

Artificial Intelligence as a Powerful Tool for Development: Governance, Work, and Institutional Adaptation





Report:

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Governance, Work, and Institutional Adaptation**

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Executive Summary

Artificial intelligence is increasingly integrated into economic, institutional, and social systems, including media, marking a new phase in the long trajectory of technological development. As with previous periods of transformation, the central issue is not the technology itself, but how it is governed, directed, and aligned with human objectives.

This report examines artificial intelligence as an enabling instrument that reshapes work, productivity, social communications, and institutional performance without diminishing human agency. In this context, human agency refers to the continued central role of human judgment, ethical reasoning, responsibility, and institutional accountability in directing and supervising AI-assisted processes. Drawing on historical parallels, it demonstrates that technological progress leads to the evolution and transformation of professions rather than their disappearance. AI-assisted systems often reduce repetitive effort, enhance efficiency, and support higher-quality outcomes, while preserving the essential role of human judgment, responsibility, and expertise.

The analysis highlights the impact of artificial intelligence on time allocation and quality of life. By optimizing processes and reducing cognitive and physical workload, AI-assisted tools create opportunities to improve work-life balance, strengthen human performance, and support social well-being, when integrated within clearly defined workflows and supported by appropriate skills and institutional capacity.

Historical experience provides important context for current debates. At the beginning of the mechanical and industrial era, widespread concern emerged that manufacturing machinery would eliminate significant portions of the workforce. Public discourse anticipated structural unemployment and permanent social disruption. In practice, however, industrial transformation produced a more differentiated outcome. While certain manual activities declined and eventually disappeared, industrial expansion generated new technical, managerial, and supervisory roles. Economic structures, production capacity, and labor markets reorganized around evolving skill requirements. Technology and employment patterns evolved in parallel, demonstrating that the long-term effects of innovation are shaped by adaptation and institutional response rather than disruption alone.

A similar debate now surrounds artificial intelligence. Contemporary concerns focus on potential displacement, yet historical technological transitions have consistently redistributed functions and stimulated new forms of economic activity. The decisive factor is not the sophistication of the systems themselves, but the governance frameworks, training policies, and institutional structures that shape how societies integrate and direct technological progress.

From an institutional perspective, artificial intelligence can enhance security, safety, and operational efficiency when deployed within robust governance frameworks. Applications in areas such as transportation, border management, and public administration demonstrate how AI-assisted systems can improve prevention, coordination, and response capabilities while maintaining human oversight and accountability.

The report also addresses prevailing misconceptions by clarifying that, artificial intelligence functions so far as a tool embedded within systems, rather than as an autonomous actor. While acknowledging risks related to misuse, including disinformation and security-related applications, these challenges are situated within a broader framework of ethical governance and international cooperation.

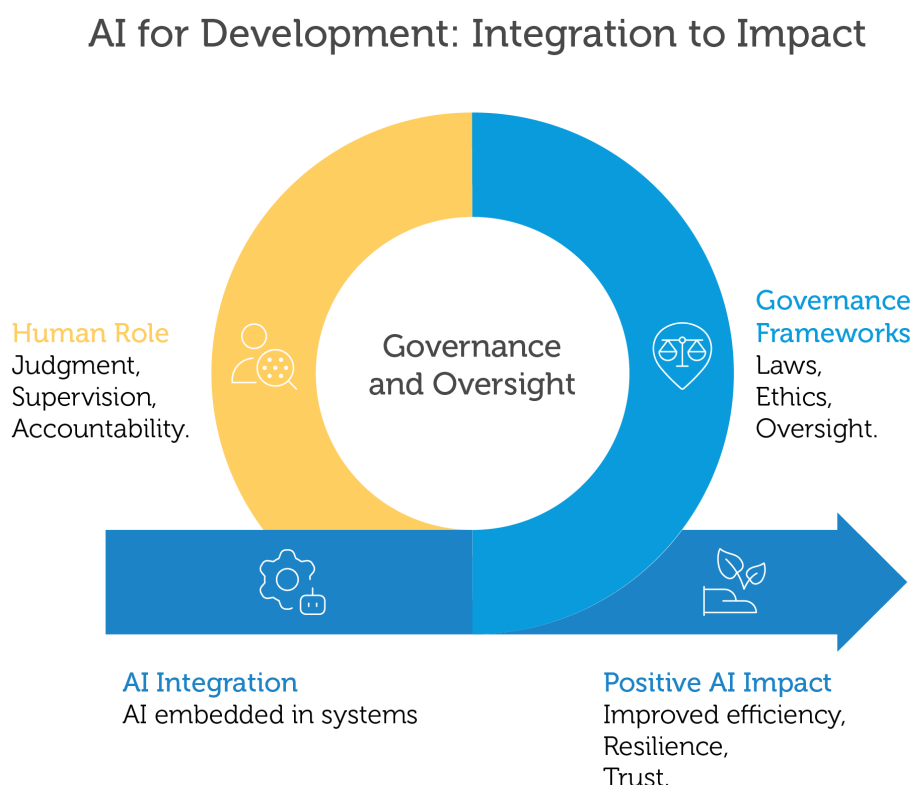
In conclusion, societal resilience and long-term sustainability depend on deliberate policy choices that place human well-being at the center of technological progress. A balanced, forward-looking approach grounded in governance, ethics, and human oversight is essential to ensuring that artificial intelligence remains a constructive force for societies and institutions across the Mediterranean region.

