



National Research
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Big data, grey literature and personal data protection. A crucial impact on social life

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Grey literature and Big Data

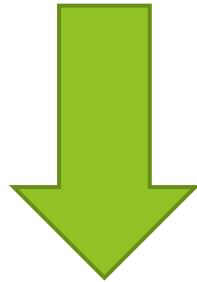
- ▶ Grey literature management in large and distributed organizations can leverage Big Data technologies for:
 - ▶ acquisition
 - ▶ storage
 - ▶ Processing and knowledge extraction

Digital preservation systems

- ▶ In several countries Public Administrations and private companies must guarantee Long Term Preservation for many different types of Digital Objects
- ▶ This can be done in house or acquiring ad hoc services from external providers.

Grey literature and personal data

Grey literature includes many types of documents, structured and unstructured



A Grey literature management system can potentially store all kinds of personal data

Data circulation: pros and cons

Data circulation fuels economy by stimulating research and breeding new ideas.

BUT

can cause harm to individuals and organizations when personal (or confidential) data are used for illegal purposes

General Data Protection Regulation

- ▶ In 2016 EU issued the General Data Protection Regulation (EU regulation n. 2016/679)
- ▶ The goal is to favour data circulation by providing a solid legal framework which protects individuals from malicious usage of personal data
- ▶ It aims at harmonizing national laws in EU countries and defining rules for data export in non EU countries

Principles

- ▶ Consent acquisition
- ▶ Accountability of the controller
- ▶ Data Protection officer
- ▶ Risk based approach
- ▶ Privacy by design
- ▶ Automatic data processing limits

Organisational measures

- ▶ An optimization of cybersecurity must be completed by a good privacy policy and data protection: awareness about which data must be stored and their level of truthness in order not to violate people's privacy
- ▶ A good SI (Security Intelligence) management and a good organization are equally to be pursued
- ▶ Dissemination, divulgation and constant updating about European normatives, rules and informatives, which have to be synchronized together

Organizational measures: the main actors and roles

- ▶ Data Controller: holder of data treatment (in all EU members)
- ▶ Data Processor: responsible of data treatment
- ▶ DPO: Data Protection Officer (EU Regulation 2016/679). Art.39. Mandatory for Public Administrations and firms with large scale of sensitive data treatment or involving **large scale**, regular and systematic monitoring of individuals (e.g.: an hospital processing large sets of sensitive data, Scientific laboratory **Research and patents**);
- ▶ Systems Administrators: though not cited by EU Regulations, are important figures to guard security risk and demonstrate responsibility degree

Organizational/Technical measures

- ▶ Register of data breaches according to Data breach response and notification procedure
- ▶ Creation and updating of cybersecurity breach procedures for immediate notification and in order to determine the entity of the damage and the individuals affected;
- ▶ Establishing parameters for risk evaluation and people responsible for making decisions

GDPR: main Social impact and effects

- ▶ Personal data protection and privacy of EU citizens as a fundamental human right
- ▶ **Right to delete any personal data**, is now always possible even if it has not public interest
- ▶ It's important to determine which are sensitive data (a broader number of cases including, for example, the association to a trade union reported in a pay stub)
- ▶ → **focus on social media, cyberbullying, Google and personal accounts**
- ▶ breaches impacting on the levels of trust between organisations and customers (organisations breaching citizens' trust will find an increasing commercial disadvantage)

References

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