The 'European Way' - A Blueprint for Reclaiming our Digital Future

We shall invest in our own companies, we shall foster our own talents, and we shall build a future where Europe is no longer a digital colony, but a beacon of innovation and self-determination. Together, we shall forge a new collaborative path, one that secures our digital freedoms and ensures our technological prowess for generations to come!

(An updated version of “We shall fight on the beaches”, a speech delivered by the British Prime Minister Winston Churchill to the House of Commons on 4 June 1940)

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Executive summary

This policy paper is a call for Europe to reclaim its digital future. Directed in particular at the EU Institutions and the new German government, it has three core objectives: (a) to appeal to decision makers to seize the moment and finally mitigate the EU's excessive and unilateral technology dependencies; (b) to articulate a coherent, values-driven digital policy vision — the 'European Way' — that aligns innovation, competitiveness, and democratic principles; and (c) to propose six larger reform packages that translate this vision into concrete actions across the entire technology stack, from digital infrastructure and single market integration to geopolitics, good governance, energy supply, and digital talent as well as skills.

Europe today faces a stark reality: it has slipped from global technological leadership into a position of growing dependence on foreign technologies, leaving its economic prosperity, political stability, and geopolitical standing at risk. Yet the EU has within its grasp all the key ingredients to reverse this trajectory: a vast internal market, a highly skilled workforce, world-class research institutions, and a strong regulatory tradition. What is missing is not potential, but coordinated action.

This paper offers both an overarching vision and a practical blueprint with concrete proposals to implement. It argues that the EU must move beyond reactive regulation and piecemeal initiatives, instead embracing a unified, principle-based approach that leverages its collective strengths. By implementing bold reforms, the EU can build a digital future where it no longer plays the role of 'digital colony' but reclaims its position as a global leader in innovation and technology. The time to act is now — before this unique window of opportunity closes again.

1. Europe's Strategic Decline: From Innovation Powerhouse to 'Digital Colony'

1. The rise and fall of nations and civilisations has always been deeply intertwined with the emergence, or stagnation, of technological and commercial strength. Hegemonic cycles were driven by those who managed to gain leadership positions in the basic technological advancements of their time: ship construction, the steam engine, rail, electricity or motor vehicles — technologies where, over the past centuries, European powers have always been among the frontrunners. Today's global power distribution is defined by the ability to innovate, adopt, build and lead in ICT-based industries. Yet, 80 years after the invention of the computer and 25 years into the commercial internet era, the European Union must confront an uncomfortable truth: despite some notable exceptions, its digital ecosystem and innovation economy has fallen behind the US, the global leader, while China is also growing its market share (see FIGURE 1).

FIGURE 1: ICT global market share from 2013 to 2024

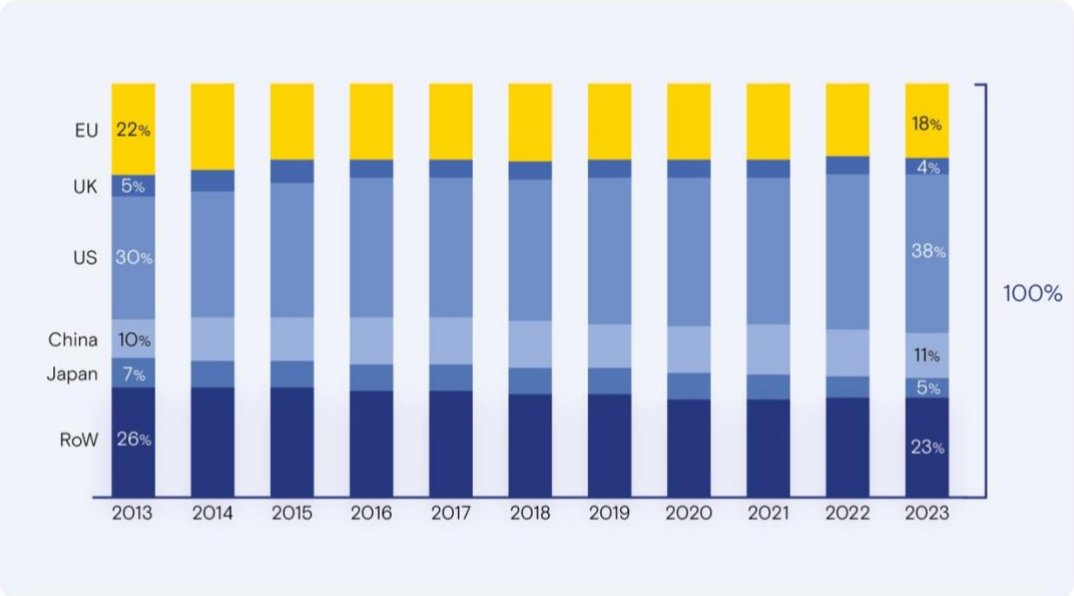

FIGURE 1: Global market share of the ICT market from 2013 to 2023 by IDC (2024)

2. Instead of driving a proportionate share of the world's technological advances, the EU finds itself almost entirely a client of powerful companies hailing from a handful of foreign countries. Such a reliance on foreign partners is not in itself a problem, in particular as the EU's economic strength has always been driven by its trade intensity. Yet, it has become excessive and unilateral: in addition to the dominant digital platforms (e.g. online search engines, app stores, social networks, cloud hyperscalers), much of the EU's critical digital infrastructure (e.g. data centres, undersea cables, semiconductors) is now operated or provided by foreign actors. One of the most striking examples within the technology stack is the EU's lag in 5G infrastructure, as European players are increasingly falling behind (see FIGURE 2). Still, European decision-makers have reacted for years with indifference and half-measures, even though the consequence of such excessive dependency is that the EU has been reduced to a vassal or 'digital colony'.

FIGURE 2: Commonalities and differences between 5G vendors and their countries of origin

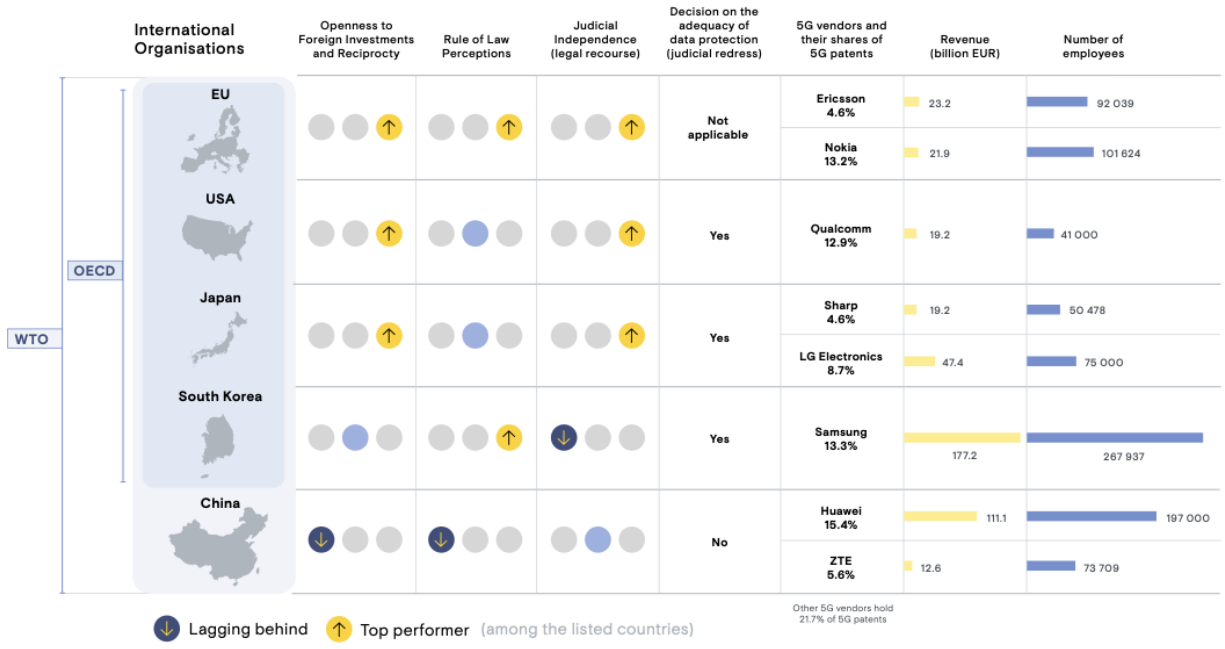

FIGURE 2: Commonalities and differences between 5G vendors and their countries of origin by EU Court of Auditors (2022)

3. Geopolitically, the picture for the EU becomes even gloomier: the second Von der Leyen Commission must navigate a more dangerous and volatile world — one where

once reliable partnerships have become uncertain. Tensions are on the rise in many critical regions, while some nations, directly or indirectly, are even challenging the European Union itself and its role in the world. On the EU's eastern borders, Russia has since 2014 repeatedly attacked European democracies via cyberwarfare and insidious propaganda campaigns. While China has managed to make significant strides in emerging technologies like AI, it deployed them in questionable contexts with limited protection for individual rights. US President Donald Trump, rather than recommitting the transatlantic alliance to its joint defence of human rights and rule of law, has instead imposed unjustified tariffs and incorrectly framed the EU's digital regulation as a form of arbitrary taxation against successful American companies.

4. It is clear that 'business as usual' no longer works. The post-Cold War global order has ended and raw power has returned as the primary driver of international relations. In the face of such dramatic changes, phrases such as '*si vis pacem para bellum' (if you want peace, prepare for war)* ring true again. No longer a global technological leader, highly dependent on foreign actors, and situated in a challenging geopolitical environment, the EU's very existence is at stake. The world has changed, and not in the way that the EU's founding fathers had hoped for.