Introduction

1. Artificial intelligence is increasingly integrated into economic, institutional, and social systems, shaping a new phase in the ongoing evolution of technological development. As with previous periods of transformation, the decisive factor is not the technology itself, but the frameworks through which it is governed, directed, and aligned with human objectives.
2. Artificial intelligence today extends beyond standalone applications and is embedded within a wide range of professional tools, administrative processes, and public services. Its growing presence influences how work is organized, how institutions operate, and how time and resources are allocated. These developments call for a policy-oriented understanding that situates artificial intelligence within existing institutional responsibilities rather than treating it as an autonomous or self-determining force.
3. This report on “Artificial Intelligence as a Powerful Tool for Development: Governance, Work, and Institutional Adaptation” examines artificial intelligence as an enabling instrument that supports development by enhancing efficiency, consistency, and decision-making across sectors. Drawing on historical parallels with earlier technological transitions, it highlights continuity rather than rupture, emphasizing that technological progress reshapes professions and institutional practices while preserving the central role of human judgment, accountability, and oversight.
4. This perspective is consistent with the growing international recognition of artificial intelligence as a catalyst for sustainable development. As United Nations Secretary-General António Guterres observed during the launch of the Preliminary Report of the Independent International Scientific Panel on AI, "Used well, AI could be the most powerful engine for development, speeding the world's progress on everything from health and hunger to learning and climate¹."
5. This report, prepared by the Center for Global Studies of the Parliamentary Assembly of the Mediterranean (PAM-CGS), aims to contribute to informed parliamentary reflection by providing a structured analysis of artificial intelligence as a tool for development, governance, and institutional adaptation.

¹ United Nations. (1 July 2026). Statement by the Secretary-General at the Presentation of the Preliminary Report of the Independent International Scientific Panel on Artificial Intelligence. United Nations.
<https://transcripts.un.org/en/asset/k1v/k1v0ss615a>

Figure 1: Artificial Intelligence as a Tool for Development: From Integration to Impact²



Historical Perspective: From Mechanical Transformation to Artificial Intelligence

6. Technological development has historically reshaped societies through successive waves of innovation that altered modes of production, professional structures, and daily life. Mechanical and industrial advancements introduced new tools that increased efficiency, reduced physical effort, and transformed economic organization, while simultaneously redefining the nature of human labor rather than eliminating it.
7. Throughout the twentieth century, the introduction of mechanized agriculture, industrial machinery, household appliances, and automated production systems marked a transition from predominantly manual labor toward mechanized and technical professions. These transformations required new skills, oversight functions, and institutional adaptations, shifting human roles from direct execution toward supervision, maintenance, and coordination. Each phase of technological change generated concerns regarding employment and social disruption, yet over time resulted in the evolution of professions and the emergence of new forms of work.

² Graphic compiled by the CGS research team, based on the analysis presented in this report.

8. The digital revolution followed a similar trajectory. The expansion of computing technologies, electronic communication, and information systems reconfigured administrative processes, professional tools, and modes of interaction. Calculators, computers, and later digital networks did not replace human decision-making but enhanced precision, speed, and organizational capacity across sectors. The transition from fixed communication systems to mobile and subsequently smart devices further integrated technology into everyday activities, reinforcing the role of human agency in directing technological use.
9. Artificial intelligence represents the latest phase within this historical continuum. Its integration into software, devices, and systems builds upon earlier digital foundations, rather than constituting a rupture from past technological developments. As with previous transitions, artificial intelligence modifies how tasks are performed and how responsibilities are distributed, while remaining dependent on human intention, expertise, and control.
10. Understanding artificial intelligence within this historical context is essential for informed policy discussion. Past technological transformations demonstrate that societal outcomes are shaped not by tools alone, but by governance choices, institutional readiness, and the capacity of individuals and organizations to adapt. This perspective provides a foundation for assessing artificial intelligence as a tool for development that can support productivity, institutional efficiency, and social progress when guided by appropriate frameworks and human oversight.

The Transformation of Work and Professions

11. Technological progress has consistently reshaped the organization of work and the nature of professions. Rather than eliminating human labor, successive innovations have altered the skills required, the distribution of responsibilities, and the relationship between human effort and technical tools. Artificial intelligence follows this established pattern by transforming how work is performed while preserving the central role of human expertise and accountability.
12. The integration of AI-assisted tools into professional environments reduces the need for repetitive and routine tasks, allowing individuals to focus on higher-value activities that require judgment, creativity, and contextual understanding. Administrative functions, data processing, design, and analytical tasks increasingly rely on AI-enabled support, improving

efficiency and consistency without displacing human decision-making. As in previous technological transitions, professional roles evolve toward supervision, coordination, validation, and strategic oversight.

13. This transformation does not imply the disappearance of professions, but their adaptation. Skills requirements shift toward digital literacy, critical evaluation, and domain expertise, reinforcing the importance of education and continuous training. Where artificial intelligence is used effectively, it amplifies professional competence; where foundational skills are lacking, technological tools cannot compensate for insufficient expertise. The quality of outcomes therefore remains directly linked to human capability and responsibility.
14. Concerns regarding employment displacement must be understood within this broader context of professional evolution. Historical experience demonstrates that technological change redefines occupations rather than rendering human contribution obsolete. Artificial intelligence accelerates this process by modifying workflows and expectations, but it does not remove the need for human judgment, ethical responsibility, or accountability within professional practice.
15. Historical experience across sectors illustrates this transformation in stages. When mechanical production first entered factories during the industrial era, large-scale machinery was widely perceived as a threat to human labor. Steam-powered equipment and later electrically driven machines assumed tasks that had previously depended on sustained manual effort. Fears of widespread unemployment were common, yet industrial expansion increased output, diversified production, and generated new forms of employment linked to machine operation, maintenance, and industrial coordination.
16. As production systems advanced, automation gradually reduced repetitive assembly-line tasks, paving the way for programmable machinery and eventually robotic systems in sectors such as automotive manufacturing. In many countries, welding, painting, and precision assembly became increasingly automated. However, rather than eliminating the workforce, this transition elevated its profile. Technicians, systems engineers, safety supervisors, and quality-control specialists emerged to manage, optimize, and oversee increasingly complex production environments. The center of human contribution shifted from physical repetition to supervision, calibration, and strategic management.
17. A comparable progression occurred in agriculture. Manual harvesting gave way to mechanized equipment; irrigation systems became automated; and precision technologies later integrated satellite data and digital monitoring. Physical labor requirements declined

in certain areas, yet agricultural practice became more knowledge-intensive. Expertise expanded into equipment management, agronomic analysis, compliance oversight, and supply-chain coordination. Productivity gains were accompanied by rising technical specialization.

