

Hikvision's Journey Practicing Responsible AI

What we have learned and how we are putting responsible AI into practice

As the world embraces the transformative power of AI, a global movement is emerging to ensure it is safe, fair, and beneficial to all.

Hikvision is part of this movement. This is our journey in practicing responsible AI.

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Introduction:

A New Era for Artificial Intelligence



The Rise of AI and the Global Shift Toward Accountability

Artificial Intelligence (AI), once a niche domain limited to research environments and specialised applications, has become a transformative force across nearly every sector of industry and society, reshaping how organisations operate and how individuals engage with technology.

Transforming Industrial Sectors

AI-driven automation is redefining productivity and innovation across key industries, including but not limited to:

Manufacturing

The integration of AI technologies such as advanced detection systems, predictive maintenance, and computer vision is reshaping modern production lines. AI allows for real-time decision-making, reducing downtime and optimising output.

Security

AI enhances protection measures by identifying potential risks early—such as perimeter breaches or fire hazards—enabling swift, proactive responses that help safeguard citizens and communities.

Healthcare

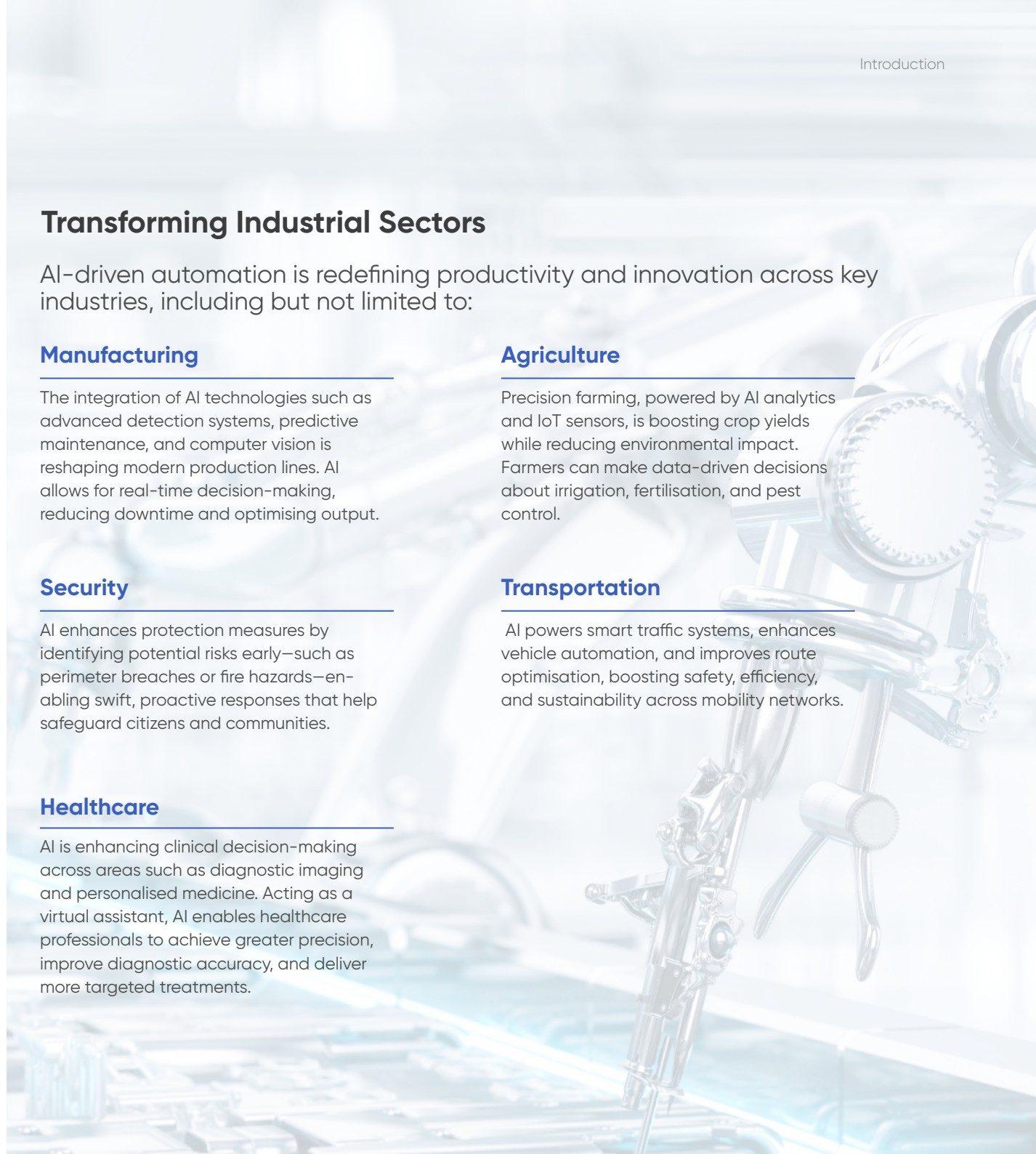
AI is enhancing clinical decision-making across areas such as diagnostic imaging and personalised medicine. Acting as a virtual assistant, AI enables healthcare professionals to achieve greater precision, improve diagnostic accuracy, and deliver more targeted treatments.

