In search of a (new) balance between data sharing and data protection in light of semantic interoperability

Short abstract of a talk at Solid Symposium, Leuven, May 2nd 2024

Gathering knowledge in the European Internal Market should be as simple and quick as planning a cinema visit via the Internet. Different types of data (location, starring actors, ratings, prices, ...) from different information sources are thus linked in a single search result and finally combined into knowledge to allow an informed decision about a cinema visit. Similarly, the EU envisages an easily searchable infrastructure of Data Spaces consisting of an amalgam of linked data from different storage locations. Semantic interoperability is indispensable here and sets the stage for a broader evolution in data sharing. In doing so, computer systems are able to understand relationships between data and then link them together, making it easy to integrate data scattered across different storage locations in an environment such as a Data Space. The emphasis here is no longer just on sharing data, but also on sharing knowledge extracted from that data.

The General Data Protection Regulation (GDPR) is based on a paradigm whose distinctive focus on the individual and the concept of data do not at first glance match the features that semantic data sharing offers. Although the call for a new paradigm has been heard for some time, it becomes even more topical and tangible in a semantic context such as, for example, Data Spaces.

The broader evolution in data sharing that the features of semantic interoperability entail in the light of the current data protection paradigm has not been sufficiently explored by legal scholars. Moreover, the contrast between the two contexts of data sharing is similar to existing concerns regarding the current data protection paradigm. Semantic data sharing, however, makes these concerns even more urgent and tangible and requires a future-proof data protection paradigm to avoid suboptimal legal choices.

The aim of this presentation is therefore to launch a multidisciplinary debate on the broader future of data protection, where certain concepts in the GDPR may be reinterpreted or even modified or enforced differently in light of a broader semantic evolution in data sharing. A new paradigm for data protection in the context of semantic data interoperability contributes to the achievement of EU goals for the deployment of Data Spaces. Moreover, it benefits a wide range of stakeholders, including legislators, policymakers, enforcement agencies, providers and users of (personal) Data Spaces and academics. Contact: michiel.fierens@kuleuven.be