



**e-SIDES**

# Privacy-preserving technologies in a data-driven society

*Daniel Bachlechner, Fraunhofer*

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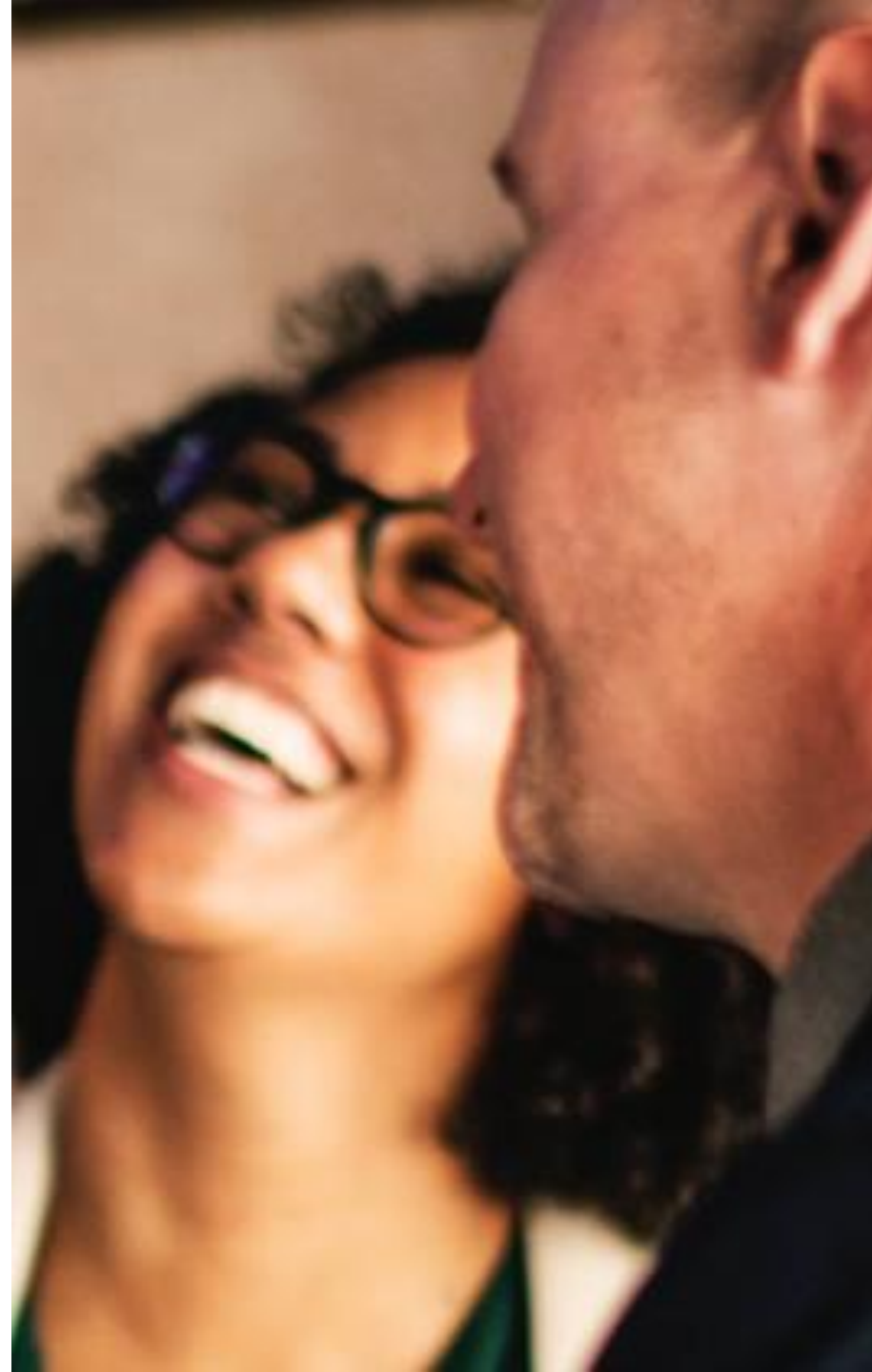
Source: <https://www.ethicalsocietymr.org/upcoming-events.html>



ANALYZE  
THE  
FUTURE



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# Objectives and methods

## Key objectives

Reach a common vision for an **ethically sound approach** to data use and facilitate **responsible research and innovation**

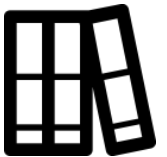


Improve the **dialogue between stakeholders** and increase the **confidence of citizens** in data technologies and use



