

EUROPE IN THE AGE OF TECHNOLOGICAL REVOLUTIONS RETHINKING IDENTITY, INNOVATION, AND HUMAN AGENCY

ABOUT THE PROJECT

This policy brief builds on insights from the EUROMOBI Conference, part of the EU-funded EuroMobi project (Horizon Europe, Grant No. 101232335), which explores mobility, demographic change, and socio-economic resilience in Europe.

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Technological change is reshaping Europe at every level – economic, social, and political. But what does it mean to innovate while upholding democratic values and human dignity? This policy brief draws on insights from a high-level panel at the Euromobi Conference, exploring how the EU can navigate the digital age without losing sight of what makes the UE unique. The discussion brought together perspectives from academia, business, and the Commission to strategic priorities in tech competition. included: the need European identity humanist values; narrow techno- and the importance leadership, and governance.

„Technology is advancing rapidly – but Europe's future will be shaped not by algorithms, but by the values and institutions we build around them.”

The panel emphasized that technology is not external to society – it is a product of human decisions and institutional design. The EU must lead with a long-term vision rooted in inclusion, ethical responsibility, and democratic control.

European
debate Europe's
the face of global
Key themes
for a renewed
shaped by
the dangers of a
economic logic;
of education,
inclusive

KEY MESSAGES

Europe faces global tech competition and internal institutional challenges.

A renewed European identity should emphasize inclusion, responsibility, and ethical innovation.

Technology is shaped by human decisions—governance matters.

The EU must invest in long-term, value-driven digital strategies.

Action is urgent to ensure sovereignty, cohesion, and democratic control.

**The time
to act
is now...**



CONTEXT AND CHALLENGE

The European Union is at a crossroads. Faced with rising geopolitical tensions, accelerating technological change, and the erosion of democratic trust, Europe must redefine its place in the global order. The war in Ukraine has forced a reckoning with Europe's founding values, highlighting the need for unity, sovereignty, and resilience. At the same time, technological revolutions – from AI to platform infrastructures – are transforming every domain of life: mobility, health, education, and work.

Yet the dominant narratives around technological innovation often obscure its political and ethical dimensions. The language of “revolution” evokes speed, disruption, and inevitability, but can mask urgent questions of justice, responsibility, and collective agency. This panel called for a pragmatic and value-driven approach to technology: not just innovation for its own sake, but for the common good.

KEY MESSAGES

War in Ukraine reaffirmed the need for unity, sovereignty, resilience.

AI, platformisation, and automation reshape mobility, work, health, and education.

Dominant “tech revolution” narratives obscure ethical, societal, and political stakes.

EU regulatory leadership (AI Act, DSA) is promising but undermined by weak implementation capacity (ECA 2024).

Governance gaps: coordination failures, limited monitoring tools, insufficient investment.

Europe is shaped by a “triple movement” of market liberalisation, sovereignty, and ethical regulation—still unresolved.

Risk: fragmentation across states, sectors, and global alliances.

Solutions: anticipatory governance, aligned investments, stronger role for SSH, and inclusive multi-level participation.

Against this backdrop, one of the central challenges facing the EU is the widening gap between its regulatory ambition in AI governance and its actual implementation capacity. While the EU has positioned itself as a global norm-setter through initiatives like the AI Act and the Digital Services Act, recent audits by the European Court of Auditors (ECA 2024) reveal significant governance shortcomings: lack of coordination across institutions, underdeveloped monitoring tools, and limited investment in AI research and deployment. This institutional fragility risks undermining the EU's digital sovereignty and its strategic autonomy in a global landscape dominated by US and Chinese tech giants.

At the same time, the EU's digital agenda is shaped by a “fictitious triple movement” in which competing policy imaginaries – market liberalisation, digital sovereignty, and ethical responsibility – remain only partially reconciled (Mazur & Włoch 2023). This leads to tensions between the goals of competitiveness, social cohesion, and value-driven regulation. Without addressing these contradictions, the EU risks reproducing fragmentation both internally (between member states and sectors) and externally (in its global positioning). To move forward, Europe needs to institutionalize stronger anticipatory governance, align strategic investment with normative goals, and empower a broader coalition of actors – including social science and humanities researchers, civic organisations, and local communities – to co-shape its digital future.

KEY CHALLENGES

How can educational institutions cultivate the interdisciplinary, ethically grounded leaders of tomorrow?

Prof. Anna Timofiejczuk and Zofia Dzik stressed that preparing future leaders requires more than technical skills. Timofiejczuk advocated for integrating real-world, interdisciplinary challenges into university curricula through project-based learning, sandboxes, and living labs (real-life environments where users, organisations, and researchers co-design and test technological or social innovations). She emphasized that students are ready to work across disciplinary boundaries – if institutions give them the chance. Dzik drew attention to the broader developmental ecosystem: leadership begins in childhood, and schools must help cultivate not just knowledge but character, purpose, and resilience. She warned that digital disruption exacerbates psychological vulnerability, including widespread loneliness among youth. The answer, she argued, lies in an educational model that nurtures emotional intelligence, critical thinking, and civic responsibility (OECD 2025). Universities, in this vision, are not just knowledge factories but spaces for ethical formation and democratic imagination.

