

BRIDGING THE GAP

Confronting the Digital Divide and AI's Unseen Risks

#TechWatch

Adriana Dergam, PCMS

12.2.2024

BRIDGING THE GAP

This event is being live-streamed on Zoom for remote attendees.

<https://uit.zoom.us/j/62699382241>
Meeting ID: 626 9938 2241

#TechWatch

What Lies Ahead: Guiding Topics

1. Human Rights in the Digital Age
2. Bridging the Digital Divide and Exclusion
3. Insights from the Czech Republic
4. People with Special Needs
5. Navigating AI's Unseen Risks
6. Collaboration Is Key



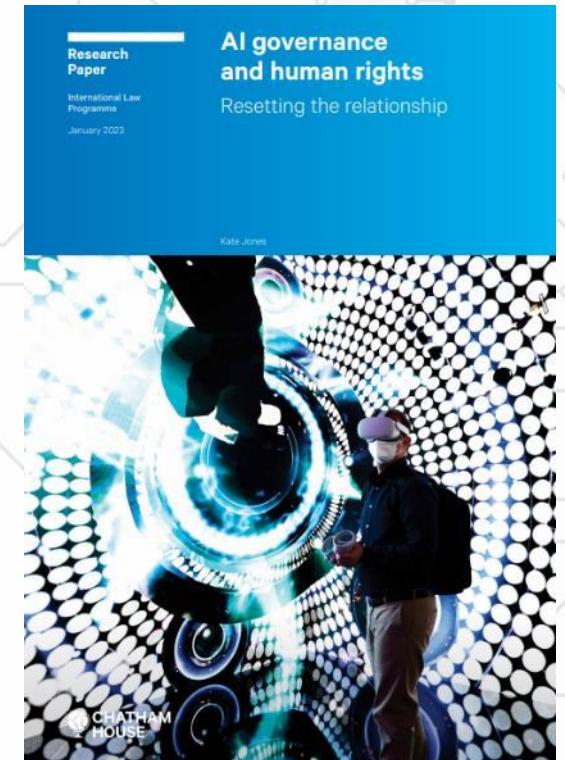
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Big companies and policymakers love to present more technology in our daily lives as a miraculous remedy to humankind's struggles, or as a sure path to a better world. But from digital ID systems and biometrics, to the widespread adoption of AI; all these alleged solutions **risk creating more problems if they aren't underpinned by human rights.**

Chérif El Kadhi, MENA Policy, Access Now Analyst, 2023

Myths about human rights

1. Ethics holds all the answers
2. Human rights prevent innovation
3. Human rights are complex and entail expensive legal advice
4. Human rights are about governments
5. Human rights are radical
6. Human rights are vague
7. Human rights get it wrong
8. Human rights are organized around national models
9. Human rights entail greater legal risk



[Kate Jones \(2023\): AI governance and human rights Resetting the relationship](#)
[UN Office of the High Commissioner on Human Rights \(undated\), 'B-Tech Project'](#)

Impact of Technology on Society

- Era of Connectivity
- Information Age
- Workplace Evolution
- Education Reimagined
- Healthcare Advancements
- Social Dynamics
- Economic Shifts
- Smart Living



Beware the Hidden Dangers...

...Governments using telecommunications infrastructure **to spy** on political opponents. Private companies **collecting highly sensitive biometric data** – and **making money** off it. Authorities using AI-powered systems **to exclude people** from public services, **without transparency or accountability...etc.**

Online Harms

Phase:

- In the production of content
- In the distribution of content
- In the consumption of content



[WEF Typology of Online Harms 2023.pdf](#)

Typology:

- Threats to personal and community safety
- Harm to health and well-being
- Hate and discrimination
- Violation of dignity
- Invasion of privacy
- Deception and manipulation

Key Human Rights Affected



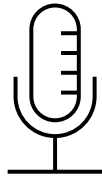
PRIVACY



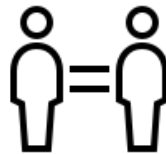
HUMAN DIGNITY



NON-DIGITAL



FREEDOM OF
SPEECH AND
EXPRESSION



NON-
DISCRIMINATION
AND EQUAL
TREATMENT

Jana PATTYNOVÁ (2022)

[Media and Human Rights in Digital Era, 2022 \[online\]](#).

Human Rights Program ([LP-HRMGSA-017](#))

Digital Rights

...are human rights applicable in the **digital sphere**.

The digital sphere covers both **physically constructed spaces**, such as infrastructure and devices, and spaces that are **virtually constructed**, such as online identities and communities.



PEOPLE AT THE CENTRE

Digital technologies should **protect** people's rights, support democracy, and ensure that all digital players act responsibly and safely. The EU promotes these values across the world.



SOLIDARITY AND INCLUSION

Technology should **unite, not divide, people**. Everyone should have access to the internet, to digital skills, to digital public services, and to fair working conditions.



FREEDOM OF CHOICE

People should benefit from a **fair online environment**, be **safe from illegal and harmful content**, and be empowered when they interact with new and evolving technologies like artificial intelligence.



PARTICIPATION

Citizens should be able to **engage in the democratic process** at all levels, and have control over their own data.



SAFETY AND SECURITY

The digital environment should be **safe and secure**. All users, from childhood to old age, should be empowered and protected.



SUSTAINABILITY

Digital devices should support **sustainability** and the **green transition**. People need to know about the environmental impact and energy consumption of their devices.

[EU Declaration on Digital Rights and Principles](#): a commitment to a secure, safe and sustainable digital transformation.

Understanding the Digital Divide

... refers to the gap between individuals, households, businesses, and geographic areas at different socio-economic levels with regard to their opportunities **to access** information and communication technologies (ICTs), and **their use** of the Internet for a wide variety of activities.



