

Dell Technologies Blueprint for making Europe an Al Continent

Foreword

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We are at a pivotal moment for the global adoption of artificial intelligence (AI). Across sectors and societies, AI is reshaping how we work, learn, govern, and innovate. The European Union's AI Continent Action Plan rightly recognises this moment—not only as a technological inflection point, but as a strategic opportunity to build a future-ready, sovereign AI ecosystem.

Dell Technologies welcomes this ambitious vision. The Action Plan provides a strong framework for sustained investment, responsible innovation, and agile governance. As a long-standing partner to Europe's institutions and industries, we have seen firsthand the importance of strategic public-private collaboration in turning policy ambition into real-world impact.

We are proud of the role we've played across Europe over the past 40 years—from enabling breakthroughs in healthcare and education to driving progress in manufacturing and digital public services. Today, our operations support tens of thousands of jobs and contribute billions in economic value to the region. As Europe accelerates towards its high-performance computing goals and builds the infrastructure to support its AI future, Dell is committed to helping deliver on that mission.

We look forward to deepening our collaboration with governments, enterprises, SMEs, and communities across the EU, and to supporting the bold vision of making Europe not just an AI leader—but an AI continent.

Powering Europe's Al Future: A Blueprint for Sovereign, Scalable and Future-Ready Innovation

As the technology industry's leading end-to-end AI infrastructure provider, and for more than 40 years a trusted partner and collaborator to the European market and its governments, we look forward to playing an integral role to help establish and strengthen Europe's position in the global AI market, drive government efficiency, create jobs and boost the regional economy. Our approach is built on a three-pillar framework that can accelerate European AI advancement: Invest—an infrastructure-first approach to AI innovation by prioritising scalable, resilient systems; Innovate—drive AI leadership through public-private collaboration to pioneer transformative solutions; and Evolve—implement future-ready governance to lead the way in an ever-changing global landscape.

Realising Al's full potential will require substantial and appropriate investment focus to help address chip resourcing and increased compute power, data storage and energy efficiency needs. Public and private sector collaboration provides the optimal basis from which to move forward.

Invest: An Infrastructure-First Approach to Al Innovation

1. Scaling AI Compute Infrastructure for a Future-Proof Ecosystem

Europe should prioritise AI compute expansion to address escalating demand and enhance AI sovereignty. The rapid growth of generative AI and machine learning models necessitates significant



advancements in AI infrastructure, high-performance computing (HPC), data centre efficiency and semiconductor design and fabrication.

Al and data-driven decision making will play a central role in reshaping how governments operate, interact with citizens and provide essential services. We recommend European governments, facilitated by the EU, prioritise investment and scaling up of compute infrastructure with the objective of maintaining control over their data and the underlying infrastructure to build a strong foundation for Al adoption and innovation across the continent. An infrastructure-first approach will ensure Europe is competitive in the global Al landscape, secures its technological sovereignty, and unlocks accessible, transformative opportunities in both the public and private sectors. By addressing the growing compute demands and aligning infrastructure with strategic priorities, Europe can lay the groundwork for sustained leadership in Al innovation.

Key Considerations:

- Al Compute Demand Growth: According to IDC, genAl workloads will represent more than a
 quarter of the total European Al market by 2027. IDC forecasts that the European Al market,
 including Al storage, will grow at a compound annual growth rate (CAGR) of 33.7% over the
 2022-2027 period. Furthermore, Goldman Sachs research estimates that data centre power
 consumption in Europe will grow by 160% by 2030.
- Data Security: Expanding AI compute infrastructure within the EU is essential to provide businesses and innovators with secure, domestic access to advanced computing resources, drive economic growth and strengthen the European AI ecosystem's competitive edge.
 Digital Transformation: The EU and its Member States still face significant challenges when it comes to digitalisation of their public sector. Digitalisation of public services, along with the improvement of the security level of infrastructure, are key pillars of the EU's Digital Decade policy programme 2030.

