UNIVERSITY OF AMSTERDAM
Institute for Information Law

Summary of the research on
Information Law and the Digital Transformation of the University

For centuries public universities have been endowed with academic freedoms and institutional autonomy to promote scientific advancement in the interest of society. By carrying out research universities and academics make fundamental and incremental contributions to science and knowledge production across many scientific domains. In step with the digital transformation of society, universities are expected to fully utilise the potential of digital infrastructures and data for scientific research and education. This comes with challenges and new dependencies. In order to safeguard universities as independent, and public interest driven knowledge institutions, it is essential to safeguard and promote academic freedoms in the digital age.

The research project "Information Law and the Digital Transformation of the University" addressed three questions:

- What does 'digital sovereignty' mean for universities in light of their public mission and values?
- How can the rapidly developing body of European Union law cater better to needs of scientific research?
- How can researchers' access to third-party data to conduct scientific research be improved?

The research project was commissioned by the Executive Board of the University of Amsterdam and executed by a research team from the Institute of Information Law (IViR).

What does 'digital sovereignty' mean for universities?

The digital transformation of universities is now largely driven by the adoption of technologies produced in (global) markets. Commonly, many digital technologies and services used in the university sector are supplied by commercial entities. Universities' increasing reliance on commercial suppliers means the external influence on universities' digital designs and academic practices grows. This despite the major role universities have played in the advancement of information technologies and the creation of shared infrastructures for scientific research.

The concentration of digital infrastructures, and the data within, in the hands of powerful corporate entities bears the risk that academic values on which universities are founded will erode. It moreover leads to dependencies when it is costly and difficult to change suppliers or when digital services are not operating optimally together. Another concern is that personal and other data from universities' digital environment are extracted for suppliers' economic gains, as is for instance the case with commercially supplied publication repositories or the collection of detailed data logging the use of a services.

Such risks have prompted universities' calls for 'digital sovereignty'. When universities and academics cannot take autonomous decisions and actions regarding digital infrastructures and data, their digital sovereignty is threatened. A sufficient degree of digital sovereignty is a precondition for universities to realise the academic values they are founded on and to uphold their public function as autonomous knowledge producers in the digital era.

Recommendations

In light of the findings, the study recommends that universities:

- **Develop a procurement framework that integrates the safeguarding of academic values**; tools can include lock-in risk assessments, data protection impact assessments and compliance audits;
- **Produce shared knowledge about legal and technical assessments** of frequently procured digital services and infrastructures and team up as a sector to increase negotiation power vis-à-vis large suppliers of digital services and infrastructures;
- **Promote services and technologies developed with academic values and the public interest in mind** and diversify the digital portfolio where possible.

How can European Union law cater better to the needs of scientific research?

The European Union (EU) exercises increasing influence on the conditions under which universities and academics carry out public interest-oriented scientific research. EU legislation constructs the European Research Area, implements Europe's Open Science Policy, and sets up the European Open Science Cloud.
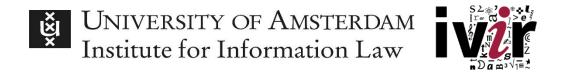
Besides, a fast-growing body of EU digital and data legislation seeks to regulate the data economy, e.g. Digital Services Act, Open Data Directive, Data Governance Act, and the upcoming Data Act and AI Act. These laws directly and indirectly affect scientific research activities, however, not always they have been conceived with scientific research in mind.

All this makes the European Union an important venue for putting the freedom of sciences and the right to research centre-stage in EU law and policy. Yet, scientific research is not coherently addressed. There is only piecemeal recognition of scientific research activities across EU digital and data legislation, with contradictory concepts of what constitutes research and research organizations. This makes legal compliance for universities and academic researchers unnecessarily complex and leaves needs unaddressed.

Recommendations

In light of the findings, the study recommends law- and policymakers to:

- **Adopt a consistent notion and definition of scientific research across legislation** which emphasises the public-interest nature of scientific research and its adherence to recognised ethical standards of scientific research and open science;

- **Continually assess and address the internal coherence** of EU data and digital legislation from the perspective of promoting scientific research;
- **Give broad recognition to scientific freedom as a cross-cutting policy issue** that transcends the EU's Open Science Policy and elevates the objectives of scientific research throughout the EU's policy cycle.

Researchers' ability and rights to access third party-held data

The digitisation of society makes it crucial to be able to observe and understand how data and digital infrastructures intermediate the world around us. Yet, while the amount of data being generated in our society is growing exponentially, (academic) researchers are facing increasing obstacles to access that data and observe digital phenomena. The lack of clear transparency and data access rights for academic research, challenges universities' core missions as public interest-driven knowledge producers and watchdogs.

Our empirical research demonstrates that researchers are confronted with many legal uncertainties when trying to access and use third-party data for their work. This is concerning, as the reliance on third-party data for academic research is said to increase in the coming years. We identify a particular need among academic researchers for improved legal guidance, robust data (sharing) infrastructures, and institutional support more broadly.
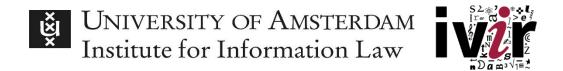
Recently, a range of data access and transparency provisions has emerged throughout new EU legal frameworks addressing digital infrastructures such as online platforms. In most cases these provisions are not designed with academia's interests and mission in mind. One notable exception is Article 40 of the Digital Services Act, which sets out a right for academic researchers to obtain access to any data from 'very large online platforms' under certain conditions. Other data access and transparency provisions scattered throughout new EU 'data laws' show varying potential, notably by providing opportunities for 'data donation' or otherwise contributing to an enabling environment for data sharing beneficial to academic research. Still, a lot of questions remain as to the specific operationalisation of these provisions.

Recommendations

Considering the findings described above, this report advises universities to:
- **Invest in legal, methodological, and technical capacity** to enable the best use of transparency and data access provisions as laid down in EU law and share knowledge, best practices and experiences across departments and institutions;
- **Promote the explicit recognition of scientific research objectives** in the adoption and implementation of transparency and data access provisions in EU and its Member States' laws.

Due to the limits of what universities can do to improve the conditions for researchers' data access, this report recommends law- and policymakers to:

- **Give better recognition to enabling scientific research in digital law- and policymaking** by providing academic researchers with the ability to access third party-held data under the transparency provisions of EU legislation for public interest-oriented scientific research;
- **Provide more clarity about the scope, breadth and application of data access rights** which are conducive to the aim of enabling public interest-oriented scientific research and avoiding its undue obstruction;
- **Continue to invest in public technical infrastructures and tools to facilitate data access** that can be deployed by (academic) researchers to operationalise transparency and data access provisions.

Read the full reports:

Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023.
https://www.ivir.nl/part-i-digital-sovereignty/

Arnold Roosendaal, 'The GDPR as a means to protect digital sovereignty of universities' (Expert Memo), Amsterdam: September 2023.
 https://www.ivir.nl/expert-memo

Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part II. Access to Data for Research. Amsterdam: September 2023.
https://www.ivir.nl/part-ii-access-to-data-for-research/

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