How can Europe maintain digital sovereignty without falling into techno-nationalism?

Prof. Wolfgang Schulz emphasized the importance of maintaining Europe's openness while striving for sovereignty. He warned against interpreting digital sovereignty as a retreat into protectionism, sharing concerns raised by young African researchers who viewed the term with suspicion. Schulz advocated for a form of governance rooted in predictability, transparency, and independent regulatory frameworks that reflect Europe's values while remaining globally engaged. The challenge lies in striking a balance: ensuring technological self-determination without isolating Europe from global collaboration and knowledge exchange. He highlighted the importance of regulatory credibility – institutions that inspire trust through consistency and openness – as a strategic asset in a volatile global landscape. A clear example is the European Union Agency for Cybersecurity (ENISA), whose independent and evidence-based frameworks strengthen Europe's regulatory credibility.

How can the EU embed ethics, inclusion, and long-term foresight into its regulatory and research agendas?

Ms. Mina Stareva from the European Commission underlined the persistence of structural and cultural barriers to integrating social sciences and humanities (SSH) in digital research agendas. She argued that ethical and societal considerations are often treated as optional or peripheral – what she called a "luxury expertise." To move beyond box-ticking, SSH must be embedded from the earliest stages of research design and policy formation. Schulz echoed the need

experimentation with new technologies before full-scale deployment) and risk-based regulation (regulatory approach that allocates oversight proportionally to the potential risk of harm) as promising mechanisms that allow regulators and innovators to experiment while staying accountable to public interest goals. All panellists agreed that Europe needs more participatory governance frameworks, involving citizens and civil society in shaping the rules and goals of innovation. Funding structures must support interdisciplinary teams not only at the outset but also beyond project lifecycles to sustain the value of collaborative knowledge (e.g. Horizon Europe mission clusters supporting interdisciplinary teams beyond single project cycles).



KEY INSIGHTS AND EVIDENCE

The session highlighted the urgency of a distinctively European approach to the digital future – one that combines competitiveness with cohesion, and innovation with responsibility.

The EU's regulatory frameworks (e.g. AI Act, Digital Services Act) are promising but require robust, iterative implementation and enhanced international cooperation. Their success will depend on independent oversight, real-time monitoring of technological impacts, and sustained political commitment.

Interdisciplinary collaboration is essential – not only for research but also for governance and education. Integrating STEM, social sciences, humanities, and civil society requires changes in institutional incentives, publication norms, and evaluation systems.

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Universities in Central and Eastern Europe must transition from reactive to proactive roles in shaping EU digital agendas. This includes building stronger international partnerships, influencing EU research funding, and fostering regional innovation ecosystems aligned with EU values.

Citizens, engineers, educators, and business leaders must be empowered as co-creators of inclusive, democratic technological futures. This requires not just access to digital tools but also meaningful participation in defining what those tools should do – and whom they should serve.

Insights from the Audience Discussion

The panel underscored that Europe's digital future must be guided by democratic values, human dignity, and institutional foresight. Technological change is not neutral or inevitable – it reflects political choices and shapes societal futures. In conversation with the audience, the panel revealed deep consensus on the need for a distinctly European approach that prioritizes ethics, inclusion, and long-term thinking across all levels of governance, education, and innovation.

Participants consistently emphasized:

- The importance of a holistic vision for technological transformation that integrates societal, cultural, and ethical dimensions.
- The urgency of involving citizens, not only as users of technology, but as co-creators of digital futures.
- A call to strengthen interdisciplinary collaboration and transnational knowledge exchange – particularly across Central and Eastern Europe.
- Recognition that current regulatory and educational systems lag behind technological developments, requiring more adaptive and anticipatory policy tools.

The session served not only as a space of exchange, but as a collective exercise in imagining alternative, socially responsible trajectories for Europe's digital transformation.



KEY MESSAGES

For Policymakers

- Preserve the EU's role as a normative power by reinforcing regulatory independence and transparency.
- Scale up participatory foresight and ethical impact assessments across all digital policy domains.
- Strengthen integration of SSH expertise within Horizon Europe and national innovation strategies.
- Support regulatory experimentation (e.g. sandboxes) and public-interest technology ecosystems.
- Invest in education reforms that bridge STEM and civic competencies at all levels.

For Academics and Researchers (suggested, but not-obligatory content)

- Promote long-term, interdisciplinary collaborations beyond the lifecycle of individual projects.
- Address key knowledge gaps such as the socio-technical dynamics of algorithmic decision-making, the long-term impacts of platformisation on civic institutions, and the role of local communities in shaping digital infrastructures. Examples include CHANSE-funded projects, such as REDACT (Researching Europe, Digitalisation and Conspiracy Theories), which explore digital governance, platformisation, and societal impacts of AI.
- Explore new research questions, including: How can regulatory design anticipate technological evolution? What are the sociocultural drivers of AI adoption across regions? What modes of civic participation are most effective in shaping digital futures?
- Demonstrate how interdisciplinary research – connecting engineering, law, ethics, political science, history, and sociology – can inform more robust and democratic policy frameworks.
- Advocate for improved access to comparative data across EU member states, longitudinal datasets on digital inequalities, and shared infrastructure for policy-relevant research.
- Expand conceptual work on governance models beyond standard regulatory paradigms.
- Contribute to public understanding of sociotechnical imaginaries and their role in shaping futures.