**WILL?!
FREE CHOICE?!**

Digital Divide: Factors

+ Socio-Economic and Cultural Factors:

- Income and Affordability
- Education and Literacy
- Infrastructure and Accessibility
- Age
- Cultural Attitudes
- Gender

+ Institutional, Geographical Factors

+ Psychological (emotions, motivation...)

+ Societal attitudes



CZECH CONTEXT

- ↑ age / ↓ education / ↓ income
- ↓ personal satisfaction / focus on family as a life goal
- ↓ openness to the world
- ↓ participation in elections
- ↓ support for EU membership
- ↓ contribution to charity
- ↓ belief in the role of education and the value of self-study
- ↓ social capital

Understanding the Czech Digital Divide

- Data, Methodology, and Data Integration: Functionality and Efficiency
- Digitization and Technology: Enhancing Quality of Life and Efficiency?
- Avoiding Increased Social Inequalities and Human Rights Violations
- Wide Range of User Needs
- Digital Exclusion - A Dynamic Process
- Digital Education and Literacy is Not a Panacea
- Impact on Democratic Participation, Disinformation, Security, etc.
- Digital Hygiene and Self-Regulation
- "Nothing About Us Without Us"

Czech Digital Divide: Free Choice

Citizen participation in digitalization should be voluntary:

- 46% Strongly Agree
- 20% Somewhat Agree"

Názory Čechů na digitalizaci

Zapojení občana do využívání digitálních nástrojů by mělo být dobrovolné.



Human Rights Program ([LP-HRMGSA-017](#))

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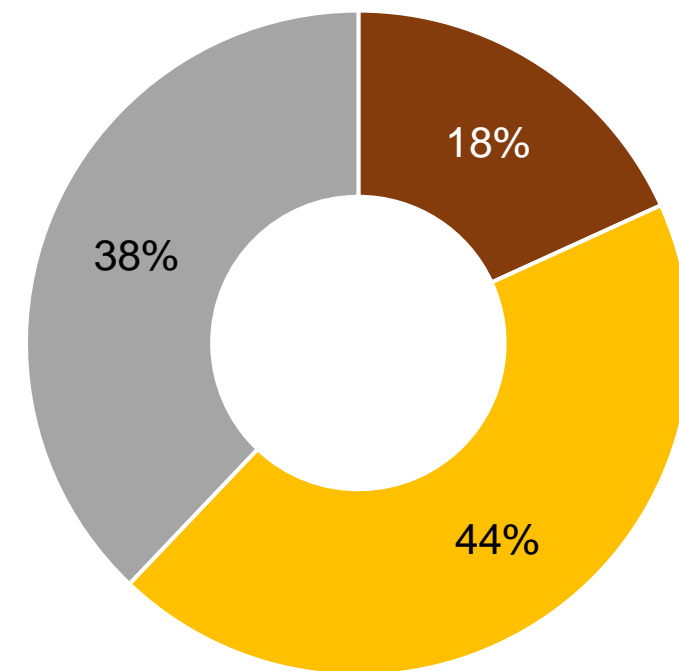
To ensure that digital transformation does not exacerbate existing social inequalities, it is imperative to consider the **needs of all citizens**, including those who may lack internet access, lack digital skills, face physical limitations, or **choose not to use** digital technologies for various reasons.

Barbora Hořavová, OSF Foundation

Czech Media's Perception of Technology's Impact

Are the outputs of your media (including websites) accessible to people with visual and hearing impairments (accessible design, sign language interpretation, etc.)?

- **44%:** Not adapted for individuals with visual and hearing impairments
- **38%:** Uncertain about this question
- **18%:** Media outputs are accessible to people with impairments

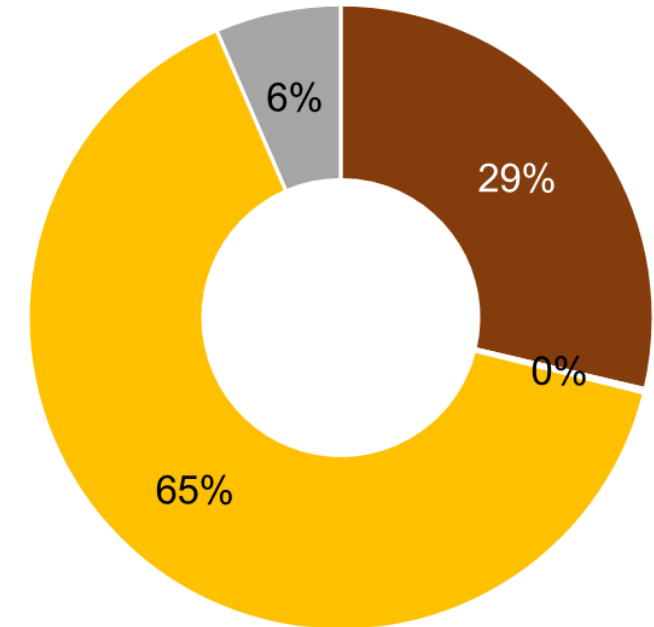


Human Rights Program ([LP-HRMGSA-017](#))

Czech Media's Perception of Technology's Impact

Creating content for and about people with disabilities should be considered a responsibility:

- **65%** believe it should be the responsibility of **both private and public service media**
- **29%** think it should be **solely the responsibility of public service media**
- **6%** of respondents are unable to assess this



The role of content creation should not be exclusive to private media.