Agriculture

Precision farming, powered by AI analytics and IoT sensors, is boosting crop yields while reducing environmental impact. Farmers can make data-driven decisions about irrigation, fertilisation, and pest control.

Transportation

AI powers smart traffic systems, enhances vehicle automation, and improves route optimisation, boosting safety, efficiency, and sustainability across mobility networks.



Reshaping the Workforce

Automation is transforming jobs by assisting with routine tasks and reshaping roles across sectors. While some positions become obsolete, others evolve or emerge:

- Certain kinds of tasks are being automated or streamlined, leading to a shift in demand toward roles requiring practical expertise, emotional intelligence, and adaptability.
- New career pathways are opening in areas such as AI ethics, data governance, and AI system maintenance.
- Continuous learning and upskilling have become essential in today's workplace.

Societal Impacts and Growing Public Concern

The widespread integration of AI also brings profound societal shifts, as well as intensified public scrutiny:

▪ **Fairness and Bias**

AI can improve access to services like education and healthcare, particularly in underserved communities. However, if not carefully designed and implemented, AI risks reinforcing or amplifying existing social inequities.

▪ **Trust and Transparency**

As AI systems become more integrated into daily life, transparency, accountability, and fairness are essential to maintain public trust.

▪ **Privacy and Security**

The use of AI involving personal data raises ongoing public concerns. Regulatory frameworks must evolve proactively to protect individual rights and ensure responsible data use.

▪ **Accountability and Oversight**

Clear responsibility is essential when AI systems malfunction or result in harm. Strong governance and human oversight are critical, especially in sensitive or high-stakes contexts.

Why Responsible AI is No Longer Optional

As AI becomes integral to everyday life, responsible AI is no longer optional; it's essential for sustainable innovation, public trust, and societal wellbeing. Navigating this transformation requires a coordinated, multi-stakeholder approach—bringing together policymakers, businesses, tech experts, and broader society to ensure that the benefits of AI are shared and its risks managed.

The Business Case for Responsibility

For businesses operating in an increasingly global and interconnected marketplace, responsible AI is no longer optional, but a business-critical imperative:

▪ Reputation and Trust

Today's customers, end users, employees, investors, and stakeholders demand and expect ethical AI. Irresponsible practices can diminish loyalty, reduce engagement, and damage brand credibility.

▪ Regulatory Pressure

Governments and regulatory bodies are taking actions. Legal frameworks are gradually being established to ensure transparency, effective risk management, and human oversight.

▪ Innovation with Integrity

Responsible AI fosters the development of higher-quality, more reliable products. Fair, transparent, and inclusive systems are safer, more effective, and better at generalising across contexts.

▪ Sustainable Growth

While rapid AI deployment may deliver short-term advantages, it can also pose significant long-term risks. Responsible AI practices build organisational resilience, mitigate potential liabilities, and support sustainable, long-term growth.

A Call to Action

Responsible AI is no longer a “nice-to-have” or a distant ideal. It is a core business requirement and a foundation for long-term success in an AI-driven world. As the risks and expectations surrounding it intensify, companies and institutions must move decisively from passive awareness to active leadership.

Building trust, navigating evolving regulations, delivering high-quality innovations, and ensuring sustainable growth all depend on an organisation’s commitment to responsible AI. This means embedding ethical principles into every stage of AI development and deployment – from governance frameworks and risk assessments to inclusive data practices and transparent model design.

The time to act is now.



Navigating the Landscape:

How the World is Shaping AI Policy



Global AI Regulatory Overview

As AI technologies continue to evolve rapidly, legislators, regulators, and standard-setting bodies are developing frameworks to maximise its benefits to society while mitigating its risks. These frameworks aim to be resilient, transparent, and equitable, promoting its ethical, safe, and responsible development and use.

Key examples include the European Union's (EU) AI Act, U.S. development of policy initiatives, China's regulatory framework, and emerging approaches across Asia-Pacific, Latin America, and Africa.

While AI regulation is becoming a global priority, different jurisdictions are taking varied approaches depending on their legal traditions, policy priorities, and economic interests. For example, some regions place a strong emphasis on data protection and ethical safeguards, while others prioritise national security, technological leadership, or economic competitiveness.