Policy Recommendations:

- Introduce an EU-wide AI Compute Scaling Target: The EU Digital Decade programme for 2030 does not currently include a measurable target for AI compute scaling. To accelerate and complement the EU AI Factories plan, the EU should introduce an ambitious, quantitative target to scale compute capabilities in its digitalisation objectives for 2030. This would also help track progress in EU countries, enhance transparency for industry, and enable the Commission to provide recommendations on how to achieve the target.
- Foster special AI compute zones within the EU: We fully support the EU's efforts to foster new
 private-public partnerships to build AI Gigafactories and expand its AI Factories, leveraging its
 world class EuroHPC supercomputing infrastructure and existing government and academic
 research infrastructure. To ensure rapid progress, the Commission should also recommend EU
 countries to create special AI compute growth zones, as is already being tested in France and the
 UK.
- The European Union should focus on establishing Al data centres in accordance with supporting incentives and funding for advanced liquid cooling solutions, high-density data centre designs, and energy-efficient systems.
- The European Union should seek to deliver on the announced ambitious objectives of its EU Cloud and Al Development Act to triple the EU's data centre capacity within the next five to seven years.



- The European Union should prioritise the digitalisation of the European public sector through strategic investments in modern PCs, software and cybersecurity as well as review the Digital Decade targets to encourage EU countries to accelerate the modernisation of their digital infrastructure.
- The European Union should prioritise connectivity and ensure it meets its Digital Decade target of all European households being covered by a Gigabit network, with all populated areas covered by 5G by 2030, as well as enhance the security of its networks.

2. Ensuring Energy Resilience and Infrastructure Modernisation for Sustainable Al Growth

The rapid proliferation of AI-driven applications—such as machine learning models, generative AI tools and large-scale data processing—has ushered in an era of unprecedented computational demand. These energy-intensive technologies are transforming industries like healthcare, finance, entertainment and logistics, but they are expected to place significant strain on the European power grid. McKinsey & Company projects that data centres will account for about 5% of total European power consumption by 2030.

Without proactive investment in grid modernisation and future-ready energy solutions, these constraints—compounded by regulatory hurdles and the pace of infrastructure upgrades—could hinder AI expansion, forcing organisations to rethink deployment strategies or investments in energy-efficient solutions. As global competition intensifies, the EU should act decisively to bolster its energy infrastructure, to ensure it can sustain AI growth and continue to be competitive in technological innovation.

Key Considerations:

- Escalating Energy Demand for AI: According to McKinsey, data centres in Europe are
 expected to almost triple from about 62 terawatt-hours (TWh) today to more than 150 TWh by
 2030, driven by the rapid adoption of AI technologies. This surge will necessitate significant
 investments in new generation capacity to meet the growing demand.
- **Energy Efficiency:** While modern servers have achieved significant improvements in energy efficiency compared to their predecessors, the recent <u>European Action Plan for Affordable Energy</u> confirmed that strategic investments are needed to promote the sustainable integration of data centres and avoid excessive strain on the energy system.
- Resilient and Modernised Grid Infrastructure: To support widespread AI adoption, data
 centres must be co-located with energy infrastructure projects, and the national grid must be
 upgraded to handle increased loads and integrate diverse energy sources effectively.

Policy Recommendations:

- The European Union should strengthen grid resilience and modernisation by expanding investments in transmission infrastructure and deploying AI-powered smart grids to optimise energy consumption, enhance grid efficiency, and ensure AI-intensive workloads do not overwhelm the existing power supply. We welcome the presentation of the Strategic Roadmap for Digitalisation and AI for the Energy Sector in 2026 announced as part of the AI Continent Action Plan, and we recommend accelerating preparatory work to ensure a swift and agile implementation.
- Establish dedicated EU funding streams for sustainable computing: Investments in nextgeneration technologies are essential to maximise advanced computing's potential while



minimising its environmental footprint. The EU should seek to boost public and private investments with new dedicated funding streams and a supportive regulatory framework for semiconductor innovations, energy efficient computing technology and software architecture improvements.