18. Food processing and other manufacturing sectors followed a similar pattern. Mechanized sorting and packaging evolved into automated inspection systems capable of rapid, standardized output. While routine tasks diminished, oversight functions, safety supervision, and regulatory management grew in importance. Employment did not disappear; it reorganized around higher levels of technical responsibility.
19. This dynamic extended beyond industrial settings into domestic life. Household cleaning once depended entirely on manual tools. Electrically powered appliances reduced physical strain, and today autonomous robotic vacuum systems navigate interior spaces and perform cleaning functions with minimal direct intervention. Each stage redistributed effort while preserving human direction, choice, and oversight. Similar transformations can be observed across numerous household technologies that have evolved over time, reflecting the same broader pattern of technological adaptation that societies have experienced and directly witnessed in everyday life.
20. Telecommunications and computing reflect the same arc of transformation. Communication once depended on fixed-line systems and physical correspondence, later expanding through mobile connectivity and integrated smart devices. In parallel, computing evolved from large, centralized machines accessible only to governments and major institutions into personal computers available to households and workplaces, and eventually into portable, networked devices embedded in daily life. What began as complex, room-sized systems reserved for specialized use has become an accessible and indispensable tool for communication, productivity, and information exchange. With the incorporation of artificial intelligence, contemporary digital platforms and smart devices now provide contextual assistance, real-time translation, image recognition, data analysis, and intelligent scheduling. At each stage, technological capacity expanded while human agency remained central in directing, interpreting, and applying these tools.
21. Across these domains, technological substitution consistently affected specific tasks rather than eliminating human participation. Employment structures adapted through skill transformation, organizational restructuring, and institutional response. The historical pattern is clear: innovation reshapes the form of work, yet long-term employment outcomes

are determined not by technology alone, but by governance, institutional preparedness, and the capacity to adapt.

22. From a policy perspective, managing this transformation requires proactive investment in skills development and institutional adaptation. Supporting workforce transitions, ensuring access to training, and aligning education systems with evolving professional requirements are essential to ensuring that artificial intelligence contributes positively to employment, productivity, and social stability.

Time, Productivity, and Quality of Life

23. Technological development has historically altered how time is allocated between work, personal life, and social engagement. Artificial intelligence extends this trajectory by optimizing processes, reducing manual and cognitive burden, and accelerating task execution across professional and institutional environments. When integrated responsibly, AI-assisted tools contribute to productivity gains without intensifying workload or diminishing human control.
24. By automating repetitive and time-consuming activities, such as data entry, document classification, scheduling coordination, routine reporting, preliminary data analysis, and the initial screening of applications, correspondence, or regulatory documentation, artificial intelligence allows individuals and organizations to redirect effort toward tasks that require judgment, coordination, and strategic thinking. In public administration and institutional contexts, AI-assisted systems can support case management, information sorting, compliance checks, and the preparation of draft summaries, thereby improving procedural consistency and reducing administrative backlog. Administrative workflows, information processing, and routine analytical functions benefit from increased speed and consistency, enabling more efficient use of working hours. These gains are not solely economic; they directly affect how time is structured within professional and personal spheres, influencing workload distribution, organizational flexibility, and overall quality of work.
25. The impact on quality of life is therefore closely linked to how productivity gains are managed. Reduced operational effort can support improved work-life balance, lower cognitive strain, and greater flexibility in professional organization. When accompanied by appropriate institutional policies and workplace practices, artificial intelligence can contribute to healthier work patterns and sustained human performance rather than increased pressure or acceleration.

26. However, productivity gains are not automatic. The benefits of artificial intelligence depend on clearly defined workflows, realistic expectations, and adequate skills. Without proper integration, AI-assisted systems risk introducing inefficiencies or new forms of dependency. Human oversight, contextual judgment, and institutional guidance remain essential to ensuring that technological efficiency translates into meaningful improvements in well-being.
27. From a policy standpoint, the relationship between artificial intelligence, productivity, and quality of life highlights the importance of governance choices beyond technical deployment. Decisions regarding working time, organizational models, and performance assessment shape whether AI-enabled efficiency supports social well-being or merely redistributes pressure. Aligning technological adoption with human-centered objectives is therefore a critical component of sustainable development.

Security, Safety, and Institutional Efficiency

28. Artificial intelligence increasingly supports security, safety, and institutional efficiency across public and private sectors. When integrated within clearly defined governance frameworks, AI-assisted systems enhance situational awareness, operational coordination, and preventive capacity without replacing human decision-making or responsibility³.
29. In transportation systems, critical infrastructure management, and public service delivery, artificial intelligence contributes to improved monitoring, risk detection, and response coordination. Automation of routine processes and real-time data analysis enables institutions to operate with greater speed and consistency, supporting early identification of anomalies and more efficient allocation of resources. These capabilities strengthen institutional effectiveness while preserving the central role of human oversight⁴.
30. Security-related applications illustrate the importance of responsible integration. In areas such as border management, airport operations, and public safety, AI-assisted tools support faster screening, improved pattern recognition, and enhanced preventive measures. These systems do not remove the role of human personnel; rather, they transform professional

³ Organization for Economic Co-operation and Development (OECD). (2023). *Governing with artificial intelligence: Are governments ready?* OECD Publishing. <https://www.oecd.org/digital/governance/governing-with-artificial-intelligence-26324001-en.htm>

⁴ Organization for Economic Co-operation and Development (OECD). (18 September 2025). *Governing with Artificial Intelligence: AI in Public Service Design and Delivery*. OECD Publishing. https://www.oecd.org/en/publications/2025/06/governing-with-artificial-intelligence_398fa287/full-report/ai-in-public-service-design-and-delivery_09704c1a.html

functions toward supervision, validation, and decision-making in complex or sensitive situations⁵.