2. A Moment of Truth for the EU: Doing more of the Same or Seizing the Moment?

5. The EU was established in part to act as a bulwark against such waves of geopolitical uncertainty and to facilitate swift and coordinated responses by European nations. European history shows that, when facing challenging odds, Europeans can act decisively. The EU recently demonstrated this through its speedy responses to the COVID-19 pandemic and to Russia's 2022 invasion of Ukraine.

6. On paper, the EU has also all the key ingredients (see FIGURE 3) required to put forward a similarly united and urgent response to address its strategic decline in the

digital field: a significant market size, a highly skilled and educated workforce, a rich history and track record of technological innovation and industrial excellence, private capital, a thriving startup ecosystem, excellent and open academia, and a pioneering sense of ambition. Furthermore, the EU's social welfare model offers entrepreneurs a 'safety net' enabling them to be less fearful of taking calculated risks and more willing to pursue innovative and disruptive business ideas.

FIGURE 3: Strengths of the Digital Single Market of the EU

FIGURE 3: Strengths of the Digital Single Market of the EU (2025)

7. How then did the EU manoeuvre itself into such a challenging situation? Many recent studies, including those authored by Enrico Letta and Mario Draghi, have illustrated that the decline in the EU's technology leadership must be seen in the context of general economic stagnation and strategic stagnation. This paper builds on those findings, by developing a tangible blueprint to address specifically the challenges in the digital field.
8. The first step necessary is to radically rethink the EU's approach to digital policy. The main strategy thus far to enhance its digital sovereignty has been to draft myriad new

legislative proposals, ensuring that every European and foreign digital product or service traded on the Internal Market was 'in line with EU values' and would not harm European citizens or consumers. The fact that these laws were sometimes adopted globally by international companies was hailed as the 'Brussels Effect' (see FIGURE 4). In addition, the EU has attempted to accelerate its digital transformation with somehow ambitious targets in the 2022 Digital Decade Policy Programme (DDPP) and has tried to foster innovation in digital through a wide range of investment programmes such as Horizon Europe or Digital Europe Programme.

FIGURE 4: Mapping the Brussels Effect

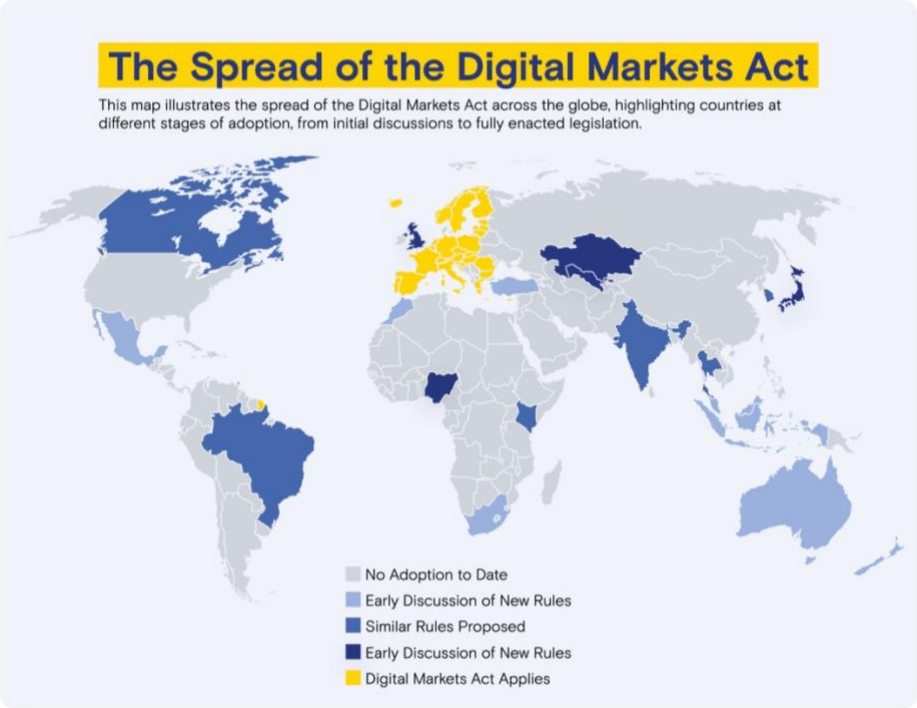

FIGURE 4: The Spread of the Digital Markets Act by CEPA (2025)

9. However, that approach ultimately lacked both an overall and coherent vision as well as a strict focus on a set of strategic priorities. While carefully designed regulatory intervention can foster innovation, the EU's legislative maze, comprising in early 2025 exactly 101 adopted digital laws, has often constrained growth, especially for European SMEs that face disproportionate compliance costs compared to global giants (see FIGURE 5). Weak and inconsistent enforcement marked by national opt-outs and divergent interpretations has amplified legal complexity and fractured the

very Digital Single Market the laws were meant to strengthen. The Digital Decade Policy Programme, though ambitious in aiming to upgrade digital skills, digital infrastructure and public services, was not well aligned with the EU's other digital policy initiatives, and has suffered from poor national implementation. Meanwhile, the EU's digital innovation strategy has too often prioritised replicating existing digital services within captured digital infrastructures instead of fostering novel digital ecosystems, and has not leveraged public procurement well enough, resulting in missed opportunities to cultivate early-mover advantages.

FIGURE 5: The "Blue Wall" of EU legislation in the digitial sector

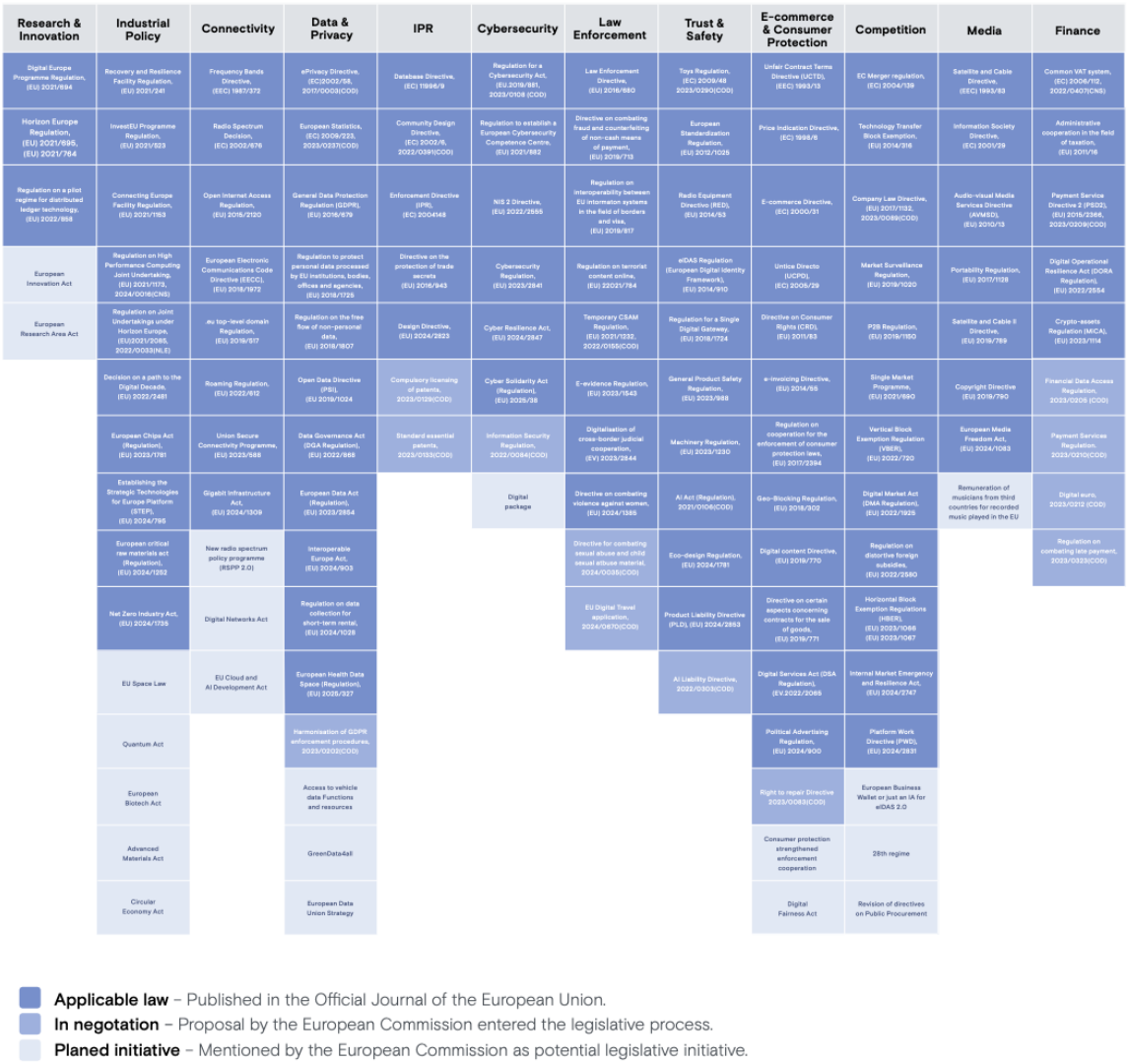

FIGURE 5: The 'Blue Wall' of EU digital legislation by Bruegel/Zenner (2024)

10. It was therefore a positive step that the EU Institutions drew the right lessons from the identified shortcomings and - after the 2024 European election - shifted their policy focus to 'implementation and simplification'. While there is no doubt that some red tape needs to be cut, however, the new approach lacks direction and vision. Simplifying or even removing regulations without a clear vision and a set of strategic priorities for the digital sector will not by itself help the EU to overcome its tech dependence on third countries and would also potentially weaken the 'Brussels Effect'. If anything, unpredictable and poorly-considered changes to applicable EU laws risk creating an uncertain environment for investment and would weaken the EU's long-term strategic interests. Even more as the recent Eurobarometer polling shows a historically high support of European membership among EU-27 citizens (see FIGURE 6). This level of trust deserves to be nurtured with meaningful actions and bold policies, guided by an inclusive, long-term vision with care to avoid the described political pitfalls.