The European Union should prioritise the development of energy efficient data centres.
 This should include funding and incentives in advanced technologies (including liquid cooling systems) and streamlining permitting processes for both public and private energy-efficient data centres and related infrastructure. This should be part of a broad sustainable and optimised integration of data centres in the European electric grid.

Innovate: Driving AI Leadership Through Public-Private Collaboration

3. Strengthening Al Workforce Development

As highlighted in the <u>Draghi Report</u> in 2024, skills shortages in the EU are acting as a barrier to technological innovation. A lack of AI talent threatens EU competitiveness in AI innovation, as the bloc aims to keep pace with the demands of a rapidly evolving technological landscape. The advancement and deployment of AI technologies—spanning autonomous systems, agentic, natural language processing and predictive analytics—require a workforce proficient in specialised skills such as machine learning, data science, and software engineering. One of the key factors contributing to talent shortages in the EU is insufficient training and educational pipelines. The EU should build on its <u>European Union for Skills</u> plan to ensure a steady supply of skilled professionals, leveraging public-private partnerships and reskilling programmes to prepare both new entrants and existing workers for an AI-driven economy.

Key Considerations:

- Talent: The European Union faces a significant <u>digital skills gap</u> which could hinder its technological development. Currently, 4 out of 10 adults and every third worker in Europe lacks basic digital skills. The EU aims to have at least 80% of adults with basic digital skills and 20 million employed ICT specialists by 2030. Additionally, more than three-quarters of EU companies report difficulties in finding workers with the necessary skills.
- Digital & STEM Talent Gaps: Around 42% of Europeans lack basic digital skills and the EU turns out around 850 STEM graduates per million inhabitants per year compared to more than 1,100 in the US.
- Workforce & Industry Needs: While agentic AI architecture will reduce the barriers for AI use, accelerating the adoption of AI will still require a robust workforce trained in data science, machine learning and automation.
- **Primary and secondary Al Education:** Al literacy must start early to ensure a strong future talent pipeline.

Policy Recommendations:

• The European Union should accelerate the expansion of a European pool of Al specialists to support Al development across the continent. As highlighted by the recent European Union



of Skills initiative and in particular the STEM Education Strategic Plan, upskilling and reskilling EU workers and citizens in the use of AI should remain a priority.

- The European Union should demonstrate concrete application to the 2030 Roadmap on the future of digital education and skills by creating a multi-agency task force to coordinate Member States' efforts in addressing AI talent shortages. This task force should prioritise creating a centralised framework for tracking AI workforce needs, identifying critical skill gaps across industries, and aligning resources to support targeted training initiatives.
- The European Union should empower Member States to integrate Al curricula for primary and secondary education and provide incentives for schools to adopt Al-focused programs.
 This would help to address challenges related to digital skills discrepancies among Member States.
- The European Union should incentivise the development and use of Al tools in manufacturing and engineering sectors, encouraging apprenticeship programs and educational organisations to integrate these tools early in their curriculum.

4. Unlocking AI for Government Efficiency

Al can be leveraged by the European institutions and Member States to increase the public sector's efficiency and effectiveness. As both European and national administrations manage vast amounts of data and complex operations, Al has the potential to significantly enhance public sector operations, leading to substantial cost savings and improved public services that directly benefit citizens. Al-powered automation in the public sector can optimise administrative processes by streamlining and reducing processing times to improve decision-making through predictive analytics that inform policy and resource allocation.

Key Considerations:

- Al-Powered Government Modernisation: All and data-driven decision-making will reshape how the public sector operates and delivers essential services.
- Shared Cloud Software & Connected Data Spaces: Improving access to shared cloud software and connected data spaces in the public sector could save costs and improve efficiency, on top of facilitating knowledge sharing and addressing the digital divide among Member States.