31. In practical terms, AI-assisted systems are already used in airport operations and border management to support passenger flow management, risk-based screening, and anomaly detection, contributing to faster procedures and improved situational awareness while maintaining human oversight over final decisions⁶.
32. Institutional efficiency gains depend on proportionality, transparency, and accountability. Without appropriate safeguards, the deployment of artificial intelligence in security contexts may raise concerns related to rights protection, data integrity, and trust. Effective governance frameworks ensure that AI-assisted systems operate within legal mandates, respect fundamental rights, and remain subject to human control and review⁷.
33. From a policy perspective, artificial intelligence should be approached as an enabling component of institutional modernization rather than a substitute for institutional responsibility. Strengthening security and safety through artificial intelligence requires investment not only in technology, but also in training, oversight mechanisms, and inter-institutional coordination. When guided by clear governance and ethical standards, AI-assisted systems can reinforce institutional resilience, operational reliability, and public confidence.

Governance, Ethics, and Human Oversight

34. The integration of artificial intelligence into societal and institutional systems requires governance frameworks that clearly define responsibility, accountability, and oversight. As artificial intelligence increasingly supports decision-making processes, ensuring that human institutions retain control over outcomes is a fundamental prerequisite for legitimacy, trust, and effectiveness.
35. Ethical considerations are central to the governance of artificial intelligence. AI-assisted systems operate within social, legal, and political environments shaped by human values, rights, and norms. Transparency, fairness, and respect for fundamental rights must

⁵ European Commission, Joint Research Center. (2025). *AI for Border Management and Customs Controls: Anthology of EU-funded Projects, 2015–2024*. European Commission. <https://publications.jrc.ec.europa.eu/repository/handle/JRC143223>

⁶ European Union Aviation Safety Agency (EASA). (2025). *Artificial Intelligence and Aviation: EASA Position and Guidance on AI Integration in Aviation Systems*. European Union Aviation Safety Agency. <https://www.easa.europa.eu/en/light/topics/artificial-intelligence-and-aviation-0>

⁷ Council of the European Union. (2024). *Council Decision (EU) 2024/2218 of 28 August 2024 on the signing, on behalf of the European Union, of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law*. Official Journal of the European Union. <https://eur-lex.europa.eu/eli/dec/2024/2218/oj/eng>

therefore be embedded throughout the lifecycle of artificial intelligence systems, from design and deployment to monitoring and review. Ethical governance is not an abstract principle, but a practical requirement that guides institutional behavior and public acceptance.

36. Ethical governance of artificial intelligence also requires explicit attention to its gender implications. AI-assisted systems trained on historical or unbalanced datasets may inadvertently replicate or amplify pre-existing social inequalities, including gender bias in areas such as recruitment, financial services, healthcare access, public administration, and risk assessment. Where decision-support systems influence allocation of resources or opportunities, the absence of inclusive design and representative data can produce discriminatory outcomes, even in the absence of deliberate intent. Preventing such effects requires systematic bias testing, inclusive dataset development, transparency in model design, and ongoing impact assessment.
37. Addressing gender dimensions is therefore not a peripheral consideration, but a component of institutional legitimacy and public trust. International frameworks increasingly recognize that responsible artificial intelligence governance must promote equality and non-discrimination as core principles. The United Nations General Assembly resolution⁸ on safe, secure and trustworthy artificial intelligence systems emphasizes alignment with human rights and inclusive development, while the European Union's Artificial Intelligence Act⁹ requires risk management measures to prevent discriminatory impacts in high-risk systems. Embedding gender-sensitive safeguards within AI governance strengthens accountability, reinforces fairness, and supports sustainable and inclusive technological transformation.
38. Human oversight remains indispensable across all applications of artificial intelligence. While artificial intelligence systems can process large volumes of data and identify patterns with speed and consistency, they do not possess contextual understanding, moral judgment, or responsibility. Oversight mechanisms ensure that decisions informed by artificial intelligence are subject to human evaluation, correction, and accountability, particularly in areas with significant social, legal, or security implications¹⁰.

⁸ United Nations General Assembly. (2024). A/RES/78/265: Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development. United Nations. <https://docs.un.org/en/A/res/78/265>

⁹ European Union. (2024). Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act). Official Journal of the European Union. <https://eur-lex.europa.eu/eli/reg/2024/1689/oj>

¹⁰ European Union. (2024). *Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act)*, Article 14: Human Oversight. Official Journal of the European Union. <https://artificialintelligenceact.eu/article/14/>

39. Effective governance also requires institutional capacity. Clear procedures, defined lines of responsibility, and trained personnel are essential to managing AI-assisted systems responsibly. Without such capacity, even well-designed technologies may introduce new risks or undermine public confidence. Governance frameworks must therefore evolve alongside technological adoption, ensuring that institutions remain equipped to supervise, audit, and adapt artificial intelligence use over time¹¹.
40. From a policy perspective, governance and ethics should be viewed as enabling conditions rather than constraints. Clear rules and oversight mechanisms provide predictability, reduce uncertainty, and support sustainable innovation. By anchoring artificial intelligence within human-centered governance structures, institutions can harness its benefits while safeguarding fundamental rights, legal accountability, and public trust.

