

T4Data Project

Rising to the Challenge: A Look at Data Protection and Beyond

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Artificial Intelligence: Challenges, Uncertainties, and Possible Remedies

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Challenges and uncertainties



The new spring of AI

- An ongoing process: Real world beyond the hype
- General Artificial Intelligence v. decision support (or automated decision) systems
- Legal personality theories and concrete approaches
- The end of the dichotomy *Robots v. AI* (?): Focus on decision-making
- The end of machine (?): Human factor in AI



Addressing AI challenges: From Transparency to risk assessment

Transparency: A limited impact

- What is the logic of the algorithm (input/output, variables and weight, architecture)?
- Complexity (explicability): Dynamic structure, available resources
- Access to the algorithm: IP and competition, competing interests (e.g. predictive policing), potential conflict with the security obligations of data controllers
- Transparency for who? Transparency as an element of risk assessment
- Central role of risk assessment in complex technology systems and role of self-determination





- Risk assessment and AI
 - Bias (methodology, datasets, data sources e.g. selection bias, data scientists)
 - Decontextualization (data and models)
 - Comparison between AI/human decisions
- GDPR
 - Practice: Focus on data quality & data security
 - Potential broader outcomes: Impact on HRs and social issues (Recitals 4, 71, 75; Art. 35), involvement of data subjects
 - Unresolved issues: Exercise of specific data subject's rights, collective dimension, self-determination, broader approach and interplay between different regulatory frameworks

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As-Is: Contextualising the existing rules
(A Look at Data Protection and Beyond)



The Guidelines on AI and Data protection (Council of Europe, 2019)

- A legal framework consistent with the GDPR (Convention 108+)
- Human-centered approach: Human rights and fundamental freedoms
- A set of baseline measures for governments, AI developers, manufacturers, and service providers
- Key elements
 - A broad view of the possible outcomes of data use, encompassing social and ethical values (see also Guidelines on Big Data)
 - Values-oriented approach
 - By-design approach (Human Rights-by design)



- Data quality
 - Bias prevention and detection
 - Data minimization (reducing unnecessary, redundant or marginal data; use of synthetic data)
- Risk management
 - Role of committees of experts
 - Participatory approach (risk assessment, public debate)
 - Algorithm vigilance
- Freedom
 - Freedom of the human decision-maker (human factor in decision-making)
 - Freedom of choice of AI users (“providing feasible alternatives to AI applications”)



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To-Be: New rules for AI

(A Look at Data Protection and Beyond)



Regulating AI and The Law of the Horse

- The existing regulatory framework: Human rights, product liability, data protection etc.
- The crisis of the categories shaped in the 1970s and 1980s (data protection, product liability, antitrust)
- New challenges: Collective dimension, power imbalance in HRI, allocation of responsibilities
- Difficulties and constraints in redesigning the basis of the regulatory framework



- Contextualisation of existing rights (e.g. discrimination)
- Focus on the collective dimension
- Sector-specific v. general approach
- Technology/social changes and flexibility of regulatory models
- Principles-based regulation and co-regulation
- Focus on risks
- Participation
- Cooperation between different authorities and supervisory bodies



Regulating AI through ethics

- Context-dependent nature of ethical values
- Risks of a 'transplant' of ethical values
- Diversity between available ethical frameworks
- Ethics and law: Risks of an improper overlapping, complementary role of ethics
- Risk of misuse of ethics



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