Inclusive and Accessible Technology

- Challenges faced by people with special needs in the digital era
- Importance of inclusive, accessible technology and assistive technology
- Technology must enhance the agency
- Accessibility is for all
- Accessibility is a business opportunity

Permanent Temporary Situational



One arm



Arm injury



New parent

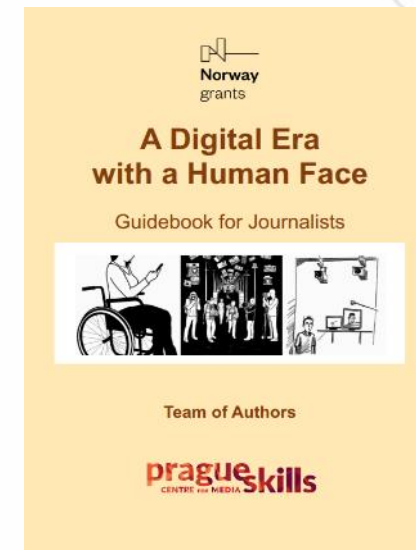
Source: [Inclusive 101 Guidebook](#)

Enhancing Journalist Skills

Educational video cycle (ENG sub.)



A Digital Era with a Human Face (ENG)



More on: Promoting Human Rights In the Digital Era – Prague Centre for Media Skills

Human Rights Program ([LP-HRMGSA-017](#))

Unseen risks of AI: The Dutch Case

- Dutch tax algorithm flags child-care benefit fraud
- 20,000+ parents wrongly tagged as fraudsters
- Immigrant background bias
- Dual citizenship linked to high-risk by algorithm
- Lives impacted, including suicides
- More than a thousand children were taken into foster care
- Core problems:
 - Difficult to identify what led the algorithms to such a biased output
 - Difficult to find the justice in timely manner
 - Xenophobic, racist profiling



The Dutch benefits scandal: a cautionary tale for algorithmic enforcement



Björn ten Seidam & Alex
Brenninkmeijer
April 30, 2021

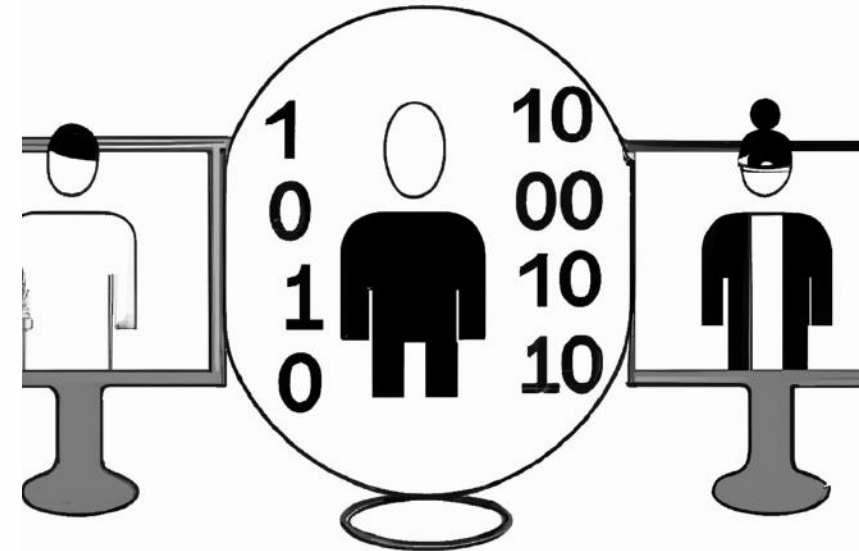
On January 15, the Dutch government was forced to resign amidst a scandal around its child-care benefits scheme. Systems that were meant to detect misuse of the benefits scheme, mistakenly labelled over 20,000 parents as fraudsters. More crucially, a disproportionate amount of those labelled as fraudsters had an immigration background.

Sources:

<https://eulawenforcement.com/?p=7941>
<https://www.politico.eu/article/dutch-scandal-serves-as-a-warning-for-europe-over-risks-of-using-algorithms/>
<https://www.business-humanrights.org/en/latest-news/netherlands-govt-use-of-ai-to-identify-potentialwelfare-fraud-violates-human-rights-court-rules/>

AI & Human Rights Potential Clashes

- Right to life
- Prohibition of torture, degrading treatment
- Right to liberty and security
- Right to a fair trial
- Right to respect for private and family life
- Freedom of expression
- Freedom of assembly and association
- Right to and effective remedy
- Prohibition of discrimination
- Protection of property