International Legal and Policy Frameworks

41. Legislative and policy considerations outlined in this report are consistent with existing international and regional frameworks that increasingly shape the governance of artificial intelligence. Across jurisdictions, these instruments converge on the importance of human oversight, accountability, transparency, and alignment with fundamental rights.
42. At the European level, Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonized rules on artificial intelligence (Artificial Intelligence Act)¹² establishes a risk-based regulatory approach that emphasizes human control, safety, and accountability, particularly for high-impact and public-sector applications. These principles correspond to the report's focus on governance structures that preserve institutional responsibility over AI-assisted systems.
43. At the multilateral level, the United Nations General Assembly resolution entitled "Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development"¹³ reinforces the need to align the use of artificial intelligence with international law and human rights, and calls for governance mechanisms that promote safe, secure, and trustworthy applications. The emphasis placed in this report on ethical governance and sustained human oversight reflects these core objectives.

¹¹ European Union. (13 June 2024). *Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act)*. Official Journal of the European Union. <https://eur-lex.europa.eu/eli/reg/2024/1689/oj>

¹² Ibidem

¹³ United Nations General Assembly. (2024). *A/RES/78/265: Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development*. United Nations. <https://docs.un.org/en/A/res/78/265>

44. The OECD artificial intelligence Principles further support a human-centered approach by highlighting inclusive growth, transparency, and accountability as guiding standards for public policy¹⁴. Similarly, the Council of Europe’s Framework Convention on Artificial Intelligence¹⁵ promotes a rights-based governance model that safeguards fundamental freedoms and democratic principles in the design and deployment of artificial intelligence systems.
45. Taken together, these frameworks provide a converging policy context that supports the strategic directions presented in this report. They demonstrate that responsible artificial intelligence governance is increasingly reflected in legal instruments and policy commitments, reinforcing the relevance and applicability of the recommendations outlined below.

Table 1: Policy Recommendation Table: Alignment with International and Regional Frameworks

Policy Area	Key Policy Direction (Artificial Intelligence as a Tool for Development)	Alignment with Existing Frameworks
Governance and Accountability	Establish clear governance structures defining responsibility, accountability, and human oversight for AI-assisted systems across public and private sectors.	EU AI Act (risk-based governance, human oversight); UN GA AI Resolution (accountability, international law); OECD AI Principles
Skills and Capacity-Building	Invest in education, training, and continuous upskilling to enable effective human oversight, interpretation, and responsible use of AI-assisted systems.	OECD AI Principles (human-centered values, skills); UN GA AI Resolution (capacity-building); EU Digital and AI Skills initiatives
Public Administration and Institutional Use	Integrate AI-assisted tools into public administration and service delivery while ensuring	EU AI Act (public-sector safeguards); Council of Europe

¹⁴ Organization for Economic Co-operation and Development (OECD). (2019). *OECD Principles on Artificial Intelligence*. OECD. <https://www.oecd.org/en/topics/sub-issues/ai-principles.html>

¹⁵ Council of Europe. (2024). *Framework Convention on Artificial Intelligence, Human Rights, Democracy and the Rule of Law*. Council of Europe. <https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence>

	legal compliance, transparency, and human control.	AI Convention; OECD AI policy guidance
Security and Safety Applications	Deploy AI in security, border management, and infrastructure protection with strict safeguards, proportionality, and continuous human oversight.	EU AI Act (high-risk systems); Council of Europe AI Convention; UN principles on responsible technology use
Ethics and Human-Centered Design	Promote ethical-by-design approaches, including transparency, fairness, explainability, and respect for fundamental rights throughout the lifecycle of AI-assisted systems.	EU AI Act (transparency obligations); UN GA AI Resolution (information integrity); OECD guidance on AI and media ecosystems
Regional and International Cooperation	Encourage coordination and exchange of best practices among Mediterranean states and international partners to harmonize AI governance approaches.	UN GA AI Resolution (international cooperation); Council of Europe AI Convention; OECD multilateral coordination

Clarifying the Reality of Artificial Intelligence Adoption

46. Public and institutional discussions on artificial intelligence are often shaped by simplified perceptions that do not reflect how these technologies are currently developed and deployed. Artificial intelligence is frequently associated with visible interfaces such as chatbots or content generation tools, leading to assumptions that artificial intelligence systems operate independently or replace human roles. In practice, artificial intelligence functions primarily as an embedded component within broader systems, workflows, and platforms, whose performance depends on human direction, contextual understanding, and institutional control.
47. Current artificial intelligence adoption is characterized by integration rather than autonomy. Artificial intelligence increasingly supports professional tools used in administration, data analysis, design, communication, and decision support. These systems assist in processing information, identifying patterns, and streamlining tasks, while

remaining dependent on human input for interpretation, validation, and final decision-making. Their effectiveness is therefore directly linked to the clarity of objectives, the quality of data, and the expertise of those who use them.

