suspicious Stragglers (23%):** These individuals struggle with digitalization and innovation, exhibiting the highest distrust of digital evolution. Despite sharing privacy concerns with Pioneers, they believe few measures could ease their discomfort with data sharing. Personal Data Stores are seen as another complex change, lacking efficacy in their view.
- **Promiscuous Passionates (28%):** Extremely comfortable and skilled in the digital world, this group embraces innovation. They are less concerned about online privacy but support transparency and control over personal data. They are the most positive about Personal Data Stores, driven by curiosity about their potential benefits.
- **Worriless Weathercocks (24%):** This group feels less skilled with new technology but is not particularly distrustful of change. They are the least concerned about online privacy and often have a resigned attitude towards data protection. They are

open to Personal Data Stores, adopting an opportunistic stance without an immediate driver for adoption, yet they are willing to give the idea a chance.

Check out your own profile @ <https://www.imec.jouwdataprotiel.be/en>

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