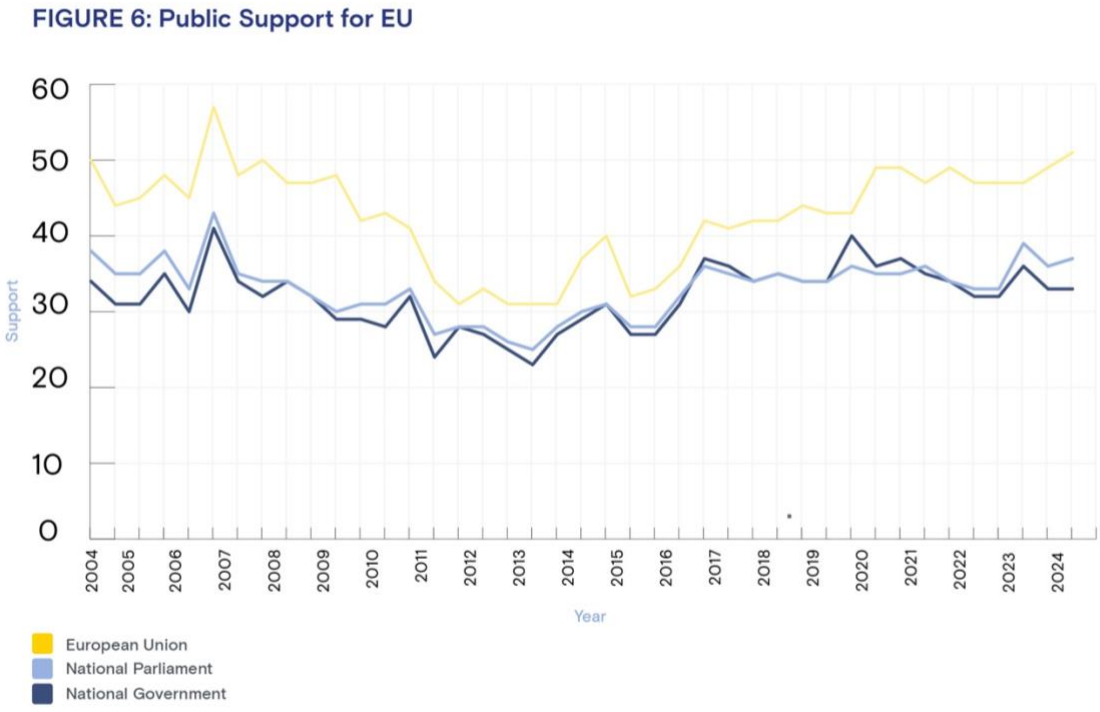

FIGURE 6: Standard Eurobarometer 102, European Commission (2024)

3. A Strategic Turnaround: The 'European Way'

11. Seen positively, the current geopolitical and economic situation offers us a unique window of opportunity to address many of the underlying reasons for Europe's decline and to rethink its trajectory toward strategic autonomy. Yet even now, there are EU policymakers and national governments arguing that it is too late to regain digital leadership, too difficult to advocate for it domestically, or too expensive, just as we saw during the COVID-19 pandemic, when several Member States delayed the rollout of joint borrowing due to fiscal conservatism. While the EU must be realistic about what is achievable, it should not give naysayers another opportunity to block necessary reforms. To safeguard the current moment from that risk, the EU needs to come up with a powerful vision and battle cry: this is where the 'European Way' comes into play!

12. Before describing what the 'European Way' could be, it is worth mentioning what it does not stand for, namely isolationism, protectionism and support for market concentration or subsidising national champions. On the contrary, the EU represents a sovereign, values-driven, and human-centric approach to digital transformation with a free, fair and open digital market; and the 'European Way' mirrors just that. At a time when geopolitical tensions are rising and excessive unilateral technological dependency is becoming a critical vulnerability ready to be leveraged by adversaries, the EU should not fall for quick fixes such as protectionism. Protectionism is not only at odds with European values but it is also not realistic as digital supply chains became notoriously globally interconnected (e.g. a single semiconductor chip requires components that have crossed several national borders multiple times, see FIGURE 7).

FIGURE 7: Microchip value chain

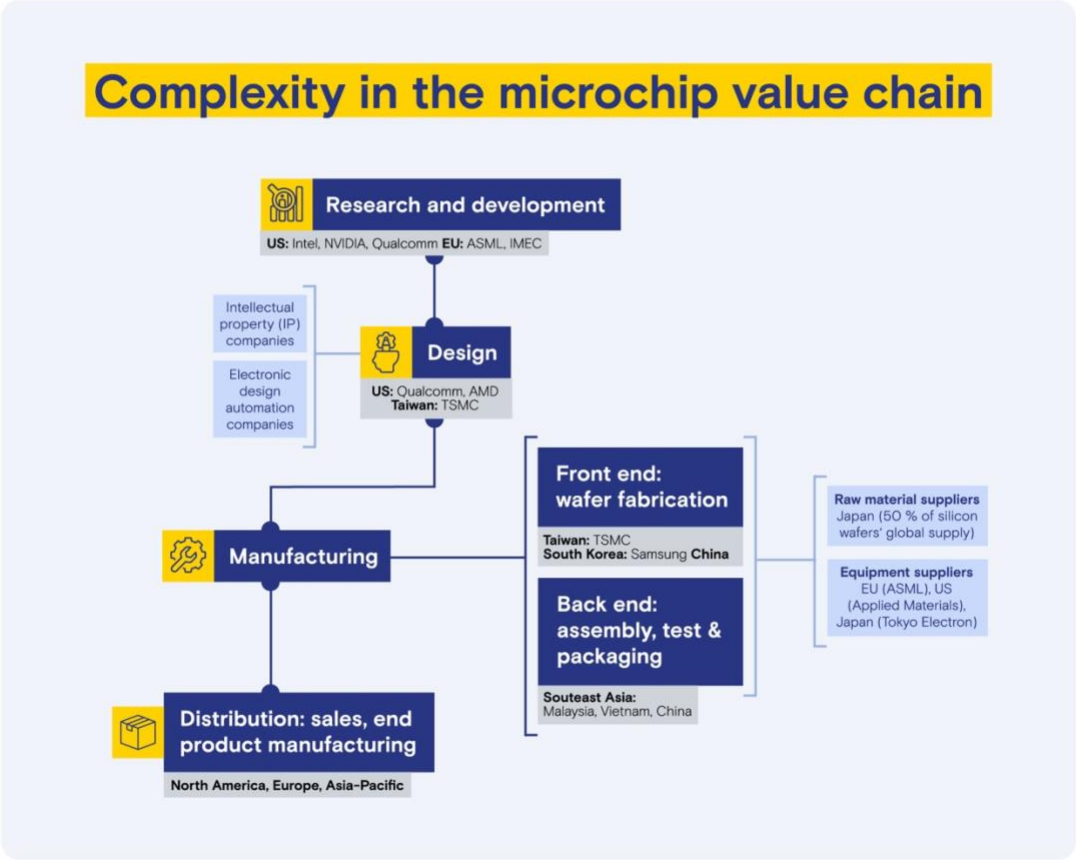

FIGURE 7: The semiconductor chip supply chain by the EU Court of Auditors (2025)

13. So far, Europe's vision for technology is a rather poorly defined concept: the EU is known for regulating digital and emerging technologies with an emphasis on human centricity, democratic oversight and the protection of individual rights, as exemplified by the European Declaration on Digital Rights and Principles. Democratic governance of technology is by no means only a European value, but the EU has certainly taken a global leadership role. Its digital rulebook is the most comprehensive effort globally to protect privacy and other human rights, raise product safety standards, and ensure fair competition in the digital economy. While the EU's digital regulations can be complex and cumbersome, their underlying objectives and focus on fundamental rights provide a relatively complete backdrop for the sustainable digital transformation that many other regions crave. Parts of it have thus become a template for other governments in emerging markets, while multinational companies

have adopted EU laws on data privacy, cybersecurity, product safety as their global standard, benefiting countless people who have never set foot on European soil.

14. This abstract appeal of the EU's democratic governance is, however, not enough to regain strategic autonomy in the digital sphere. The 'European Way' requires a much more concrete blueprint to guide its regulatory simplification reforms and streamline all efforts toward a common goal. This blueprint also needs to be systematically implemented in the way the EU regulates, enforces, invests or acts on the global stage. Here lies the core problem. Although there are almost two decades of discourse in politics, academia, and standardisation groups on how Europe should govern the digital sphere, the EU still has no grand strategy that explains it and brings all the different parts together. The activities of the European Commission demonstrate this: while it regularly mentions a 'European Way', it does so in very different contexts, by different institutional actors, with different meanings, and in an incoherent manner.

15. Therefore, as the EU charts its path through the digital age, EU policymakers must - as a first crucial step - ensure that digital transformation is guided by a coherent, values-based, and unified vision. To initiate the required political debate among policy-makers, the authors of this paper propose that the future of the EU's digital society should be grounded in six foundational principles: **principled governance, strategic resilience, interoperability, sustainability, trustworthiness**, and a **decentralised economy** (see FIGURE 8).