48. Another common misconception is that artificial intelligence is a recent technological development. In reality, artificial intelligence has evolved over several decades and has long been integrated into a wide range of digital technologies and services. What has changed in recent years is not the existence of artificial intelligence itself, but its growing visibility through widely accessible generative AI applications. This shift has brought AI from the background of digital infrastructure into everyday public use, contributing to the widespread perception that artificial intelligence is a new technology rather than the latest stage in its long-term evolution¹⁶.
49. Recent developments in the Israel–Gaza conflict illustrate current challenges associated with the integration of artificial intelligence in military operations. According to Bloomberg analysts, the Israeli Defense Forces (IDF) have begun employing AI-assisted systems to support target identification and operational planning, enabling rapid analysis of large datasets to prioritize potential airstrike targets and coordinate logistics. These systems, while still subject to human oversight and approval, vastly accelerate the processing of intelligence and the generation of military options compared with traditional human-only processes. Critics and analysts have raised concerns that such accelerated, algorithm-assisted targeting can strain meaningful human control and accountability, particularly in densely populated environments where the risk of civilian harm is high and distinctions between combatants and non-combatants are difficult to ascertain. These developments underscore the necessity of robust governance frameworks, transparent oversight mechanisms, and clear lines of responsibility when AI-enabled tools are deployed in high-risk security contexts¹⁷.
50. A common source of misunderstanding relates to the quality and reliability of AI-generated outputs. Artificial intelligence systems generate responses based on probabilistic patterns rather than factual verification or contextual judgment. Without appropriate supervision, validation, and critical assessment, outputs may be incomplete, misleading, or inaccurate.

¹⁶ Littman, M. L. et al. (16 September 2021). Gathering Strength, Gathering Storms: The One Hundred Year Study on Artificial Intelligence (AI100) 2021 Study Panel Report. Stanford University, One Hundred Year Study on Artificial Intelligence (AI100). <https://ai100.stanford.edu/gathering-strength-gathering-storms-one-hundred-year-study-artificial-intelligence-ai100-2021-study>

¹⁷ Bloomberg News. (16 July 2023). Israel using AI systems to plan deadly military operations. Bloomberg. <https://www.bloomberg.com/news/articles/2023-07-16/israel-using-ai-systems-to-plan-deadly-military-operations>

Responsible use requires clear instructions, domain knowledge, and institutional procedures that ensure verification and accountability¹⁸.

51. Another misconception concerns the pace and scope of adoption. While artificial intelligence is increasingly present across sectors, its deployment remains uneven and highly dependent on organizational capacity, regulatory clarity, and skills availability. Artificial intelligence systems do not automatically improve performance; their contribution depends on integration within existing structures and alignment with institutional objectives. Adoption is therefore a process of gradual adaptation rather than immediate transformation¹⁹.
52. Understanding these practical realities is essential for informed policymaking. Moving beyond simplified narratives enables institutions to focus on governance, capacity-building, and responsible integration. Artificial intelligence should be approached as a tool that supports human decision-making and institutional performance, not as an autonomous actor. Clarifying its actual capabilities and limitations provides a necessary foundation for sustainable adoption and effective oversight.

Societal Resilience and Long-Term Sustainability

53. Societal resilience in the context of technological transformation depends on the capacity of institutions and communities to adapt without undermining social cohesion, trust, or stability. Artificial intelligence, when integrated responsibly, can contribute to resilience by supporting institutional adaptability, improving service delivery, and enabling more responsive governance structures. Its impact, however, is shaped by policy choices rather than technological capability alone.
54. Long-term sustainability requires that artificial intelligence be aligned with human development objectives, including employment stability, skills evolution, and social inclusion. As professional roles evolve, sustained investment in education and training becomes essential to ensure that individuals and institutions can adapt to changing requirements. Resilience is reinforced when technological adoption supports broad participation and avoids creating new structural inequalities.

¹⁸ National Institute of Standards and Technology (NIST). (2023). *Artificial Intelligence Risk Management Framework (AI RMF 1.0)*. U.S. Department of Commerce. <https://www.nist.gov/itl/ai-risk-management-framework>

¹⁹ Organisation for Economic Co-operation and Development (OECD) et al. (2 May 2025). The Adoption of Artificial Intelligence in Firms: New Evidence for Policymaking. OECD Publishing. https://www.oecd.org/en/publications/the-adoption-of-artificial-intelligence-in-firms_f9ef33c3-en.html

55. Institutional resilience is equally critical. Public administrations and organizations must be able to integrate AI-assisted systems while maintaining continuity, accountability, and public confidence. This includes the capacity to manage transitions, address unintended consequences, and respond to emerging risks. Artificial intelligence contributes positively to resilience when embedded within governance frameworks that emphasize proportionality, transparency, and human oversight.
56. From a broader societal perspective, resilience also depends on public trust in institutions and technologies. Clear communication, ethical safeguards, and visible accountability mechanisms play a central role in maintaining confidence during periods of change. Artificial intelligence adoption that prioritizes reliability, fairness, and oversight strengthens trust and supports long-term stability.
57. Sustainable integration of artificial intelligence therefore requires a balanced approach that links technological innovation with institutional responsibility and social well-being. By embedding artificial intelligence within human-centered governance structures and long-term policy planning, societies can leverage its benefits while reinforcing adaptability, cohesion, and resilience over time.

Policy-Oriented Synthesis

58. The integration of artificial intelligence into contemporary societies represents a structural transformation comparable to earlier technological shifts that reshaped work, institutions, and governance. As demonstrated throughout this report, artificial intelligence should be understood not as a disruptive force that diminishes human agency, but as an enabling instrument whose impact depends on how it is governed, integrated, and overseen.
59. Across professional environments, artificial intelligence contributes to the evolution of work by enhancing efficiency, reducing repetitive effort, and supporting higher-quality outcomes. These changes do not eliminate human roles, but reorient them toward judgment, supervision, and strategic responsibility. Productivity gains derived from AI-assisted systems create opportunities to improve organizational performance and quality of life when aligned with appropriate institutional practices.
60. At the institutional and legislative level, artificial intelligence strengthens operational capacity, coordination, and preventive functions, particularly in public administration and security-related domains. These benefits are contingent upon clear governance frameworks

that ensure accountability, transparency, and proportionality. Human oversight remains essential to maintaining legitimacy, safeguarding rights, and sustaining public trust.

