

In summary, Article 25 of the European Union's requires the integration of the essential principles of data protection into the design and development of systems for processing personally identifiable data (Bygrave, 2017). Pseudonymisation is one of the mechanisms recommended by the regulation to protect personal data. With pseudonymisation, the direct identifiers are replaced by a pseudonym. While a table of data linking pseudonyms and identifiers is stored or held at a separate secure location. For example, pseudonymisation of the data in the instance of visits to healthcare facilities would have replaced the patient's name, family name, and address by random number. Pseudonymisation does not equate to anonymity because there is still a possibility to link the pseudonym to an individual's data. For instance, the security of the table that holds the mappings of the aliases to original data that was detached and replaced with pseudonyms is crucial in protecting the complete record of an individual's data.

Pikulik (2019) recommends encryption over pseudonymisation as the safest technique to secure data. He argues that encryption renders the data unintelligible to those who are not authorised to access it, even in the event of a data breach. I concur with this argument because this eliminates the need to have a table that holds the mappings of data to aliases. The table introduces a risk that needs measuring and managing by the data controller. However, pseudonymisation is relevant and applicable in the case of maintaining 'a need to know' technique. For example, a doctor issues an electronic script to the pharmacist. The pharmacist only needs to see the information that enables administering the required medicine; personal information that identifies the patient, such as full names, must not be disclosed.

References :

Bygrave, L. A. (2017) 'Data Protection by Design and by Default : Deciphering the EU's Legislative Requirements', *Oslo Law Review*, 1(02), pp. 105–120. doi: 10.18261/issn.2387-3299-2017-02-03.

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