FIGURE 8: The European Way

FIGURE 8: The 'European Way' by Kai Zenner (2025)

a. Following a **principled** governance approach: The EU's digital policy must not only be shaped by but also effectively safeguard democratic norms and European values. As foundational principles of the EU, the rule of law, fundamental rights but also a free market with fair competition are non-negotiable. Elected officials and public authorities have a duty to ensure that digital products, services, and infrastructures alike do not erode but rather support EU norms and values.

b. Building **resilience** into critical infrastructure: Strategic autonomy in the digital domain is essential. The EU must reduce its excessive unilateral dependencies on foreign technologies (particularly those that pose risk to European values) and gain access to robust, diverse, secure infrastructures that can withstand cyber threats, disinformation campaigns, and geopolitical and

systemic shocks. This requires proactive investment, coordinated defence strategies, a trade policy that focuses on supply chain diversity and cross-border preparedness.

c. Championing **interoperability** for a unified digital market: Policymakers must prioritise legislation and funding that promotes digital interoperability. From public services to private enterprises, aligning standards across Member States will enable a synergistic ecosystem—driving efficiency, agility and innovation—and foster a truly integrated Digital Single Market. Use of open source and open standards will help to ensure interaction between services and platforms, opening up choices and fostering competition and innovation across Europe.

d. Embedding **sustainability** in the digital transition: Digital innovation must align with the European Green Deal. Therefore, policymakers must mandate energy efficiency, sustainable procurement, and life-cycle accountability for digital products and services. Regulatory incentives and funding mechanisms should support green tech adoption and climate-neutral digital infrastructures as this is not only important to meet our climate policy goals but also creates a unique business opportunity for EU companies.

e. Ensuring public **trust** through tech governance: To maintain citizens' confidence and buy-in but also to create a globally competitive 'made in the EU' commercial brand, European digital products and services must - on top of being sustainable - be secure, transparent, and accountable. Regulatory frameworks must, for instance, reinforce ethical AI development, GDPR compliance, and platform accountability. Political leadership is thereby key to embedding trust into every layer of the EU technology stack.

f. Promoting a **decentralised** digital economy: The EU's digital economy is shaped by a majority of small and medium-sized companies, reflecting also its cultural, religious and linguistic diversity. The EU's digital policy should

leverage this globally unique economic characteristic, promoting experimentation and innovation so that EU firms can meet the individual demands of their regional as well as global customers.

16. This vision of a 'European Way' is not just another call to action: it has already demonstrated tangible results in the past. The best example can be found – outside the digital field – in how Airbus was established in 1970: France and Germany pooled resources and collaborated in a consortium of several European aviation companies to build the A300 and successfully compete with Boeing. Such foresight by the European aviation industry allowed a unique public private initiative to be funded and organised, with important long-term consequences for EU industrial sovereignty. Today, Airbus has edged past its main competitors and dominates the aircraft market globally.

FIGURE 9: Airbus and Boeing Plane Deliveries by Year

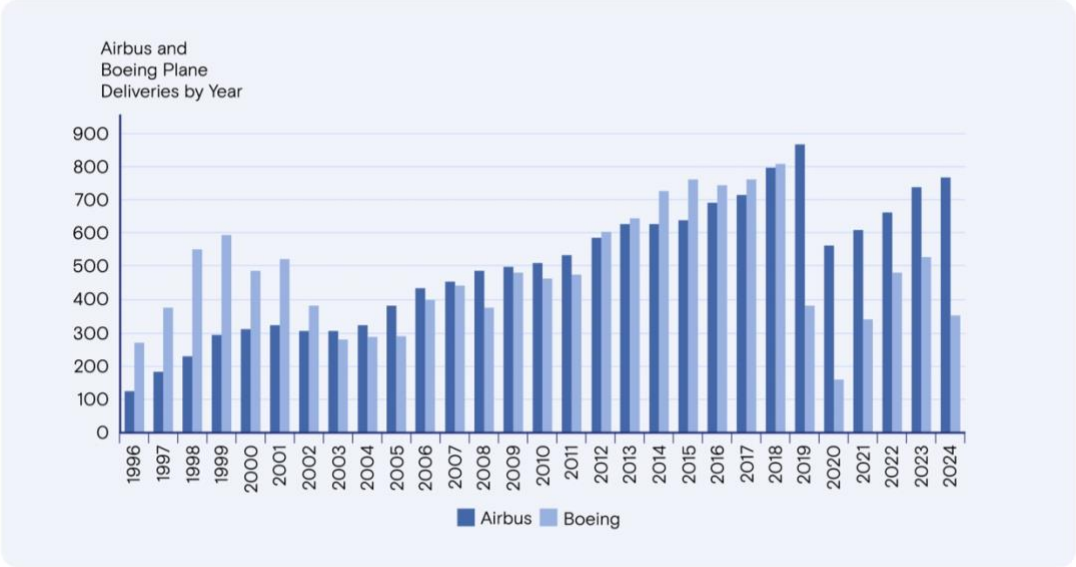

FIGURE 9: Based on publically available information (2025).

17. However, introducing an overall vision to each of the EU's digital policy activities is still not enough. It can only be the first of two crucial as well as interconnected steps. The EU will only be able to leverage the current momentum for regaining its strategic

autonomy in the digital sphere if it applies the new overall vision of a 'European Way' deliberately to its entire digital infrastructure, understood in this paper as a highly intertwined 'technology stack' (see FIGURE 10), and also only if it decides to collaborate - like with the Airbus consortium - in areas of the stack where EU players are strong:

FIGURE 10: The Tech Stack has Three Layers and Three Foundations

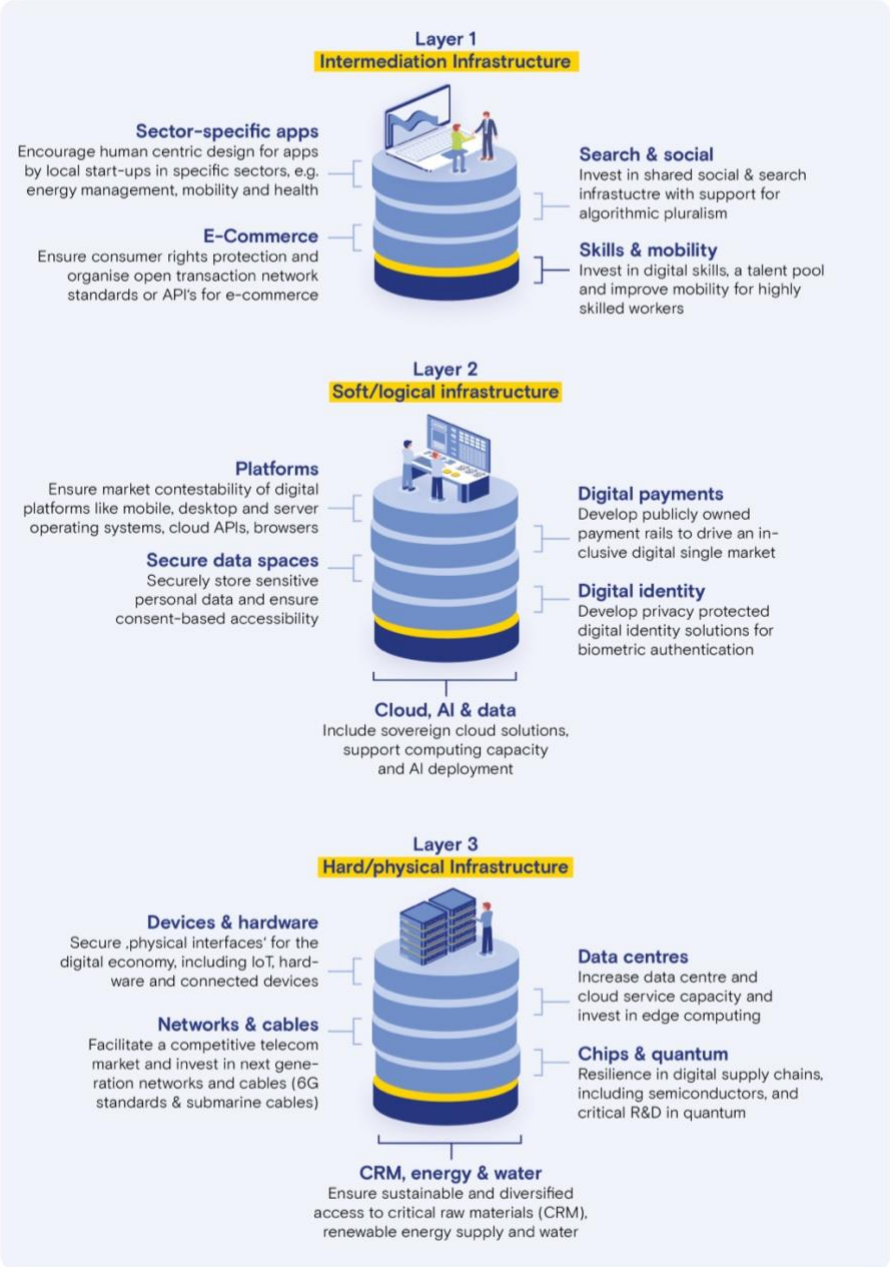

FIGURE 10: 'The Technology Stack' by Gautam Kamath (2025)

18. This means concretely that the six principles outlined above (see FIGURE 8) should be reflected in the policy interventions across each layer of this technology stack - the 'intermediary' layer, which organises activities online, especially at a 'people to people' level; the 'soft or logical' layer, which comprises the 'rails' on which digital activities take place; and the 'hard or physical layer', which includes all the physical interfaces of the digital world - as they in the end all need to be aligned with each other to make the 'European Way' work in practice.