61. This report also highlights the importance of moving beyond simplified narratives surrounding artificial intelligence adoption. Artificial intelligence systems function as tools embedded within broader workflows and decision-making structures, requiring human direction, verification, and contextual understanding. Effective integration therefore depends on institutional capacity, skills development, and continuous adaptation rather than technological deployment alone.
62. From a policy perspective, governance and ethics emerge as central enabling conditions for sustainable artificial intelligence integration. Clear rules, oversight mechanisms, and ethical safeguards provide predictability and reduce uncertainty, supporting innovation while reinforcing institutional responsibility. International and regional frameworks further demonstrate a converging commitment to human-centered approaches to artificial intelligence governance.
63. Taken together, these findings highlight the need for a balanced and forward-looking policy approach. Artificial intelligence can serve as a tool for development that enhances institutional efficiency, supports societal resilience, and contributes to long-term sustainability when embedded within human-centered governance structures. Ensuring this outcome requires sustained political attention, institutional coordination, and a clear commitment to aligning technological progress with public interest.

Addressing the Risks of Misuse: Disinformation, Synthetic Media, and Security Implications

64. While this report focuses on the responsible and constructive integration of artificial intelligence, it is necessary to acknowledge that the same technologies may be misused when deployed without appropriate safeguards, oversight, or accountability. One of the most visible risks concerns the production and dissemination of synthetic content, including deepfake images, audio, and videos, as well as the large-scale generation of false or misleading information.
65. Advances in generative artificial intelligence have lowered technical barriers to producing highly realistic synthetic media. When combined with the speed and reach of digital platforms, these capabilities can be exploited to distort public discourse, undermine trust in institutions, influence public decision-making processes, and cause reputational harm. The

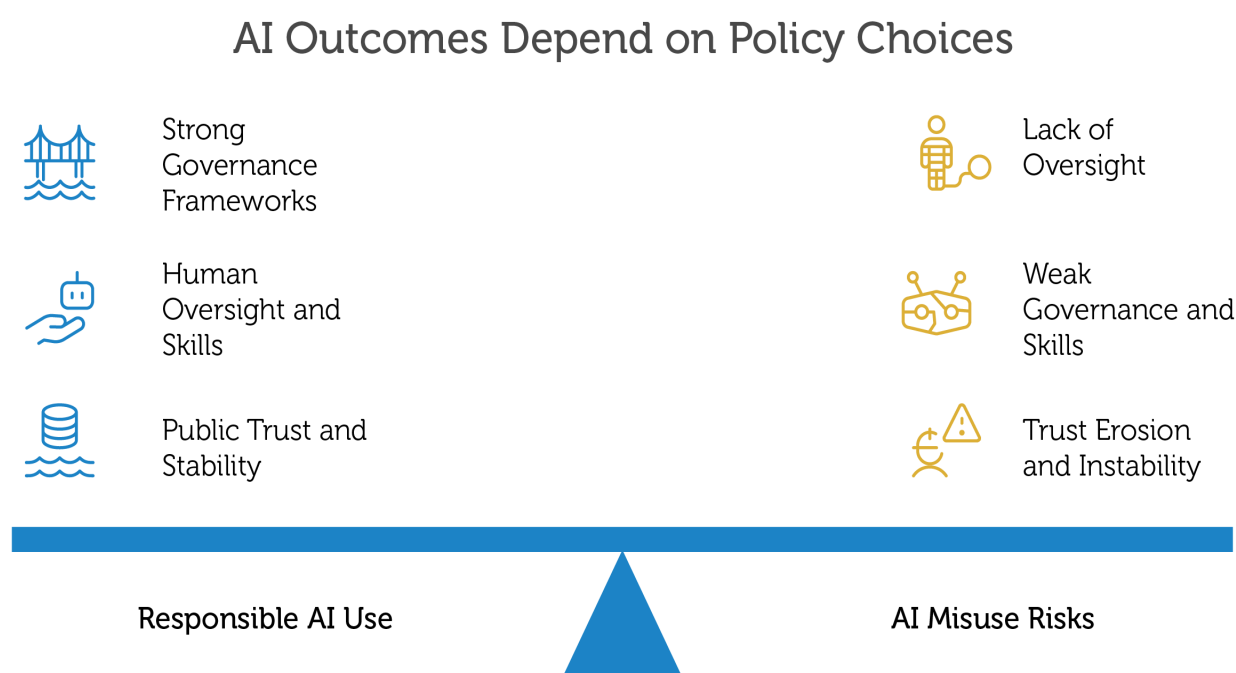
challenge is amplified in environments where verification mechanisms are limited and information circulates rapidly.

66. Beyond information manipulation, concerns also arise regarding the potential misuse of artificial intelligence in sensitive security-related domains. The convergence of AI-enabled data analysis, automation, and accessibility introduces risks linked to military applications, autonomous or semi-autonomous systems, and the misuse of scientific knowledge in bioterrorism-related contexts. These developments highlight the importance of strict governance, proportionality, and sustained human control in high-risk applications.
67. In military and high-risk security contexts, the use of artificial intelligence to support data analysis, logistics, or decision-assistance further underscores the necessity of strict governance frameworks and sustained human control, particularly where the consequences of error or misuse may be significant.
68. The misuse of artificial intelligence does not stem from the technology itself, but from gaps in governance, transparency, and institutional oversight. Addressing these risks requires a combination of technical safeguards, legal frameworks, institutional coordination, and public awareness. Human judgment, source verification, and ethical review remain central to mitigating misuse across both civilian and security contexts.
69. Economic and structural disparities among countries and regions represent an additional obstacle to responsible artificial intelligence governance. Differences in digital infrastructure, regulatory capacity, financial resources, research ecosystems, access to advanced technologies, and technical expertise may widen existing inequalities in AI capabilities and limits, adoption and governance, increasing the risk that the emerging AI divide reinforces existing development disparities. While some states and institutions possess the capacity to implement comprehensive safeguards, conduct technical audits, and invest in workforce training, others may face limitations that constrain effective supervision and risk mitigation. Artificial intelligence governance therefore cannot be addressed solely through regulatory design; it also requires sustained investment in institutional capacity, digital inclusion, and equitable access to technological resources.
70. Within the Mediterranean region, these disparities may translate into uneven levels of preparedness, affecting how artificial intelligence systems are integrated, supervised, and evaluated across different national contexts. Bridging such gaps is essential to preventing fragmented governance environments that could increase vulnerability to misuse, regulatory arbitrage, or unequal socio-economic outcomes. Strengthening regional cooperation, knowledge exchange, and capacity-building initiatives can therefore play a