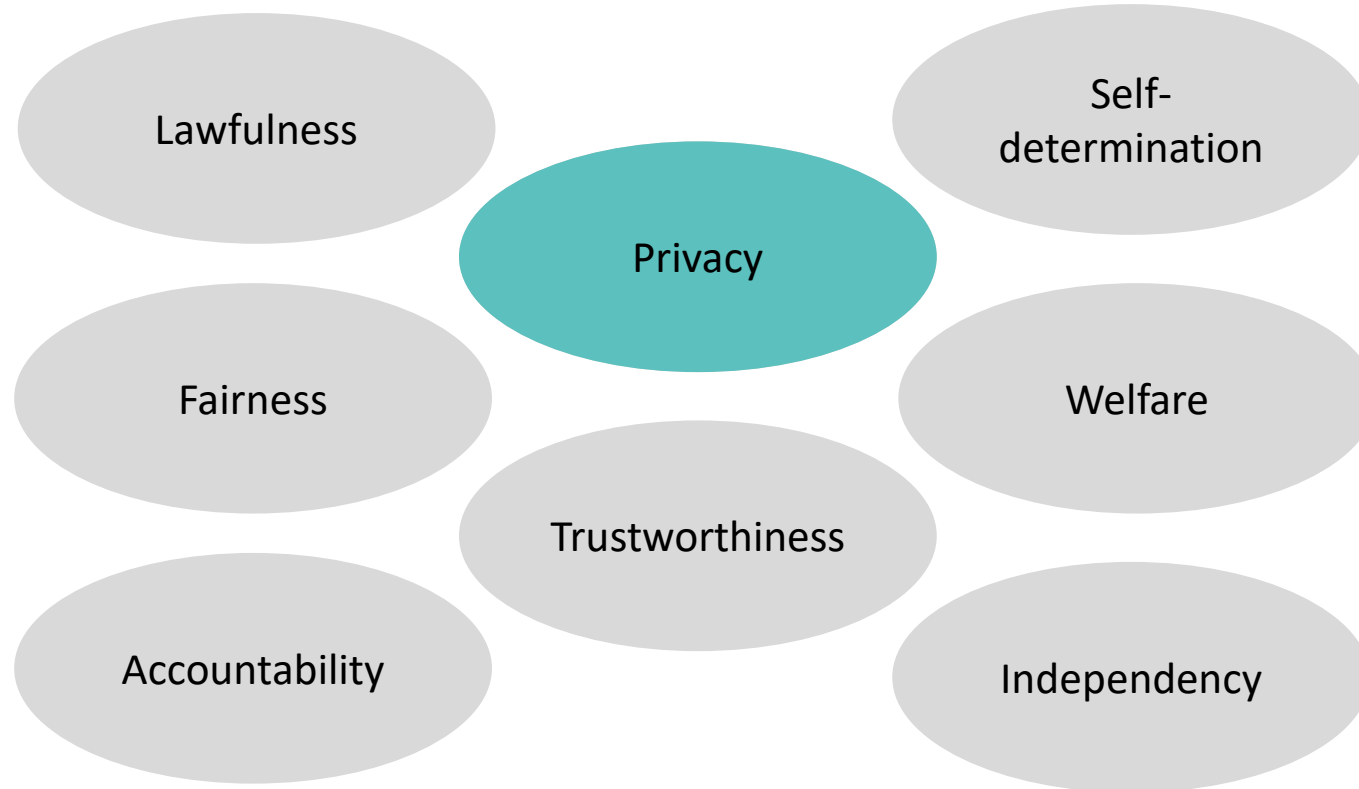
## Main methods

- Investigation of **related projects** through joint workshops, interviews and website analyses
- Collection of insight from **renowned experts** with different backgrounds through workshops and interviews
- Review of more than 200 **articles** including academic papers and study reports
- Interaction with a **diverse set of stakeholders** by means of a collaborative platform