19. These principles should not just form the bedrock of how the EU designs its internal digital policies, but also inform its international engagement. The EU remains the world's largest importer and exporter of digital services, with over $3 trillion worth of digitally delivered services traded in 2023. Therefore, it is imperative that the EU continues to stay open for foreign business, while ensuring that its policy interventions focus on key priority areas, like semiconductors, quantum, AI, and connectivity. The EU must create partnerships with trusted international partners or even 'coalitions of the willing', securing its technology supply chain. At the same time, it will be critical to promote the European technology ecosystem overseas, building on its strengths in key layers of the stack, while forging partnerships with geopolitically important regions like the Indo-Pacific (e.g. India, South Korea, Japan, ASEAN) or the Americas (e.g. Canada, USA, Mexico, Brazil).

20. Since the EU does not have endless capacities or resources, European policymakers need to have a sober assessment of where in the technology stack the EU has an opportunity for global leadership, where it should focus on ensuring a minimal level of domestic alternatives to protect its self-determination, and where the EU will need to rely on trusted international partners. As each layer of the tech stack is analysed and mapped in that way, an overall blueprint that directs all future policy interventions will become clearer. In the next chapter, the authors of this paper propose six key reform packages that should permeate across each layer (and sub-layer) of the tech stack. The overall strategic objectives of these bold reforms proposals are to:

- Attract significant investments in the EU tech ecosystem, while improving competitiveness and innovation on the Digital Single Market.
- Strengthen the EU's strategic autonomy by limiting critical dependencies in each layer of the technology stack.
- Facilitate partnerships with like-minded countries and fund European private sector aggregations that can compete and win on the world stage at different layers of the stack.

21. During this exercise, European policymakers must be clear-sighted, especially when choosing how, and to which extent, they can achieve these objectives best. Only with a resurrected digital economy, competitive businesses, and meaningful leadership will the EU be able to achieve what democracies aim to provide for their citizens: prosperity, agency, social stability, security, and confidence in a future where Europeans can properly navigate the world's global challenges.

4. Six Reforms to make the 'European Way' a Reality and Reclaim our Digital Future

22. The authors of this paper have chosen the following set of priority reforms as a way to implement the proposed overall vision of an 'European Way' and to reclaim the EU's digital future (see FIGURE 11), namely by (a) powering up a European digital infrastructure, (b) supporting the completion of the Digital Single Market, (c) helping to transform the EU into a geopolitical protagonist, (d) reinforcing Good Governance principles in the EU's digital policy procedure, (e) guaranteeing reliable and sustainable energy supply, and (f) attracting and retaining talent, while promoting digital skills.

23. Picking priorities always means that many other important strategies and fields will be overlooked. Policy proposals that are not listed in this chapter can certainly still have an enormous effect on the overarching goal of this paper: achieving strategic

autonomy in the digital field. This is particularly the case for already announced and sufficiently specified proposals of the European Commission (e.g. the 28th regime, Digital Networks Act, Digital Fairness Act and the Digital Omnibus). Similarly, this paper also does not include a detailed analysis of legislative proposals that are currently negotiated (e.g. Digital Euro, FiDA, GDPR Procedural Regulation) or were recently adopted (e.g. Data Act, AI Act, Cyber Resilience Act).

24. Ultimately, every ambitious roadmap collides with a hard political fact: the EU still requires unanimity for core budgetary and treaty matters, giving any single government (today Hungary, tomorrow another) an effective veto over the EU's strategic posture. As long as that structural weakness persists, even the most fine-tuned 'European Way' will remain hostage to domestic calculations that have little to do with collective security or technological renewal. The authors of this paper acknowledge that sovereignty cannot be regained through policy papers alone; it also requires an institutional circuit breaker that prevents deliberate obstruction from paralysing twenty-six willing partners.

25. The authors therefore propose - beyond the digital focus of this paper - a '**Sovereignty Compact**', a self-contained protocol annexed to the EU Treaties that enters into force once two-thirds of Member States, representing at least 70 % of the EU population and GDP, ratify it. Within the Compact's perimeter, critical decisions on defence, digital infrastructure and related budget lines will move to qualified-majority voting; participating states will gain automatic access to joint borrowing facilities (e.g. Digital Sovereignty Fund, Digital Defence Fund), while non-participants retain their existing rights but forgo those new resources. Legally, the mechanism mirrors the Euro's Fiscal Compact or the Schengen Convention: it avoids full treaty revision yet creates a clear incentive structure - join and shape the EU's tech sovereignty, or stay out and watch others build it. By converting veto power into a strategic choice, the Compact would give the EU the political engine it needs to move from aspiration to action.

FIGURE 11: Digital Reform Package

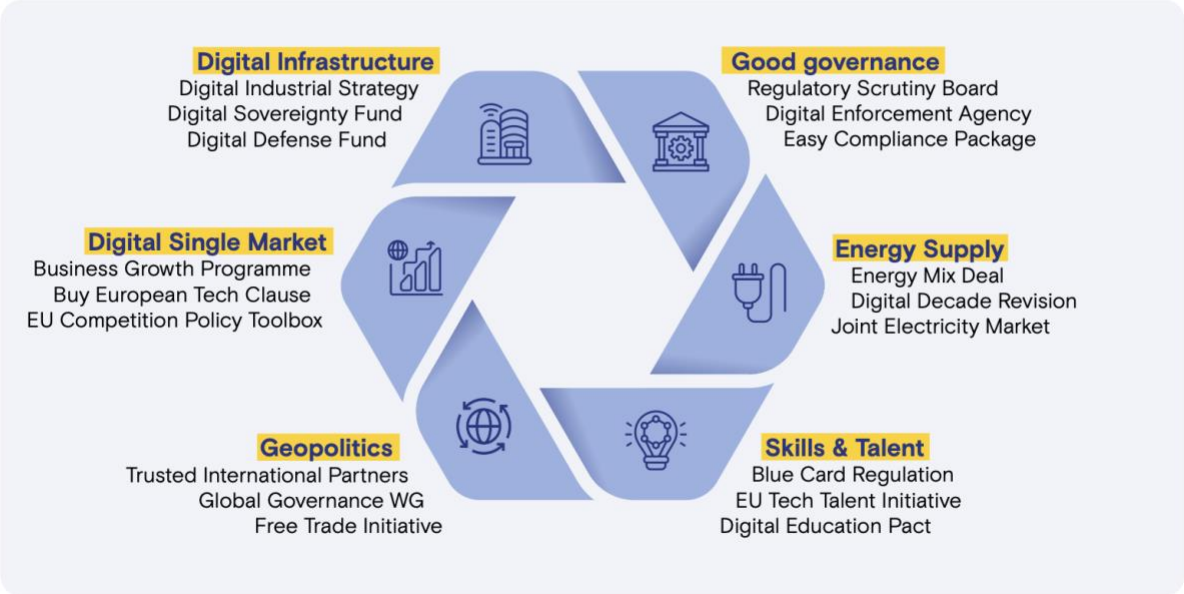

FIGURE 11: The 'Digital Reform Package' by Kai Zenner (2025)

26. **REFORM #1 - Digital Infrastructure:** For too long, the EU has focused most of its policy efforts on digital rights and the regulation of dominant online services, which have failed to address (and perhaps even contributed to) critical dependencies as well as chronic underinvestment in the critical hardware and software infrastructure needed to power the EU's digital sector. Yet, in today's tense geopolitical climate, the EU has the rare chance to confront these vulnerabilities and to build a robust, sovereign digital infrastructure that secures Europe's future strength and competitiveness.

27. At the core of this first reform package must be a comprehensive '**Digital Industrial Strategy**' for the EU, focused on developing a European Digital Infrastructure (see EuroStack initiative) grounded in the principles of the 'European Way' outlined above. While the EU's current infrastructure is overwhelmingly controlled by non-European actors, it is entirely feasible to build robust European alternatives by mobilising private-sector capabilities without resorting to a centralised or state-heavy approach. Past successes — such as the formation of Airbus from fragmented national initiatives into a global industrial leader — show one of several ways of how private

entrepreneurship, cross-border collaboration, and strategic policy alignment can drive competitiveness. Rather than attempting to recreate every layer of the tech stack domestically, the new strategy should prioritise areas where European players can plausibly achieve global leadership (i.e. Quantum Computing, Applied AI, biotechnology, resilient data infrastructures, digitally integrated defence systems), sufficiently well-functioning stack layers for critical infrastructure and strategic independence (i.e. Cloud, AI Foundation Models, satellite and space technologies, social, search, adtech, browsers), and credible fallback capacities (i.e. productivity suites and operating systems) in case of foreign pressure and to prepare for the future. This industrial strategy will require a dual approach: combining targeted investment in strategic technologies with strong commercial partnerships, ensuring interoperability and security across platforms; and embedding resilience into EU's digital ecosystem. The EU Digital Identity Wallets, the upcoming European Business Wallets but also the EU Data Spaces and the Digital Euro can further complement the strategy. Ultimately, the EU's strategic autonomy will depend not on eliminating all foreign dependencies but on sufficiently securing its supply chains and ensuring that no single vulnerability can be weaponised against it.

28. Also needed is a radical rethinking of how public money is spent for digital technology research, innovation, and development. Public spending should focus much more on supporting the creation of commercially viable EU-sourced infrastructures that contribute to the EU's long-term goals - not just on funding university research. The creative energy of European industry can be better liberated by pioneering disruptive ideas and incentivising projects with post-funding viability and long-term scalability, combined with clear performance metrics that can achieve measurable, outcomes-based results. New funding may also be generated through reallocation of funds away from existing programmes, such as Horizon Europe and the Digital Europe Programme, where certain parts show a lack of tangible results. In combination with other EU funds, private investment schemes through the European Investment Bank, Venture Capital, Private Equity funds, crowdfunding, tokenisation (i.e. STOs and ICOs) but also tax incentives, a true '**Digital Sovereignty Fund**' could be created,

significantly contributing to the creation of a resilient EU digital infrastructure.