A Closer Look at Regional Approaches – Some Examples

■ European Union (EU)

The EU's approach to AI is grounded in the promotion of ethical standards, human rights, and robust data protection, as highlighted by the General Data Protection Regulation (GDPR) and the EU AI Act. This comprehensive regulatory framework aims to ensure AI systems are safe, transparent, and accountable.

The EU AI Act adopts a risk-based approach, categorising AI applications based on their potential risks to individuals' rights, safety, and wellbeing. High-risk sectors such as healthcare, transportation, and criminal justice, are the primary focus of this regulation, which seeks to mitigate potential harms by enforcing stringent requirements for transparency, oversight, and ethical use of AI technologies.



■ China

China has introduced a series of regulations on AI, focusing on areas like AI-generated content, algorithmic recommendations, and deep synthesis. The regulatory framework aims to address the growing impact of AI technologies, ensuring that they are developed, deployed, and applied responsibly.

Key provisions require ethics reviews for high-risk AI projects, with compliance enforced through inspections and penalties. Broader frameworks, such as the Opinions on Strengthening the Governance of Science and Technology Ethics, further guide responsible AI development, emphasizing transparency, accountability, and ethical considerations.



■ United States

The United States currently lacks a unified federal framework for AI regulation. While there are federal initiatives like the AI Initiative Act and sector-specific guidelines from agencies such as the FTC and FDA, these efforts remain fragmented.

In response, states have begun introducing their own AI-related bills, such as the Colorado AI Act, California AI Transparency Act, and Utah Artificial Intelligence Policy Act. These state-level initiatives reflect growing demand for regulatory oversight in areas like transparency, accountability, and ethical AI use.



■ Brazil

In late 2024, Brazil's Senate approved the Artificial Intelligence Legal Framework, which adopts a risk-based approach to regulation, including requirements for impact assessments, human oversight, and penalties for misuse. Alongside this, Brazil launched the 2024–2028 AI Plan to promote AI research, skills development, and infrastructure, while advocating for strong AI governance in international forums. These initiatives position Brazil as a key player in AI governance, balancing innovation with accountability and human rights.



■ South Korea

In December 2024, South Korea passed the Basic Act on the Development of Artificial Intelligence and Establishment of Trust (AI Basic Act), set to take effect in January 2026. This law regulates the use of AI with potentially high societal impact, introducing a comprehensive framework focused on trust-building, transparency, and the responsible development of AI technologies.



Challenges in Global AI Regulation

Despite the growing recognition of AI's transformative power, a key challenge remains the fragmentation of regulatory approaches. Multinational companies face difficulties navigating these varying standards, as they must adapt to different regulations depending on the region.

Additionally, there is ongoing debate on how best to balance the need for innovation with the imperative for safety and ethics. While stricter regulations can help protect citizens and promote responsible AI development, some argue that overly rigid controls may hinder innovation.



Opportunities for Global Cooperation

Given the global nature of AI technology, there is a compelling case for international cooperation in developing AI standards and regulatory frameworks. As AI continues to impact economies, societies, and cultures across borders, it is crucial that nations collaborate to create cohesive and interoperable approaches.