Policy Recommendations:

- The European Union should proactively facilitate public sector AI technology adoption by providing guidance to accelerate procurement processes and allocating regular funding for tech modernisation.
- The European Union should encourage knowledge sharing between EU countries to
 increase efficiency of existing IT systems and networks and evaluate operational needs. Member
 States with fewer digital resources could benefit from the experience of more digitally advanced
 countries. This could help to reduce the digital divide, and future proof the EU, its organisations
 and citizens for the AI era.
- The European Union should enhance and expand common practices and solutions for high-quality data sharing. Through the development of guidelines, the EU could optimise the use of public, private and hybrid cloud providers to enhance data control and security, access top-tier services, offer workload optimisation flexibility, and manage costs effectively. In addition,



we welcome the Commission's objectives with a planned Data Union Strategy to enhance interoperability and data availability across sectors, while also seeking to reduce complexity and administrative burdens in existing data legislation.

Evolve: Agile Al Policy & Future-Ready Governance

5. Crafting Agile Al Governance for Growth

Al policy must be allowed to evolve in step with technology, and Europe's market, industrial and investment needs. Europe's regulatory frameworks should be implemented with flexibility, pragmatism, and a focus on outcomes and global collaboration.

The Commission has recognised the importance of a more balanced regulation of AI – with 'regulatory simplification' a key pillar of the AI Continent Action Plan. For the Action Plan to succeed, policy parameters within AI should be agile from the outset and allow for regular realignment and evaluation of rules to keep pace with the technology's burgeoning growth and progress. This innovation-friendly approach should be applied across EU countries at all levels, from economic agencies to security departments.

Seizing the opportunity to streamline AI Act implementation as well as considering a stop-the-clock mechanism to postpone its entry into application are welcome first steps which can encourage innovation, security, and adoption. More broadly, helping companies to avoid overly burdensome obligations while preserving market entry to ensure the most efficient and highest quality of AI adoption should be a key priority.

Key Considerations:

- Rapid Technological Evolution: Al's fast-paced development requires policies that can adapt to
 new use cases and capabilities, such as generative Al and autonomous systems, without stifling
 innovation. PwC research found that 76% of executives believe Al introduces new risks that
 require regulatory attention, and many expressed the need for clearer guidelines to manage
 those risks effectively.
- Ethical Governance: Balancing innovation with ethical oversight is essential to maintain public
 trust and ensure AI serves societal benefits across healthcare, education and beyond. Dell
 research found that 83% of business leaders see AI regulations as important to maximise the
 potential of AI for generations to come, suggesting that thoughtful governance can enhance
 adoption rather than hinder it.
- **Economic Competitiveness:** Agile policies can champion European innovation, incentivise domestic R&D, and support open ecosystems.

Policy Recommendations:

• The EU should streamline the requirements of the Al Act and use the Digital Simplification Package to remove overlapping requirements and ensure that Europe's digital regulatory framework is fit for the purpose of supporting Al innovation. We see the EU Al Act as an important step toward building trust and providing clarity in the Al landscape—while laying the



groundwork for responsible innovation across Europe. As the Act transitions from legislation into implementation, it is crucial that secondary legislation and Codes of Practice should remain targeted and proportionate in line with the EU's simplification objectives. In parallel, the EU should promote international harmonisation of AI governance frameworks that support interoperability and reduce regulatory fragmentation for businesses operating globally.

- Al Act implementation should focus on highest risk systems: as the EU Al Act implementation progresses, it's important that regulatory focus remains on highest risk systems without placing undue compliance burdens on the broader Al and machine learning ecosystem. High-risk Al systems should be narrowly and specifically defined as applications that directly perform critical decisions in sensitive domains. To avoid unintended consequences, European Commission guidelines should clarify that general-purpose hardware and infrastructure components such as servers, storage and networking equipment should always be classified as low risk regardless of the context or to whom they are deployed.
- The European Union should continue its engagement with industry through public
 consultations and public-private synergies to facilitate an implementation of the Al Act that
 focuses on the purpose and outcomes of Al systems, rather than rigid technical restrictions, to
 encourage innovation while addressing risks.
- The European Union should support broad, open Al ecosystems built on trust and transparency by promoting open-source model development, ensuring developers adhere to industry standards for responsible Al while maintaining controlled releases to mitigate risks of data misuse and safeguard national interests.
- The European Union should ensure the Al Act Service Desk is fully equipped to be a
 comprehensive authority on the application of the Al Act and provide partnership and support to
 enterprise organisations to develop useful online interactive tools to help all stakeholders
 determine the steps they need to take to comply.
- The European Union should establish an Enterprise Al Advisory Ecosystem for Europe: a forum
 where key enterprise stakeholders of all sizes could directly inform policy and accelerate Al
 adoption—and ensure Al research and innovation translate into real-world outcomes.