29. Finally, the EU's approach to digital infrastructure must prioritise zero trust principles, with security by design and constant attention to the resilience of operational systems. Strategic autonomy will remain a fiction unless we embed digital sovereignty into military doctrine. Therefore, and as a follow-up to the White Paper on European Defence Readiness 2030, a new '**Digital Defence Fund**' should accelerate the development of secure, sovereign, and interoperable digital defence infrastructure across all layers – from European-made cybersecurity solutions and homegrown AI-driven threat detection systems, drone capabilities, as well as other strike and reconnaissance components to resilient data platforms and communication networks that can operate independently of external actors. The current military threats against the EU also require the launch of a European DARPA, focused on advanced independent technology and dual-use innovation, and a fundamental shift in defence procurement: away from heavy, vulnerable tanks and artillery toward the mass production of digital-first, low-cost, integrated saturation and effector systems. Ultimately, the strengthening of the EU's defence capabilities will require deeper collaboration between Member States: military data must remain within European jurisdiction and be protected from external influence.

30. **REFORM #2 - Digital Single Market:** A decade after its announcement, the EU's Digital Single Market remains unfinished, which has an impact on safety standards and consumer protection, stalls innovation, and limits the scale our companies can achieve, hindering their global competitiveness. Yet in today's tense geopolitical climate, the EU has the rare chance to break through longstanding internal gridlock and unlock the full potential of the single market for digital products and services.

31. A cornerstone of this second reform package, as advocated for by Mario Draghi and Enrico Letta, must be the completion of the Capital Markets Union (e.g. common insolvency as well as tax laws and a unified EU Listing Act to streamline initial public offerings) and Banking Union to further reduce inefficiencies and costs in cross-border investment. The EU must also swiftly adopt the envisioned '28th regime', an

optional EU legal framework that companies can choose to use across all Member States, existing alongside (but not replacing) national laws. While none of the three initiatives are specific to the digital sphere, they would be a major accelerator for the recovery and performance of the whole Digital Single Market. Even more so if they are integrated in a larger '**Business Growth Programme**' that collates and rationalises the multiplicity of Tech Funds to provide swift growth paths for EU scale-ups, which would otherwise be incentivised to relocate to the US, Asia or the Middle East. The programme should, however, also introduce other supportive measures beyond funding, such as expanded tax incentives for business angels, EU labels for trusted venture capitalists (VCs), the facilitation of cross-border contracting based on standard contractual clauses and templates, and more efficient royalty-sharing models to name a few.

32. Public procurement is another underutilised tool that should be wielded to boost the EU's digital economy. Integrating a '**Buy European Tech Clause**' in existing relevant legal frameworks would establish clear procurement goals aligned with the 'European Way'. This would incentivise digital products and services made in Europe by supporting public authorities which choose to use European vendors[1]. A procurement decision in favour of a non-European supplier would always require the disclosure of the selection criteria as well as a comprehensive justification on what grounds that decision was taken. The introduction of 'Technology Change Vouchers' for public authorities would help to overcome severe lock-in effects. Such a policy could also create further incentives to steer private sector demand for European technology through interoperability and vendor diversity requirements. The upcoming reform of the Public Procurement Directives should be used to introduce ambitious timelines, effective monitoring mechanisms, require commitments to adopt harmonised technical standards, and to ensure a high level of cyber resilience as well as sufficient supply chain and vendor diversity.

[1] Based on the 2020 certification scheme, developed by ECSO, such a company would need to (a) be European-based (= legal entity, headquartered in Europe), (b) have European ownership (= must provide reasonable assurance that there is no major control from outside Europe, with immunity from other jurisdictions and data stored and processed within the European territory, and (c) has Europe as a primary business place (= over 50% of R&D activities and over 50% of staff (FTE) located in the EU27, EFTA, EEA, UK).

33. Finally, competition policy must be revamped to better reflect the realities of today's digital markets. The EU as well as the national competition authorities should thereby widen their lenses to fields such as national security, data protection and privacy, labour law, intellectual property rights or industrial strategies where these are relevant to a competition analysis. In this regard, the whole '**EU Competition Policy Toolbox**' should be revised, in particular by adjusting merger rules and introducing greater possibilities to enforce merger conditions ex-post, by allowing more flexible state-aid policies in strategic sectors, and by establishing agile procedures, tighter deadlines, and transparent decision-making processes. While the adjustments should enable the Commission's DG Competition to intervene faster and more effectively in all cases with a Union dimension, new institutional safeguards should make sure that investigations cannot be stopped anymore because of political or national interests. This new EU competition policy, including the enforcement of new laws such as the Foreign Subsidies Regulation and the Digital Markets Act, will require significantly increased hiring efforts.

34. **REFORM #3 - Geopolitics:** With China and the US shaping a new global digital order on their own terms, the EU risks becoming a bystander in a contest that will define everyday life for years to come. But this strategic drift also offers a chance to reset: by systematically integrating the 'European Way' into its foreign policy toolbox, the EU will become more capable of defending its interests and promoting its own vision for the digital sphere, while also revitalising crucial alliances and partnerships — especially with the US — by reasserting itself as a sovereign, values-driven and reliable partner.

35. A foundational step for this reform will be to establish a frequently updated list of '**Trusted International Partners**', similar to the U.S. Major Non-NATO Ally (MNNA) designation. This list will ensure that diversification efforts in raw materials, semiconductors, digital infrastructure, or critical applications prefer vetted partners from like-minded and democratic countries. This would minimise the EU's dependency on authoritarian regimes and hostile countries, including private companies or organisations under their control. Increased cooperation with these

vetted partners would also allow the EU to better leverage areas where it possesses natural advantages. Ongoing dialogues on topics such as quantum technology or advanced semiconductor supply chains should be initiated with all listed trusted international partners, building upon the existing Digital Partnership Councils and relevant parts of the Digital Decade Policy Programme.

36. To become a more assertive player in digital governance, a new permanent '**Global Governance Working Group**' for Member States should be established within the Council of the EU. This working group would adopt decisions by a qualified majority, helping to align the 27 national governments for the global stage and aiming for an EU that speaks with one voice. The 'European Way' should be strategically promoted in all international organisations and through the Global Gateway strategy. Before key votes at the UN level or important negotiations, the working group should not only align internally, but also help to revitalise existing alliances (i.e. NATO) and form new strategic partnerships, in particular with the listed trusted international partners. Together with a dedicated EU Commissioner for technical standardisation, the Working Group should also work towards regaining leadership in all relevant international standardisation bodies, while trying at the same time to gather support for a new global framework of digital governance. The High-Level Forum on European Standardisation should develop a template for all standardisation requests of the Commission, incorporating the core principles of the 'European Way' to ensure their consistent implementation across all sectors. Significant public investments in European and national standardisation bodies as well as tax breaks for companies that hire standardisation experts seem inevitable, similarly to a revision of Regulation (EU) 1025/2012 to address the rise of software-based standards as well as to enhance the representation of EU stakeholders and to mitigate the dominance of large foreign tech companies.

37. Finally, the EU's trade policy must shift focus toward digital trade both to address gaps in the value chain, where no EU-based alternatives exist, and to boost the export of European technologies to third countries. Thereby, a new strategic '**Free Trade Initiative**' should aim to expand the EU's Free Trade Agreements to cover all

Member States from the Council of Europe, NATO, and OECD, while ensuring that digital trade chapters are included in each of those deals. Agreements such as the EU-Japan Economic Partnership and the EU-UK Trade Cooperation Agreement should thereby serve as blueprints for how to facilitate free trade while avoiding protectionism. Missing digital chapters in existing Free Trade Agreements must be renegotiated, and outstanding deals with Mercosur, Australia, India, Indonesia, the Philippines, and Thailand finalised and ratified. Negotiations with the US and the Gulf Cooperation Council (GCC) must be revived and concluded as soon as possible.

38. **REFORM #4 - Good Governance:** The EU's regulatory superpower is at risk of collapsing under its own weight - trapped in a maze of fragmented rules, duplicative procedures, and enforcement gaps. But this overload also presents a moment of reckoning: by streamlining its digital governance and aligning regulatory goals with strategic outcomes, the EU can reclaim its capacity to lead - domestically and globally - with agility, effectiveness and principles.

39. A crucial first step of this reform package is to transform the '**Regulatory Scrutiny Board**' into one of the then eight EU Institutions, independent from the European Commission, where it is currently located. Alongside a more empowered European Court of Auditors, the new Board would be sufficiently resourced to conduct ex-post evaluations more systematically and to monitor the entire EU policy cycle, ensuring that all adopted EU laws are fit for purpose, that the Better Regulation agenda is implemented, and the 2023 Better Regulation Toolbox is assiduously followed for any new legislative initiative. Both the Regulatory Scrutiny Board and the European Court of Auditors would start by conducting a comprehensive fitness check of all 101 adopted digital laws, sending policy recommendations to the Commission. The aim of this exercise would be to significantly reduce regulatory burden, remove legal overlaps and contradictions, and incorporate sunset clauses in laws to ensure their adaptability. The integration of the 'Innovation Principle' in the EU treaties as proposed by the ESPC in 2016 is also important. New laws drafted by the EU co-legislators should be precise and principles-based, similar to the original 1985 Product Liability Directive. Secondary legislation, guidelines, technical protocols, and

harmonised technical standards will provide the necessary specifications. The European Parliament's role in shaping secondary legislation ought to be strengthened (i.e. including MEPs in comitology committees), bringing greater accountability and transparency to this part of the EU policy cycle, while keeping the agility of those processes.