Addressing AI's Threats

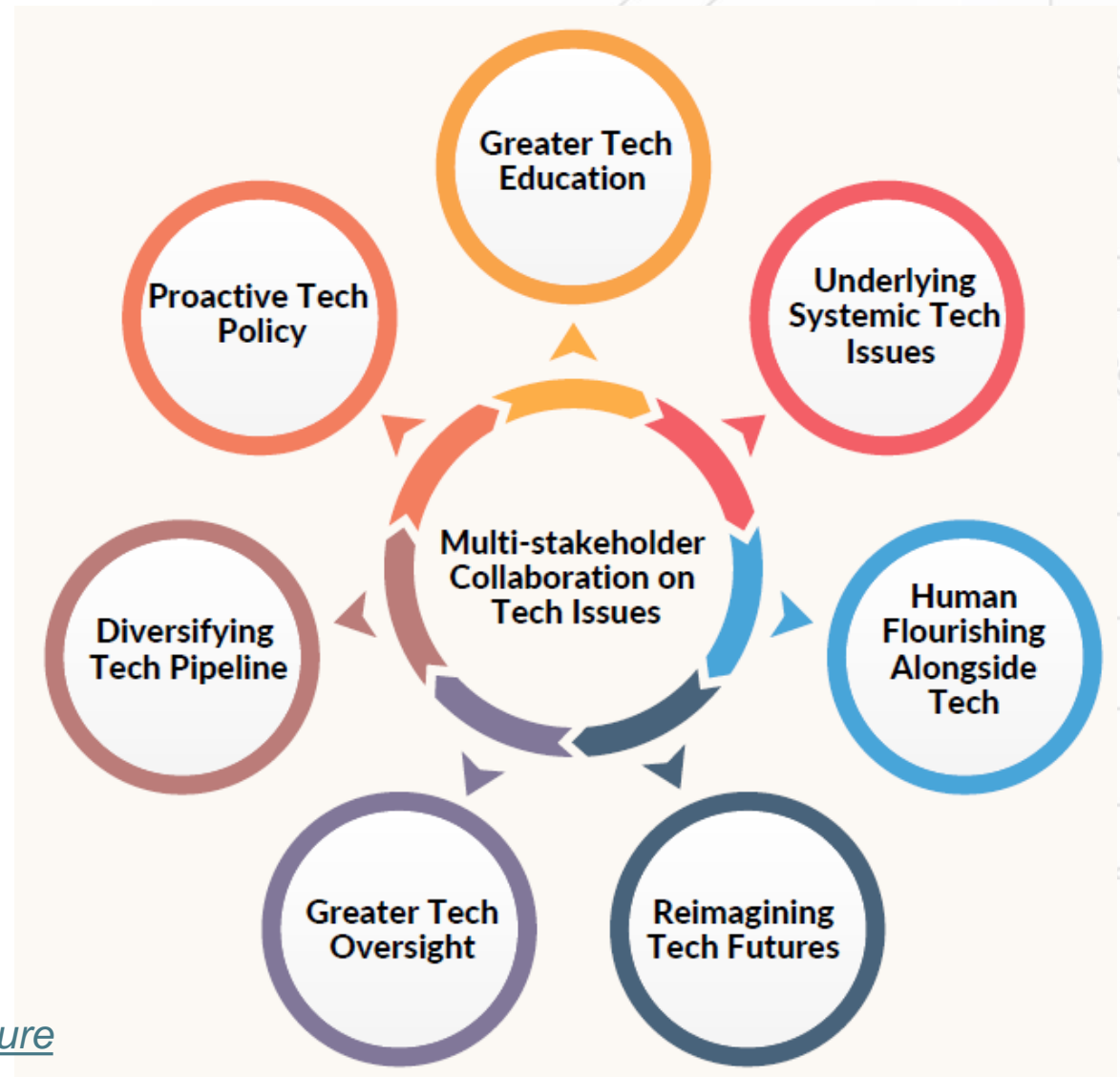
CONVENTION ON AI & HUMAN RIGHTS

[CAI - Committee on Artificial Intelligence \(coe.int\)](https://www.coe.int)

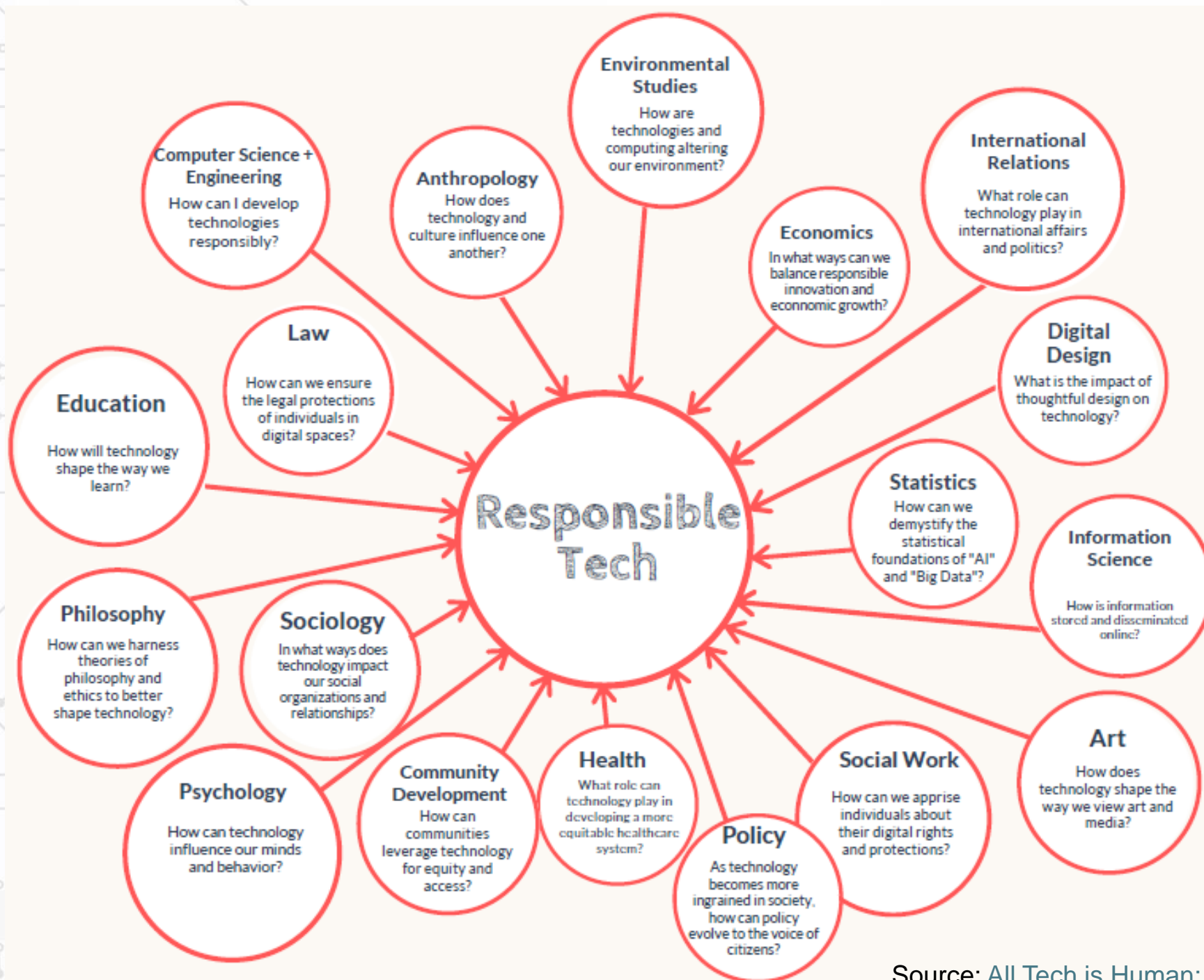
- Obligations relating to public and private actors
- Key principles:
 - Preservation of individual freedom, human dignity and autonomy
 - Access to public debate and inclusive democratic processes
 - Preservation of public health and the environment
 - Fundamental principles of design, development and application of artificial intelligence systems
 - Principle of Equality and Anti-discrimination
 - Principle of Privacy and Personal Data Protection
 - Principle of Accountability, Responsibility and Legal Liability
 - Principle of Transparency and Oversight
 - Principle of Safety
 - Principle of Safe Innovation
- Training
- Procedural safeguards and rights: records, access, explanations
- Red flags