For the General Public / Media / Civil Society

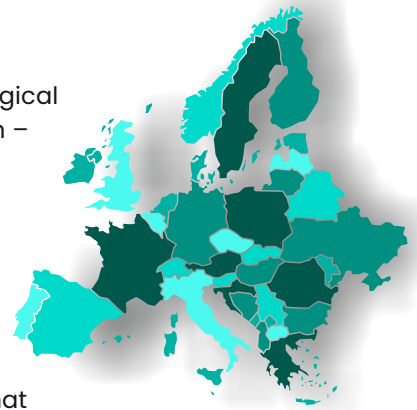
- Advocate for inclusive technology policies that reflect social diversity and communal needs.
- Demand transparency and ethical accountability from technology providers and regulators.
- Participate in local digital initiatives, citizen science projects, and public consultations.
- Support education models that foster digital literacy, critical thinking, and resilience.
- Recognize the power of everyday choices – in consumption, communication, and community-building – in shaping Europe's technological trajectory.



POLICY RECOMMENDATIONS

1 EU Level:

- Develop a comprehensive strategic framework that positions technological development as a means to uphold democratic values and social cohesion – not only global competitiveness.
- Ensure that new regulations (AI Act, DSA, etc.) are accompanied by robust, adaptive implementation mechanisms, including risk-based oversight and dynamic monitoring of social impacts.
- Institutionalize participatory foresight practices and establish ethics advisory councils to support anticipatory governance across technological domains.
- Increase funding for interdisciplinary research and education programs that bring together STEM, humanities, and social sciences to address complex digital challenges.
- Promote mechanisms that support local experimentation – such as sandboxes, mission-driven innovation clusters, and civic tech labs – with transnational knowledge exchange. Regional civic tech labs funded under the European Digital Innovation Hubs initiative demonstrate that models for mission-driven experimentation already exist.



2 National/Regional Level:

- Embed digital ethics, social responsibility, and democratic engagement into national digital strategies and education reforms.
- Create frameworks for cross-sector pilot programs that link local innovation with EU-level funding and policy priorities.
- Support regional innovation ecosystems, especially in underrepresented areas, to participate proactively in European tech policy and research initiatives.
- Develop data-sharing infrastructures and regional observatories to track long-term social impacts of technology deployment.



3 Local Level:

- Invest in civic education and digital literacy programs rooted in community needs and co-designed with local stakeholders.
- Empower schools, libraries, and cultural centres as hubs for digital inclusion and participatory innovation.
- Support networks of educators and civic leaders working to embed critical thinking, ethical reasoning, and resilience into daily institutional practice.
- Foster partnerships between local authorities, SMEs, academia, and NGOs to address local tech-related challenges collaboratively.



4 Stakeholder Landscape:

- A coordinated response requires collaboration among EU institutions, national governments, regional authorities, educational systems, civil society, and the private sector.
- Independent regulators, SSH researchers, educators, and community actors must be empowered with institutional support and sustained funding to play proactive roles.
- Special attention must be given to involving underrepresented regions and populations to ensure that Europe's digital transition is inclusive, just, and resilient.



ADDITIONAL RESOURCES

Resources for deeper understanding and further exploration

FOR POLICYMAKERS

European Commission (2025). European Approach to Artificial Intelligence,
<https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence>

European Court of Auditors (2024). Special Report No 08/2024 –EU Artificial intelligence ambition: stronger governance and increased, more focused investment essential going forward, 28.05.2024
<https://www.eca.europa.eu/en/publications?ref=sr-2024-08>

OECD (2025). Future of Education and Skills. Education 2030/2040.
<https://www.oecd.org/en/about/projects/future-of-education-and-skills-2030.html>

FOR ACADEMICS

Mazur, J., & Włoch, R. (2023). Embedding digital economy: Fictitious triple movement in the European Union's Artificial Intelligence Act. *Social & Legal Studies*, 33(1), 104-123.
<https://doi.org/10.1177/09646639231152866>

Śledziewska K., & Włoch, R. (2022). *The Economics of Digital Transformation. Disruption of Markets, Production, Consumption and Work*. Routledge,
<https://www.taylorfrancis.com/reader/read-online/0cbdd04a-1026-4dca-80af-a7faa89ce233/chapter/pdf?context=ubx>



DISCLAIMERS

This brief was produced as one of the outcomes of the Horizon Europe project “EuroMobi – Europe and Mobilities: Challenges and Opportunities for Socio-Economic Transformations”). It reflects the views of the author(s) and does not necessarily represent those of the EU.