40. Enforcement must also be overhauled. As a matter of principle, only Member States or independent EU agencies should enforce digital laws. The Commission must cede its politicised role as enforcer, and focus again solely on the implementation of laws. The Regulatory Scrutiny Board and European Court of Auditors would present a proposal on how to cut the current web of 82 digital governance mechanisms accordingly, for example with ENISA designated as the single cybersecurity authority, and a newly created independent '**Digital Enforcement Agency**' overseeing all AI, data and platform laws (e.g. GDPR, DSA, DMA, AI Act, Data Act). This new agency could impose permanent bans against those companies that have systematically violated EU laws or that act on behalf of a foreign adversary. The Digital Enforcement Agency would also play a crucial role in countering the growing threat of information manipulation and hybrid attacks. While a massively expanded Europe Direct Contact Centre would provide an interactive fact-checked information platform, with permanently updated and diverse scientific information to effectively tackle disinformation and protect a substantive and nuanced right to free speech, the new Digital Enforcement Agency would establish an independent early-warning system capable of identifying inauthentic behaviour patterns and coordinated hostile influence operations, closely cooperating with law enforcement authorities and military forces to strike back, if necessary.

41. Reporting obligations for businesses must be halved with an '**Easy Compliance Package**' that establishes a new 'once-only' principle, streamlining compliance towards a single designated public authority. In this regard, the Single Digital Gateway should be refined into an ambitious EU one-stop-shop. AI-powered software tools must be made available to support companies with automated compliance checks, including code analysis and risk assessments to lower compliance costs (e.g.

automated testing and guardrailing to measure the trustworthiness and resilience of AI systems based on specific regulatory requirements in the AI Act). Pre- and post-regulatory sandboxes, integrated into the existing European Digital Innovation Hubs (EDIHs), would help to produce real-world data for public authorities, drive regulatory learning on both sides, and foster experimentation in a legally secure environment. Sandboxes must also include automation tools in order to escalate and improve the testing process, as proposed by OECD in its 2023 Report.

42. **REFORM #5 - Energy supply:** The EU's digital ambitions risk stalling amid high energy prices and mounting pressure on supply security, undermining efforts to reduce critical dependencies and to remain economically competitive. Yet this challenge can lead to strategic reinvention: by aligning its digital and sustainability agendas, the EU can turn energy constraints into a catalyst for smarter, greener growth as well as cutting-edge innovation in data infrastructure and hardware production.

43. To achieve a realistic degree of energy sovereignty and enhance the EU's technological capacities, the Commission should first and foremost propose a new and balanced '**Energy Mix Deal**'. Accordingly, the role of nuclear energy - already constituting 23% of the produced electricity in the EU - should be reconsidered, while taking the relatively slower expansion capacities fully into account. Still, investing in current and fourth-generation nuclear technologies should no longer be a taboo, as they theoretically offer a secure and uninterrupted energy source, ideal for powering data centres and reducing energy bills for tech companies. At the same time, the EU must significantly expand investments in renewable energy, which is crucial for meeting our long-term climate goals and energy independence. Renewables are quicker and cheaper to deploy than natural gas power plants (as an interim solution) and new nuclear capacities (as a long-term solution), complementing both energy sources, as it was repeatedly suggested by the International Energy Agency. This balanced deal, including also fixed minimum energy thresholds reserved for EU providers, will strengthen the EU's energy affordability, security and sustainability.

44. The planned 2026 revision of the '**Digital Decade Policy Programme**' offers a unique opportunity to transform Europe's industrial backbone into a cost-effective, interconnected and circular economy. Clear monitoring and assessment of energy-intensive sectors (e.g. construction, transport, manufacturing, and agriculture) and strategies to make essential infrastructures more resilient, secure, and digitally managed (e.g. gas and oil pipelines, water management systems, and transport) must be combined with the Programme's so far only digital targets. Specific KPIs, building upon the work of the European Green Digital Coalition, will help to measure the overall progress of the green-digital twin transition. A parallel investment plan to pool existing resources and prioritise funding in innovative cleantech solutions as well as the reinforcement of circular economy practices by promoting the Digital Product Passport and by establishing a secondary market for recycled ICT equipment will further accelerate the twin transition processes.

45. A '**Joint EU Electricity Market**' is the final pillar of this fifth reform package. Introducing strong regulatory oversight, streamlining national frameworks and eliminating bureaucratic bottlenecks, such as permit delays, is essential for the electrification of key digital sectors. This new framework will harmonise energy taxation and fees across Member States and introduce tax incentives and state aid rules to encourage large-scale investments in smart grids and smart meters, heating and cooling technologies, storage solutions, high-voltage power lines and alternative energy carriers like hydrogen for hard-to-electrify industrial use cases. The EU can further complement this new framework with an open protocol for energy markets, for instance as proposed by the Digital Energy Grid (DEG) initiative, allowing the integration of transactions between producers and consumers at all scales.

46. **REFORM #6 - Digital Skills & Talent:** Despite its world-class quality of life, the EU is losing ground in the global race for tech talent, held back by sluggish digitalisation, regulatory fragmentation, and barriers to mobility. While the European Commission estimates that the EU requires 20 million employed ICT specialists by 2030, we employ slightly below half this figure. Yet this challenge also presents a unique opportunity: by championing its inclusive, diverse working culture, academic

freedom, and welfare state, the EU can position itself as a distinctive and attractive destination for the best digital minds, needed to drive Europe's digital transformation.

47. A first step of this sixth reform package must be the transformation of Directive 2021/1883 into a fully harmonised '**Blue Card Regulation**'. It should include a 'Tech Skills Acquisition Program' that creates a streamlined fast-track for third-country ICT professionals. By automatically approving qualified candidates from EU-recognised foreign universities and training institutions, the EU could drastically cut red tape, too. Those who meet key employment criteria would transition smoothly from temporary permits to permanent residency, ensuring talent remains within the Union. To reduce the language barrier, Member States must significantly step up the adoption of English as an additional official language for all public services. Secure AI tools will play a key role in that implementation. This step should also be complemented by free or heavily subsidised language courses offered by employers, as language diversity is non-negotiable within the EU and, undeniably, an added value.

48. A new '**EU Tech Talent Initiative**' will be key to retain and nurture homegrown talent. This initiative would remove barriers to mobility, introduce tax incentives for highly skilled EU workers, and simplify cross-border working arrangements within the EU. It would propose an interoperable 'European Degree Scheme' that ensures the mutual recognition of qualifications across the EU while embracing diverse learning pathways. At the same time, the initiative introduces a new 'European Digital Certification Program' that creates a set of EU standards for attesting digital competences, covering the key professional roles in the digital field and providing an alternative to the de-facto standards of leading US players. Ultimately, it comes with a new EU-wide employee stock option framework that enhances incentives for workers to stay, while a new 'Science2Commerce Program' fosters seamless transfers between academia and industry.

49. A radical education reform is equally critical. The 'Digital Education Action Plan 2021-27' would be upgraded into a binding '**EU Digital Education Pact**', including standardising curricula (with a stronger focus on STEM and ICT competences as well as digital literacy) across Member States based on the recommendations of a new 'Expert Advisory Board' as well as concrete commitments by Member States for large-scale investments in the digital infrastructure of schools and universities, teaching materials and the training of teachers. Equally important are complementary large-scale campaigns that raise the common level of digital literacy for all employees and workers, introduce two new emergency programs for establishing talent pools over the next five years with thousands of new standardisation and cybersecurity experts, and initiate a Start-Up & SME programme to train and prepare the next generation of business leaders. As other countries' current policies create a less conducive environment for conducting independent research, the EU should ultimately leverage its currently significantly more open academia to attract the brightest tech minds by offering fast-track procedure to European citizenship, and adequate compensation through special scholarship programs topping up the relatively low EU university salaries.

5. Conclusion and Call to Action

51. The EU stands at a moment of historic choice. The challenges outlined in this paper — geopolitical tensions, technological dependencies, fragmented markets, and lagging innovation — are not mere policy concerns; they put the entire European project at risk. But these challenges are not insurmountable. With vision, unity, and decisive action, the EU can chart a course towards a strong, resilient, and prosperous digital future.

52. The 'European Way' offers more than a slogan; it offers an actionable blueprint for a coherent digital policy approach anchored in democratic values, human-centric innovation, and open, rules-based collaboration. This vision is not about closing the EU off from the world — quite the opposite. It is about building an EU that leads by

example, shaping global technical standards, fostering trusted international partnerships, and advancing its interests alongside like-minded partners. Just as the Airbus consortium once proved that European collaboration is able to create a global industrial champion, so too can today's European tech actors build coalitions of the willing, scaling innovation across borders and continents.

53. To make this vision a reality, Europe must summon the political will to act boldly and cohesively. It must complete its Digital Single Market, invest in future technologies, attract and retain top talent, and effectively defend its digital infrastructure, as well as its territorial sovereignty. It must embrace its role as a global standard-setter, driving a 'second Brussels Effect' that aligns international cooperation with European principles of interoperability, sustainability or trustworthiness. And it must translate ambition into execution, turning abstract strategies into tangible outcomes, and initial visions into lasting institutions.

54. The time for half-measures has passed. The world has become a tougher place. It's time for Europe to toughen up, too. In an era marked by technological disruption and geopolitical competition, the EU cannot afford to drift or divide. Unity, collaboration, and decisive action are the only path forward. Policymakers, businesses, innovators, and citizens alike must rally around a shared mission: to secure the EU's digital future, on Europe's terms.

55. This is not just about defending the past — it is about embracing the future. A future where European companies set global benchmarks, where European citizens enjoy technological freedoms without compromising their rights, and where the EU stands tall as a confident, sovereign actor on the world stage.

56. Let this be our call to action: to work together, across sectors and borders, to build the 'European Way' — a path of innovation, resilience, and prosperity. If we act with courage and purpose, the digital EU we dream of can become the digital EU we deliver. The moment is now.