Engaging Stakeholders

- Technology must empower and enable the full realisation of rights – Technology is not an endpoint
- Technology-enabled solutions must be designed, developed, and deployed in an inclusive, intentional, and human-centered manner.
- Various stakeholders can contribute
- Building partnerships for change



Source: [All Tech is Human: Co-Creating a Better Tech Future](#)





Conclusion

10 Principles

- 1** The future of technology is intertwined with the future of democracy and the human condition.
- 2** In order to align our tech future with the public interest, we need to involve the public.
- 3** We need collective action, not just individual thought leadership.
- 4** No application without representation—not about us without us.
- 5** Combining multiple stakeholders, disciplines, and perspectives requires an agnostic space for understanding and knowledge-sharing.
- 6** People often struggle to “find the others” and discover the wide variety of people and organizations committed to co-creating a better tech future.
- 7** “Technology” is not just for technologists; we need all disciplines involved.
- 8** Top-down models have power but often lack a diversity of ideas; grassroots models have ideas but often lack power. We unite these models.
- 9** Tech innovation moves fast, while our ability to consider its impact often moves slow. We need to reduce the gulf between these.
- 10** There is a growing awareness and understanding of the root causes of our current dilemma, but limited action toward understanding values, trade-offs, and best paths forward.

Additional Resources

- Digital Trust & Safety Partnership, Trust & Safety Glossary of Terms, 2023: https://dtspartnership.org/wpcontent/uploads/2023/01/DTSP_Trust-Safety-Glossary13023.pdf
- Livingstone, S. and M. Stoilova, 4 Cs of Online Risk: Short Report & Blog on Updating the Typology of Online Risks to Include Content, Contact, Conduct, Contract Risks, Children Online: Research and Evidence, 2021: <https://core-evidence.eu/posts/4-cs-of-online-risk>
- Meta, Facebook Community Standards: <https://transparency.fb.com/en-gb/policies/community-standards>.
- Human Rights Everywhere All at Once”, Business for Social Responsibility (BSR), 8 September 2022, <https://www.bsr.org/en/blog/human-rights-everywhere-all-at-once>
- GNI, GNI Assessment Toolkit, 2021, <https://globalnetworkinitiative.org/wp-content/uploads/2021/11/AT2021.pdf>
- Global Principles on Digital Safety: Translating International Human Rights for the Digital Context, 2023: <https://www.weforum.org/whitepapers/global-principles-on-digital-safetytranslating-international-human-rights-for-the-digital-context>
- UNESCO Recommendation on the Ethics of Artificial Intelligence, 2021: <https://unesdoc.unesco.org/ark:/48223/pf0000380455>
- EU High-Level Expert Group on AI: Ethics Guidelines for Trustworthy Artificial Intelligence, 2019: <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>

Q&A

Can we develop ethical standards and regulations that ensure technology is developed and used in a way that upholds democratic values and protects human rights?

How can technology be used to strengthen our democratic institutions?

How does the digital divide impact democracy in areas with unequal access to high-speed internet?

How can we ensure that technology is used to enhance democracy rather than undermine it, especially in the face of mis-, dis-, and malinformation?

THANK YOU and



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#TechWatch

Enhancing the Response to Human Rights Challenges in the Digital World



Elektronisk Forpost Norge

You can follow the program on Zoom

<https://uit.zoom.us/j/62699382241>

Meeting ID: 626 9938 2241



Please give us your feedback by scanning the QR Code

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- 9:00-9:30 **Welcome and Introduction** (Øyvind Hanssen, Associated Professor, UiT)
- 9:30-10:15 **Bridging the Gap: Confronting the Digital Divide and AI's Unseen Risks**
(Adriana Dergam, PCMS)
- 10:30-11:15 **From Cold War to Cyber Warfare: Media's Evolution and the Internet's Role in Shaping Trust** (Frank Williams, PCMS)
- 11:30-12:15 Lunch Break
- 12:15-13:00 **Navigating the Minefield: The Evolution of Operational Security in the Digital Age** (Tom Fredrik Blenning, Elektronisk Forpost Norge)
- 13:00-14:30 **Panel Discussion: Digitalization with Human Face** led by Øyvind Hanssen