decisive role in promoting balanced and responsible artificial intelligence development across the region.

71. A comprehensive analysis of artificial intelligence misuse²⁰, including spyware²¹, surveillance technologies, synthetic media, and security-related applications, has been addressed in dedicated reports prepared by the Center for Global Studies of the Parliamentary Assembly of the Mediterranean²². This report does not seek to replicate that work. Instead, it situates misuse risks within a broader policy framework that emphasizes prevention through responsible design, ethical governance, and continuous human oversight. Readers seeking in-depth analysis are encouraged to consult the relevant PAM-CGS reports addressing these issues.

Figure 2: Artificial Intelligence Outcomes Depend on Policy and Governance Choices²³



²⁰ Parliamentary Assembly of the Mediterranean – Center of Global Studies (PAM-CGS). (18 November 2024). *Report on Artificial Intelligence and Emerging Technologies*. PAM-CGS. <https://www.cgspam.org/wp-content/uploads/2024/11/PAM-CGS-Report-on-AI-and-Emerging-Technologies-1.pdf>

²¹ Parliamentary Assembly of the Mediterranean – Center of Global Studies (PAM-CGS). (10 December 2025). *PAM-CGS Report on the Misuse of Spyware Technologies*. PAM-CGS. <https://www.cgspam.org/wp-content/uploads/2025/12/PAM-CGS-Spyware-Misuse-Report.-10-Dec-2025-1204pm.pdf>

²² Parliamentary Assembly of the Mediterranean – Center of Global Studies (PAM-CGS). (n.d.). *Documents*. Parliamentary Assembly of the Mediterranean – CGS. <https://www.cgspam.org/documents-2/>

²³ Graphic compiled by the CGS research team, based on the analysis presented in this report.

Conclusion

72. The report on “Artificial Intelligence as a Powerful Tool for Development: Governance, Work, and Institutional Adaptation” has examined artificial intelligence as an instrument for development within the broader trajectory of technological change, emphasizing continuity rather than disruption. Artificial intelligence does not diminish human relevance, but reshapes how work is organized, how institutions operate, and how responsibilities are exercised. Its impact is determined not by technological capability alone, but by the governance frameworks, institutional choices, and human oversight that guide its integration.
73. Across professional and institutional contexts, artificial intelligence contributes to efficiency, consistency, and improved decision-support, while preserving the central role of human judgment, accountability, and expertise. The evolution of work and productivity associated with AI-assisted systems reflects a long-standing pattern of technological adaptation, in which professions transform rather than disappear. When managed responsibly, these changes create opportunities to improve quality of life, institutional performance, and social balance.
74. At the institutional level, artificial intelligence can strengthen security, safety, and operational effectiveness when embedded within clear legal and ethical frameworks. Governance, ethics, and human oversight emerge as enabling conditions that ensure legitimacy, trust, and sustainability. These frameworks are essential not only to harness the benefits of artificial intelligence, but also to mitigate risks associated with misuse, disinformation, and security-sensitive applications.
75. The risks associated with the misuse of artificial intelligence must therefore be addressed through a comprehensive and coordinated approach. Technical safeguards alone are insufficient without clear legal standards, institutional accountability, cross-border cooperation, and sustained human oversight. Preventive design, transparency requirements, audit mechanisms, and capacity-building initiatives form an integrated framework for mitigating misuse while preserving the constructive potential of AI-assisted systems. Ensuring that these measures are consistently applied across jurisdictions is essential to maintaining trust, safeguarding rights, and preventing fragmentation in global and regional governance environments.
76. This report has also clarified prevailing misconceptions surrounding artificial intelligence adoption by situating artificial intelligence within its practical reality as an embedded, supervised tool rather than an autonomous actor. Effective integration depends on

institutional capacity, skills development, continuous adaptation, and effective governance. This vision is also reflected in the Preliminary Report of the United Nations Independent International Scientific Panel on AI, which concludes that realizing AI's developmental potential will depend on effective governance, international cooperation, institutional capacity, and sustained human oversight²⁴.

77. This report, prepared by the Center for Global Studies of the Parliamentary Assembly of the Mediterranean (PAM-CGS), highlights that societal resilience and long-term sustainability depend on deliberate, human-centered policy choices. Artificial intelligence can serve as a constructive force for development when aligned with public interest, legal accountability, and ethical responsibility. Ensuring that this transformation remains inclusive, secure, and sustainable is a shared responsibility that requires sustained political attention, institutional coordination, and a continued commitment to ensuring that technological progress remains guided by human values, effective governance, and the public interest.

²⁴ United Nations. (1 July 2026). Preliminary Report of the Independent International Scientific Panel on Artificial Intelligence: Evidence-Based Assessment of Opportunities, Risks and Impacts of Artificial Intelligence. United Nations. https://www.un.org/independent-international-scientific-panel-ai/sites/default/files/2026-07/en_Preliminary%20Report_.pdf