Kai Zenner's quote for the Financial Times (Tuesday, 13 May 2025)

"To bring the Airbus model into the European tech sector, we can imagine a coalition of leading European companies and trusted international partners working together across strategic domains of the technology stack, in particular where the EU has either already strong capabilities or the chance to leverage a massive first-mover advantage.

One example could be a European supply chain for smart edge AI devices, in which ASML (NL) enables chip production with its EUV lithography systems, ARM Holding (UK) designs and STMicroelectronics (FR/IT) fabricates specialized chips for edge AI, Graphcore (UK) delivers AI-specific chips for high-performance inference/training, while Siemens (DE) integrates all these chips into smart factories and industrial automation systems, with inference at the edge instead of relying on U.S.-based cloud platforms. Similar coalitions could be created in the domains of semiconductors, quantum computing or space and connectivity.

However, it's important to underline that while Airbus is an inspiration, not all sectorial consortia will need the same level of integration. In other areas a truly federated system might make more sense than a consortium. In the end, we will need to combine different strategies if we truly wish to regain the EU's strategic autonomy in the digital field."

Co-authors & Contributors

This paper is a collection of ideas from a like-minded group of people. While individual authors do not necessarily share each and every view expressed in this paper, they do agree on the scale of the general problem as well as the way forward. All views are strictly personal, and do not represent or reflect the position of the employer/organisation that each author is affiliated with.

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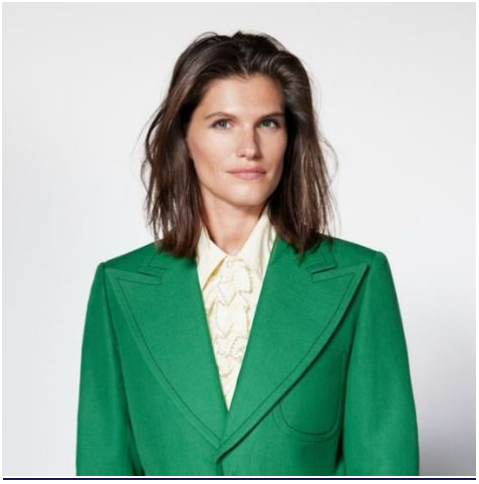
	Professor, entrepreneur, board member, and bestselling author. Since 2005, she has been appointed professor of Corporate Communication at the **University of St. Gallen**, where she previously served as founding director of the Institute for Media and Communication Management. Additionally, she is Executive Chairwoman and Co-Founder of **ada Learning**, a transformation platform for innovation in the age of artificial intelligence. She also serves on the Board of Directors of TX Group. Previously, she was a Faculty Associate at Harvard's Berkman Center for Internet & Society and has held numerous visiting positions at Fordham University, New York, Singapore Management University, the Center for European Studies at Harvard

Miriam Meckel	University, the University of Vienna and the Université de Neuchâtel. Earlier in her career, she was State Secretary for Media in the government of North Rhine-Westphalia and worked as a journalist, presenter, and editor for various television networks. Miriam has been awarded several accolades for her work, receiving, among others, the Ernst Schneider Prize for Innovation in Media and the Cicero Speaker's Prize in the category of Science. She studied in Münster and Taipei and holds a doctorate in communication science from the University of Münster.

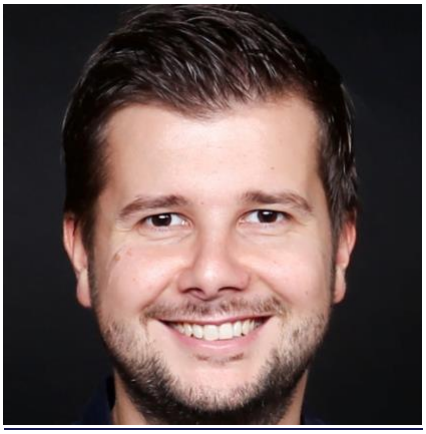
	Social scientist, entrepreneur, board member, and bestselling author. She is Executive Chairwoman and Co-Founder of **ada Learning**, a platform that equips employees across sectors with the skills and mindset to drive innovation in the age of artificial intelligence. She serves on the Board of Directors of Weleda AG and as an AI Advisory Board Member of Ringier AG. Additionally, she lectures at the **University of St. Gallen** and the **Hertie School of Governance**. Previously, Léa served as Chief Innovation Officer of WirtschaftsWoche, Germany's leading business magazine,

Léa Steinacker	and worked with social justice organizations in Bosnia-Herzegovina, Rwanda, and the Democratic Republic of Congo. Léa was named a 2020 Future Thinker by BCG, a Forbes "30 Under 30" leader, one of Medium Magazine's "Top 30 Under 30" journalists, and an Atlantik-Brücke Young Leader. She holds a BA from Princeton University, an MPP from the Harvard Kennedy School, and a PhD on the social implications of AI from the University of St. Gallen.
	Co-founder & COO of **Alinia AI**, a startup focused on safe & controlled deployment of GenAI. He was a former AI Counsel at Hugging Face, focused on LLM governance and the EU AI Act, and external advisor at OECD. Carlos is doing PhD research at the Max Planck Institute for Innovation and Competition.
Carlos Munoz Ferrandis	

<table>
<tr><td>  </td><td rowspan="2">Head of AI Regulation at the non-profit AppliedAI Institute for Europe and expert at the OECD.AI and GPAI. Focusing on under-resourced organisations, he drives the development and delivery of practical methodologies, training and tools to accelerate compliance with EU AI legislation. His background in EU regulation for medical devices and drones, and as an auditor for QMS, provides a practical perspective on how to operationalise them in high tech sectors. Till holds a PhD in Economic Geography and a degree in Industrial Engineering.</td></tr>
<tr><td><u>Till Klein</u></td></tr>
<tr><td>  </td><td>Managing Director at the AppliedAI Institute for Europe that has a background as industrial engineer with a PhD from the Graduate School of Excellence advanced Manufacturing Engineering GSaME. With 6.5 years of experience at FZI Forschungszentrum Informatik, Frauke successfully built up a Division for Innovation, Strategy, and</td></tr>
</table>

Frauke Goll	Transfer while co-heading the DIZ Digitales Innovationszentrum. Frauke has led various impactful projects, including the Digital Hub Karlsruhe Applied Artificial Intelligence and the Mittelstand-Digital Zentrum Klima.Neutral.Digital, fostering innovation and collaboration.
	Co-Founder and General Partner of **Merantix Capital**, a Berlin-based venture capital firm building and investing in AI since 2016. He is the co-initiator of the Merantix AI Campus, the leading AI community hub in Berlin, and a renowned deep learning researcher. He has published over 15 academic papers with more than 2,000 citations on deep learning while attending Oxford, Princeton, and ETH Zurich, where he received his Ph.D. Rasmus is a founding board member of the German Association of AI, devising and implementing the national AI strategy in close cooperation with the German government.
Rasmus Rothe	

	Co-founder and president of the **German AI Association (KI Bundesverband)**. After studying computer engineering and several engagements in the IT industry, he founded ParStream, a big data startup based in Silicon Valley, which was acquired by Cisco in 2015.
Jörg Bienert	
	Entrepreneur, investor, and thought leader in AI with many years of experience across politics, business, and technology. As the author of "**Die KI-Nation**", he advocates for a strategic and sovereign approach to AI in Europe. With the '**Rise of AI**' conference and many other initiatives, Fabian acts as a connector across sectors and actively shapes the public discourse on the societal impact of future technologies.

Fabian Westerheide	
 **Marian Gläser**	Co-Founder and CEO of the Berlin-Based privacy tech venture **brighter AI**. Marian serves as AI-speaker of the German Startup Association and Privacy-Speaker of the German AI Association.
	Professor at the **Cologne University of Applied Sciences**, where he directs the Cologne Research Center for Media Law. He is chairman of the Society for Data Protection and Data Security (GDD e.V.), and in 2018 was appointed to the Data Ethics Commission of the German Federal Government. Rolf is managing co-editor of the Journal of European Data

Rolf Schwartmann	and Information Law (EuDIR) and co-editor and author of numerous academic publications on media, data and information law as well as on the law of artificial intelligence, e.g. Schwartmann/Keber/Zenner AI Act, 2025.
	Full professor at the **University of Munich**, where he leads the Computer Vision & Learning Group. His research spans generative AI, semantic scene understanding, explainable AI, and self-supervised learning, with applications ranging from neuroscience to the digital humanities. Björn and his group are widely known for developing Stable Diffusion, a foundational model that has significantly advanced and democratised generative AI. Prior to his current role, he

Björn Ommer	was a full professor at Heidelberg University and co-director of its Interdisciplinary Center for Scientific Computing. Björn studied computer science in Bonn, earned his PhD from ETH Zurich, and completed postdoctoral research at UC Berkeley. He served as a long-time associate editor for IEEE T-PAMI and currently co-directs the Bavarian AI Council.

Contributors / Reviewers	
Maria Koomen	Governance director at the '**Centre for Future Generations**' (CFG), working on the challenges at the intersection of emerging technologies, democracy, and governance.
Carla Hustedt	Director of the 'Centre for Digital Society' at the **Mercator Foundation**.
Daniel Mügge	Professor of Political Arithmetic at the **University of Amsterdam** (UvA).
J. Scott Marcus	Economist, engineer and public policy analyst. He is an Associate Senior Research Fellow in the Global Governance, Regulation, Innovation and Digital Economy (GRID) Unit at the **Centre for European Policy Studies (CEPS)** and a Professor (part-time) and member of the Scientific Committee of the Centre for a Digital Society, **European University Institute** (EUI / RSCAS).
This paper was also influenced by recent discussions with various colleagues and researchers at the TUM Think Tank (**Munich School of Politics and Public Policy / Technical University of Munich** in Germany) as part of the fellowship of practice of Kai Zenner.	