BACKUP

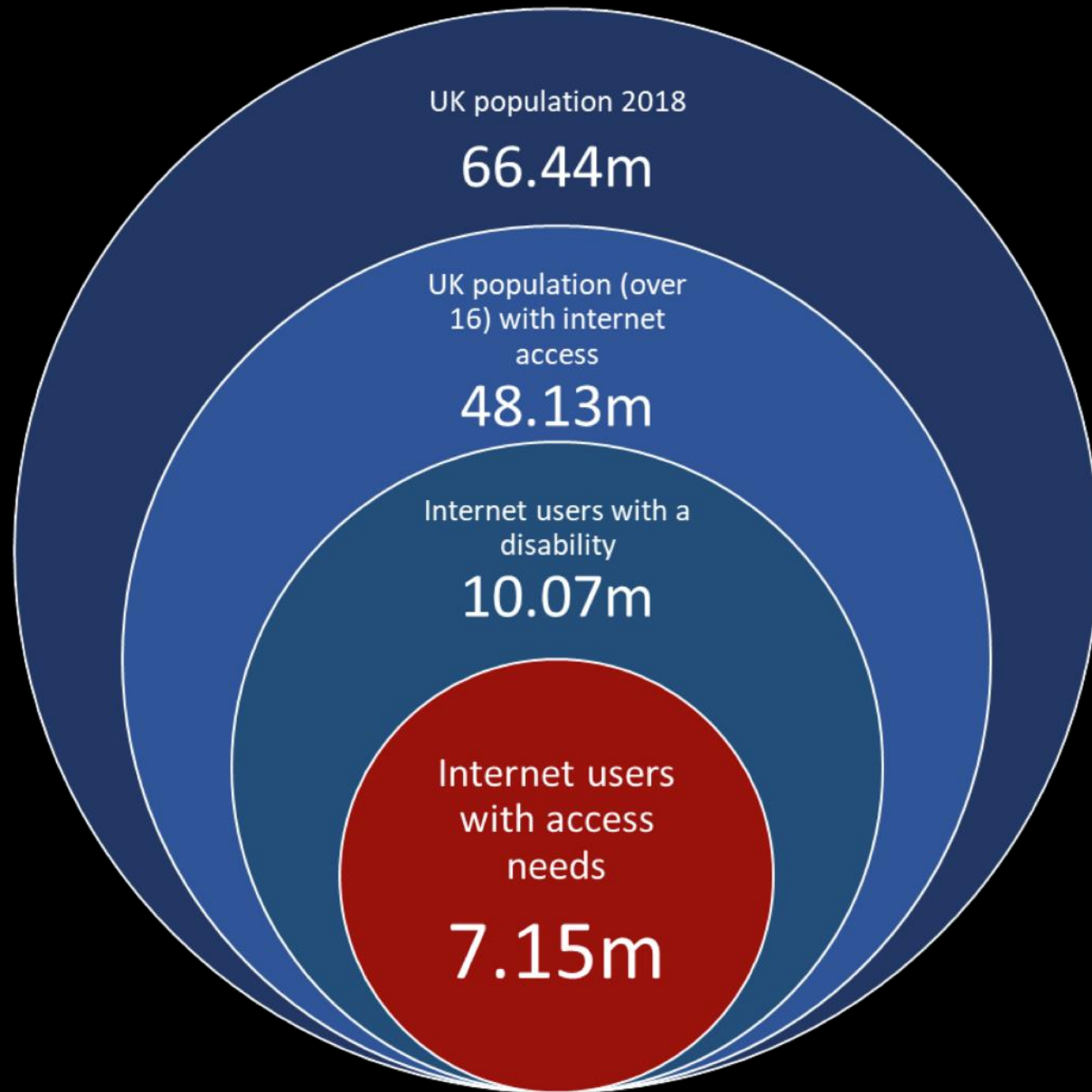


Digital Divide: Key Global Statistics

- 1/3 of the world's population, or about 2.7 billion people, have never used the Internet
- Divide more pronounced in developing countries (Africa 80 %, Europe 33 %)
- Smartphone ownership (advanced economies 76%, emerging economies 45%)