# Results

*What issues may occur  
in the context of data-driven applications?*



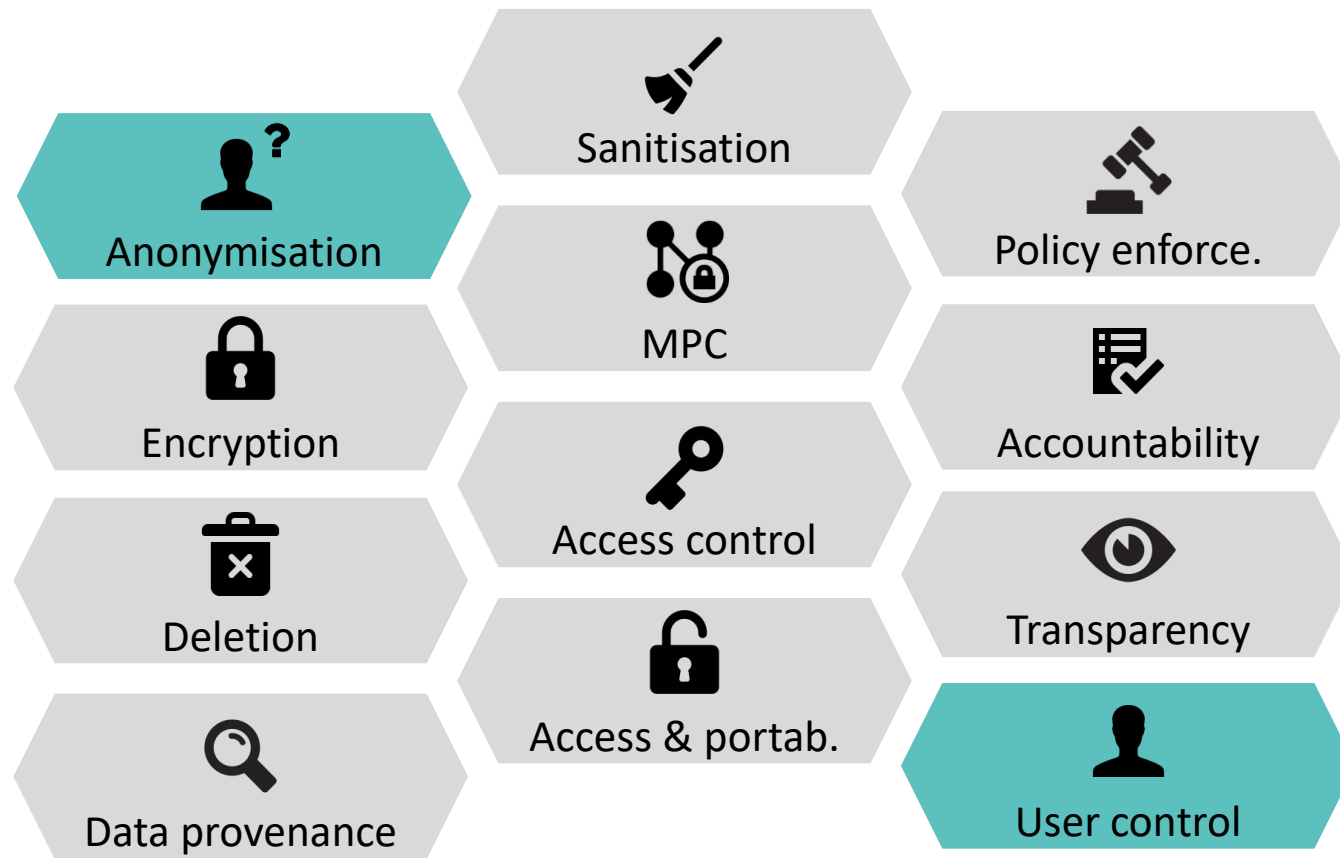
Resources: D2.2, white paper

## 1) Identify ethical and societal issues

- 2) Identify existing technologies
- 3) Assess existing technologies
- 4) Conduct a gap analysis
- 5) Identify design requirements
- 6) Assess solutions under development
- 7) Identify implementation barriers
- 8) Make recommendations

# Results

*How can they be addressed using technology?*



Resources: D3.1, white paper

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# Results

*Does current technology meet the needs?*

## *Specific assessment*

Comprehensive set
<b>Combination needed</b>
Different aims
Multidimensional measure needed
Tension between objectives

## *General assessment*

Limited integration
Low demand
<b>Regional differences</b>
Combination with non technical measures needed
Unclear responsibilities

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Resources: D3.2, white paper, WISP publication

# Results

*Which aspects of data-driven solutions still need to be improved?*

## *Ethical/legal*

Privacy-by-design

Sensitive data

Inferred data

Liability and responsibility

## *Societal/economic*

Costs and benefits

Business models

Public attention

Economic value

Cultural fit

Skill level

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Resources: D4.1, white paper

# Results

*What should be considered when designing new data-driven solutions?*

Embed security and privacy features

Take preventive measures

Connect people, processes and technology

Comply with laws and corporate policies

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Resources: D4.2



# Results

*Are new data-driven solutions being developed and used responsibly?*

## Healthcare



- Strictest data protection rules apply
- Diverse range of technologies used

## Transportation



- Business models increasingly rely on sensitive data
- Established good practices are widely adopted

## Web browsing



- Cooperation of different stakeholders needed
- Ad networks still show limited willingness to act

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Resources: D5.1



# Results

*How can data-driven solutions be developed and used in a responsible way?*

## Challenges

Differences in attitudes and contexts

Empowerment vs. cognitive overload

Issues related to legal compliance and ethics

Difficulties of conducting assessments

## Opportunities

Awareness raising and transparency

Tools of accountability

Reference points of accountability

Bodies and mechanisms of oversight

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**7) Identify implementation barriers**

- 8) Make recommendations

Resources: D5.3, collaborative platform

# Results

*What should be done to make responsible data-driven solutions a reality?*



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**8) Make recommendations**

Resources: D5.2

# Thank you!



@eSIDES\_EU



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eSIDES\_EU



info@e-sides.eu



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