6. Enhancing AI Cybersecurity

Al-driven cyber threats are increasing in scale and complexity, necessitating Al-powered security and resiliency solutions to safeguard critical infrastructure and national security. As reliance on digital systems grow—spanning energy grids, financial networks and transportation—Al can enhance protection by detecting anomalies, predicting risks, and improving response times, ensuring the resilience of vital assets. The EU should recognise that Al cybersecurity is a key pillar to achieve the Al Continent ambitions.

Key Considerations:

Al-Powered Cyberattacks: Malicious actors increasingly deploy Al-driven cyber threats that
require automated defence systems. Europol's <u>EU Serious and Organised Crime Threat</u>
<u>Assessment 2025</u> shows cybercrime is evolving into a digital arms race targeting governments,
businesses and individuals. Al-driven attacks are becoming more precise and devastating.



- Zero Trust Frameworks: Secure Al deployment necessitates robust, layered cybersecurity
 architecture which moves defences from static, network-based perimeters to focus on users,
 assets, and resources.
- Common European Security Al Coordination: Al must be integrated into cybersecurity
 frameworks. As outlined in a <u>European Parliamentary Research Service report</u>, Al systems can
 help to improve detection, prediction, analysis and threat mitigation. For example, research from
 Google finds that generative Al has contributed to a '51 % time saving and higher quality results in
 incident analyst output to their internal detection and response efforts'.

Policy Recommendations:

- The European Union should incorporate cybersecurity measures into every stage of the Al
 development lifecycle to increase resilience to cyber-attacks. The integration between
 cybersecurity and Al development is essential to protect sensitive data, mitigate adversarial
 attacks and be better equipped to prevent, monitor and address new cyber-related threats and
 vulnerabilities in Al systems.
- The European Union should mandate zero-trust security standards with response capabilities to protect AI applications and critical infrastructure, including a voluntary compliance register.
- The European Union should coordinate a unified AI security framework across Member
 States prioritizing trusted systems and standardised protocols, underpinned by public-privatesector collaboration to empower the EU's cyber security agency, ENISA, in overseeing and
 harmonising implementation of all different cybersecurity files.
- The European Union should seek to adopt autonomous AI cybersecurity solutions for realtime threat detection, response, and adaptation to match malicious AI activity, with regular private sector engagement to assess effectiveness and industry impact.

Conclusion: A Blueprint for making Europe an Al Continent

Earlier this year, the European Union's InvestAI initiative committed €50 billion in fresh EU funding, supplementing €150 billion from private investors under the European AI Champions Initiative. Announced at the Paris AI Action Summit, these renewed commitments and investments align with a broader global shift from a focus from safety and ethical concerns to AI action, innovation, and its practical implementation.

The AI Continent Action Plan of April 9 lays out the EU's long-term strategy and represents a defining moment to advance European AI capabilities. As the EU rolls out the measures in this Action Plan over the coming months, prioritising AI infrastructure, a skilled workforce, open AI ecosystems, and robust security, will ensure the EU can forge a powerful, repeatable blueprint for global leadership—one that fuses AI deployment and innovation with decisive action.

Dell Technologies stands ready to partner with the European Union to propel this vision into reality. We look forward to collaborating with policymakers, industry partners, and academic pioneers to build an AI ecosystem that empowers every European, securing a future-ready infrastructure that not only sustains but amplifies European competitiveness in AI for decades to come.