Source: ITU, 2022





UK online retail
spend 2018

£166.6b

Average annual
spending online of
UK adults, per head

£3,460

Spending power of
7.15m people with
access needs

£24.8b

Potential
Click-Away

**£17.1
billion**

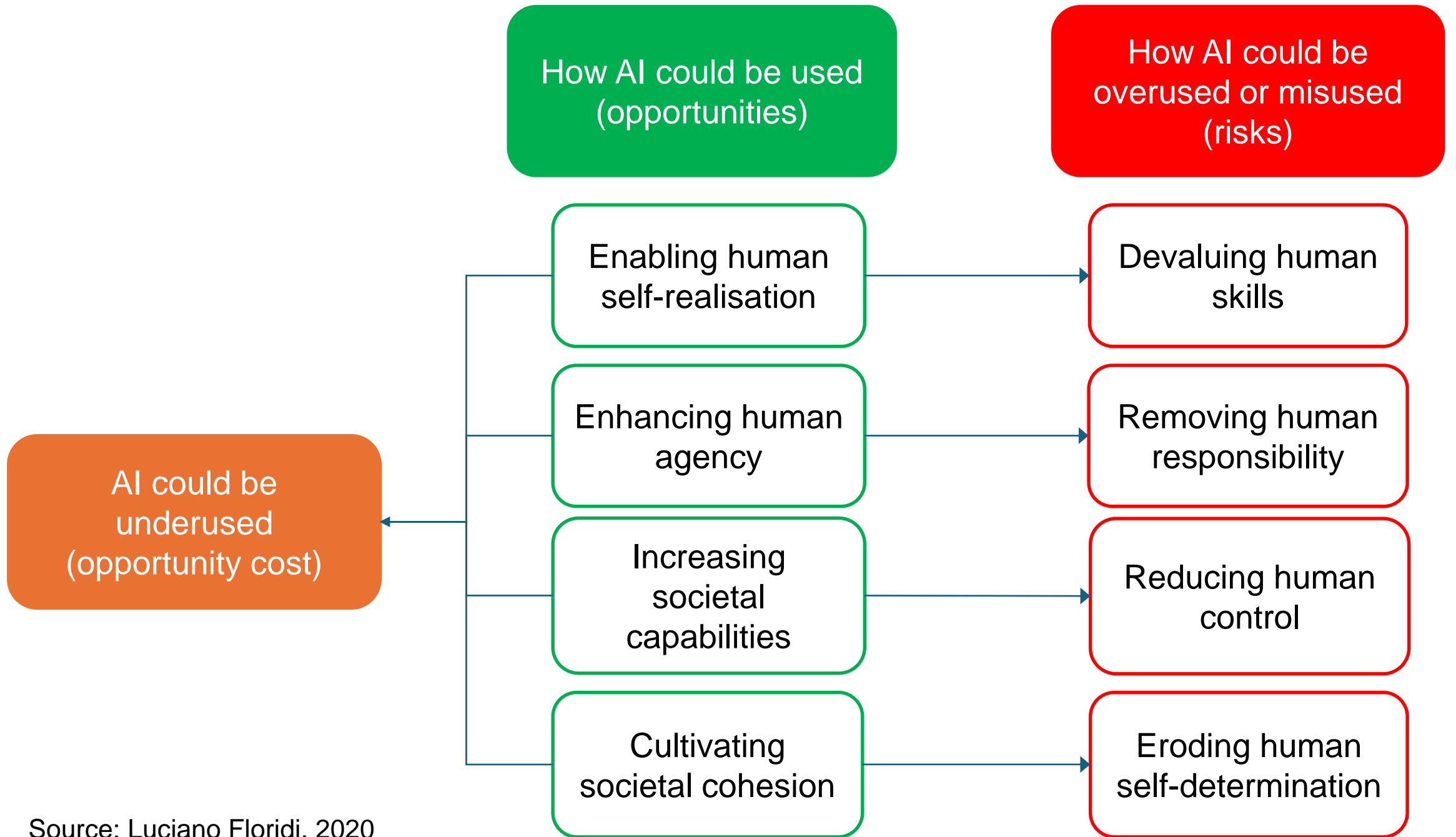


***Média,
digitalizace
a lidé s postižením***

Unseen risks of AI

- Examples of biases in AI algorithms
- LLM's on the rise
- AI's impact on decision-making in critical sectors
- Long-term societal risks of unchecked AI development





Source: Luciano Floridi, 2020

ChatGPT banned in Italy over privacy concerns

- Italy bans ChatGPT in March 2023 (ban lifted in April)
- Concerns over personal data processing
- Data leak including user conversations and payment info
- Lack of legal basis for mass data collection and storage
- Italian Data Protection Authority highlights risks to minors due to age verification issues



...the app “exposes minors to absolutely unsuitable answers compared to their degree of development and awareness.”

(Source: [BBC – ChatGPT banned in Italy over privacy concerns](#))

Focusing on Generative AI

- **Privacy protection concerns:**

data leaks, insufficient anonymization of personal data, unauthorized data sharing, potential prejudice (bias) and discrimination, failure to provide consent to processing, lack of transparency regarding data processing, and the violation of principles regarding the period of retention and deletion of personal data (Generative AI and Data Privacy).

- **Mitigation - providers of generative AI systems should deploy:**

transparent rules and documents regarding the processing of personal data, the use of reliable anonymization techniques, or the implementation of technical solutions to provide users with a high degree of control over their own data.

- **Mitigation - users** themselves must act diligently, as their conduct influences AI systems in their own way through the processing and sharing of personal data.

Algorithmization and personalization

- individual content suggestions based on algorithms and intelligent data analysis
- main goal to offer more relevant content: showing readers articles relevant to their interests.
- dark side - reinforcing confirmation bias:
 - one-sided articles or opinions, creating an information bubble, which contributes to a rather limited worldview.
 - contributes to an individual's greater susceptibility to misinformation
 - threatens the right to freedom of expression and the right to access to information and jeopardizes the possibility of balanced democratic societal debates

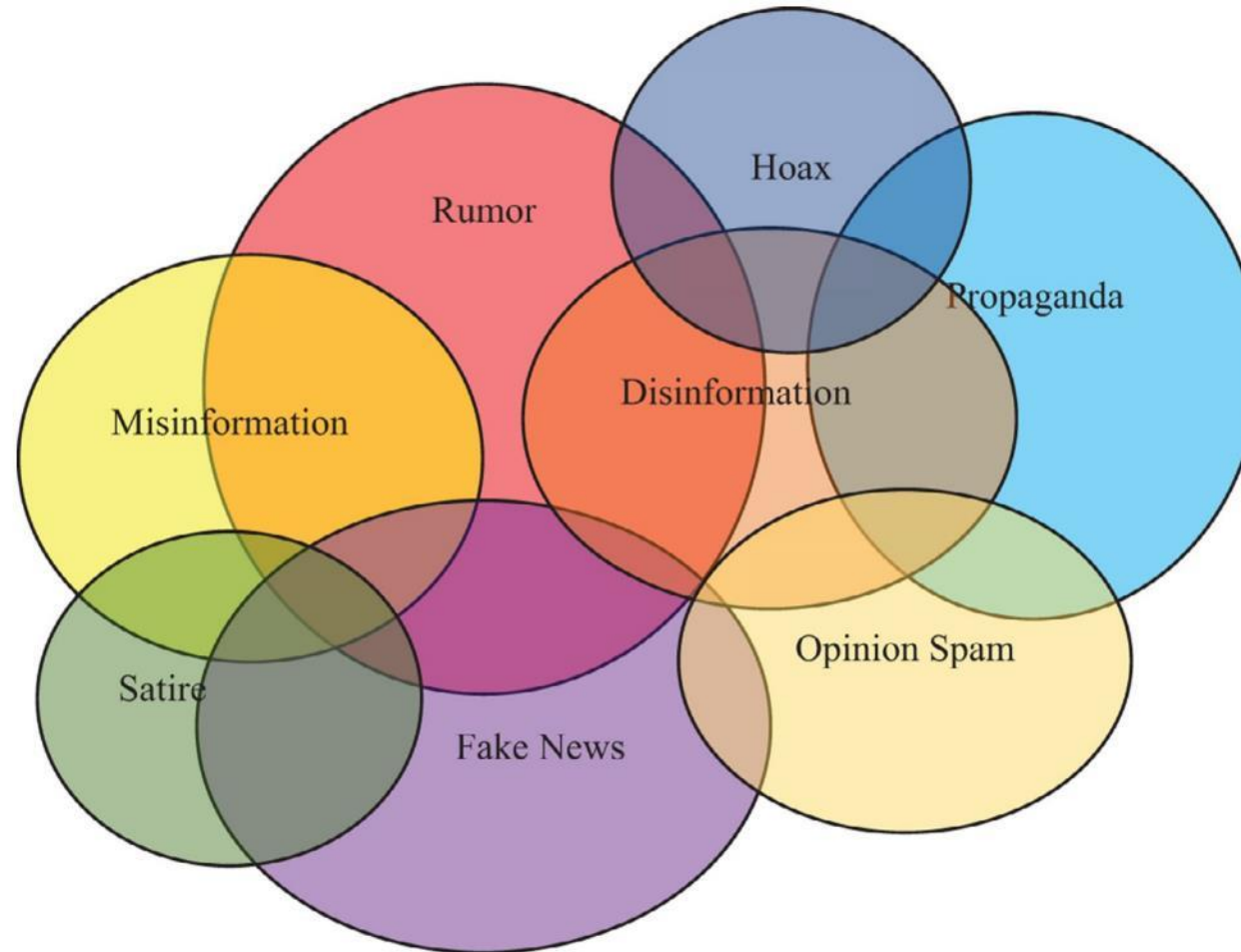


[Source: Artificial intelligence: media and information literacy, human rights and freedom of expression](#)

MIS-/ DISINFORMATION








A key issue at the intersection of technology and democracy involves misinformation and disinformation. An informed electorate is at the core of a functioning democracy.

INFORMATION DISORDERS



Source: Meel P., Kumar Vishwakarma D. [Fake news, rumor, information pollution in social media and web: A contemporary survey of state-of-the-arts, challenges and opportunities](#), Expert Systems With Applications, 2020

Types and intention of mis- and disinformation

High harm		Fabricated content	New content is 100% false, designed to deceive and harm
		Manipulated content	When genuine information or imagery is manipulated to deceive
		Imposter content	When genuine sources are impersonate
		False connection	When headlines, visual or captions don't support the content
Low harm		Satire or parody	No intention to cause harm but has potential to fool
		False context	When genuine content is shared with false contextual information
		Misleading content	Misleading use of information to frame an issue or individual

Source: [Understanding information disorder, 2019](#)

MISINFORMATION²

Prevalence and circulation of misinformation

- misinformation is not just a social media problem
- internet is not rife with misinformation or news, but with memes and entertaining content
- falsehoods do not spread faster than the truth

Impact and the reception of misinformation

- people do not believe everything they see on the internet
- people are more likely to be uninformed than misinformed
- the influence of misinformation on people's behavior is overblown

Source: Misinformation on misinformation, 2023, DOI: [10.1177/20563051221150412](https://doi.org/10.1177/20563051221150412)

AI Definition

“artificial intelligence system” means any algorithmic system or a combination of such systems that, as defined herein and in the domestic law of each Party, uses computational methods derived from statistics or other mathematical techniques to carry out functions that are commonly associated with, or would otherwise require, human intelligence and that either assists or replaces the judgment of human decision-makers in carrying out those functions.

Such functions include, but are not limited to, prediction, planning, classification, pattern recognition, organisation, perception, speech/sound/image recognition, text/sound/image generation, language translation, communication, learning, representation, and problem-solving;

TWO FAMILIES OF HUMAN RIGHTS

The body of principles that constitutes human rights can be broken down into two groupings:



Civil and Political Rights

Key rights:

- Right to life and human dignity
- Right to physical and mental integrity
- Right to liberty and security of persons
- Freedom from torture and cruel treatment
- Right to a fair trial and due judicial process
- Right to effective remedy
- Freedom of thought, conscience, and religion
- Freedom of expression and opinion
- Right to respect for private and family life
- Right to the protection of personal data
- Right to non-discrimination
- Right to equality before the law
- Freedom of assembly and association
- Right to participate in the conduct of public affairs



Social, Economic, and Cultural Rights

Key rights:

- Right to just, safe, and healthy working conditions
- Right to fair remuneration
- Right to vocational training
- Right to equality of opportunity in the workplace
- Right to organise and collectively bargain
- Right to social security
- Right to education
- Right to an adequate standard of living
- Right to social and medical assistance
- Right to the protection of health
- Right of protection for migrant workers
- Right for elderly persons to social protection
- Right to protection against sexual harassment
- Right to protection against poverty and social exclusion

Human Rights