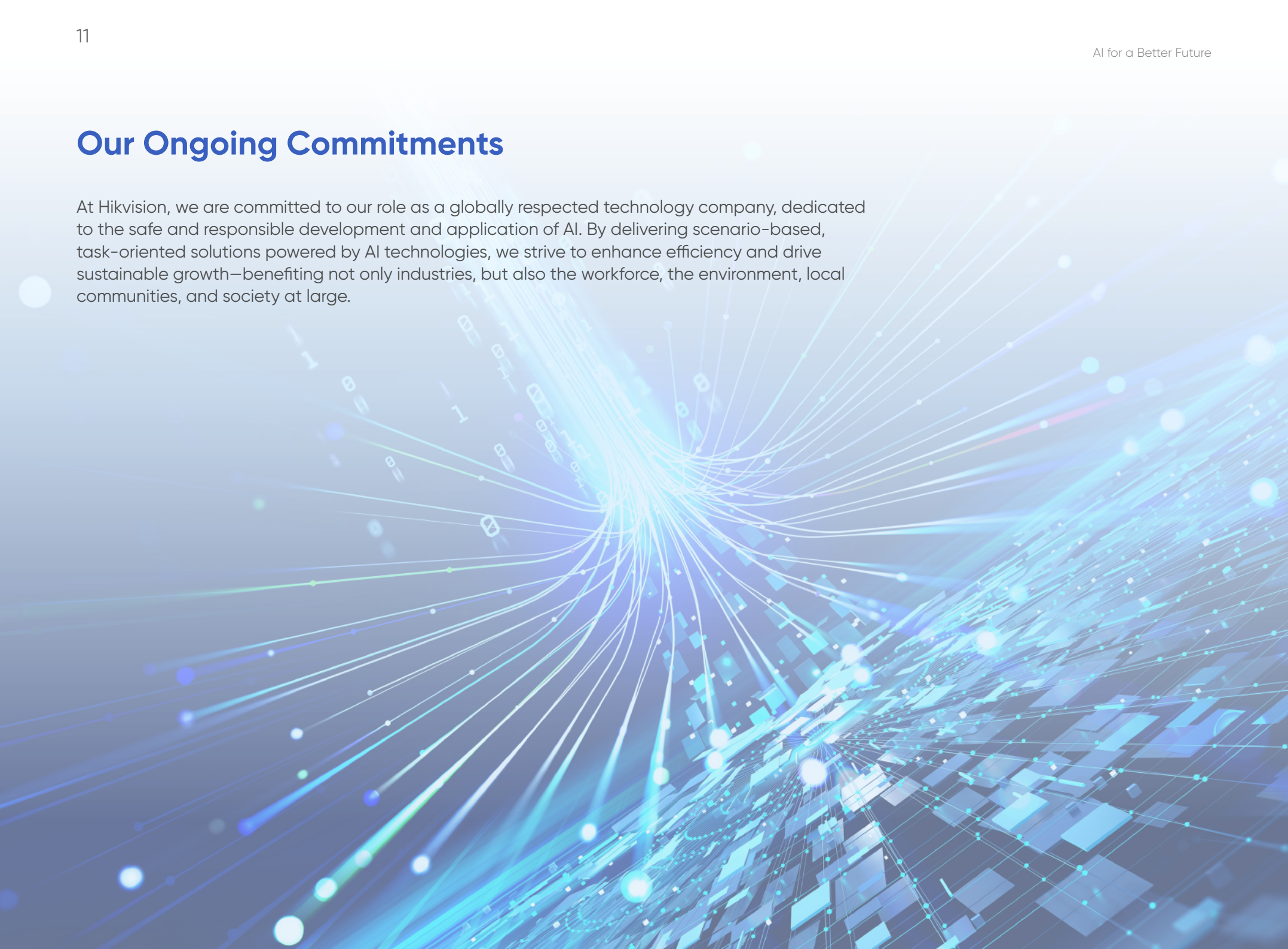
International organizations such as the OECD, UNESCO, and UN AI Advisory Body are already playing pivotal roles in establishing guidelines for ethical AI, data protection, and safety standards. Through these collaborative efforts, countries can share knowledge, align on best practices, and address potential risks collectively. This cooperative approach will foster a global consensus on AI governance, ensuring that AI remains a positive force that drives global security, prosperity, and human well-being.

AI for a Better Future:

Hikvision's Commitment to Responsible AI

Our Ongoing Commitments

At Hikvision, we are committed to our role as a globally respected technology company, dedicated to the safe and responsible development and application of AI. By delivering scenario-based, task-oriented solutions powered by AI technologies, we strive to enhance efficiency and drive sustainable growth—benefiting not only industries, but also the workforce, the environment, local communities, and society at large.



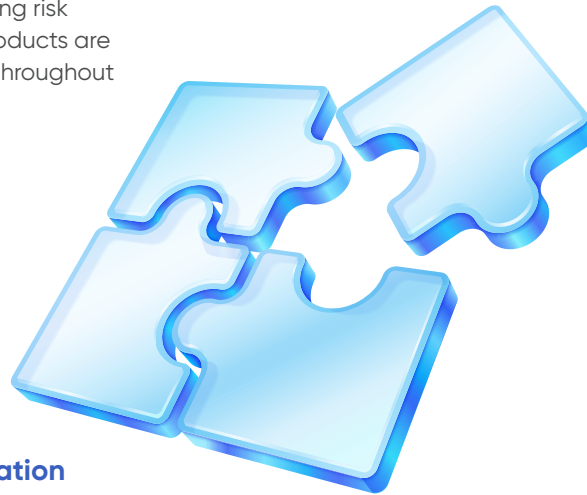
How Forward-Looking Companies Are Preparing Now

Use Hikvision as an Example

Hikvision's Approach to Responsible AI

Robust Compliance Framework for AI Governance

Hikvision has designed a comprehensive compliance framework tailored to meet stringent regulatory requirements. This framework integrates pre-market evaluations, ongoing risk assessments, and technical safeguards to ensure products are safe, transparent, and responsible from launch and throughout the entire product lifecycle.



Strategic Regulatory Vigilance

Hikvision's AI governance is built on a forward-looking approach to regulatory compliance. The company monitors global AI regulations, including the EU AI Act, and anticipates their evolution to stay aligned with guidelines and enforcement trends. This vigilance ensures Hikvision remains compliant and prepared for an increasingly robust AI regulatory landscape.

Proactive Partnerships and Continuous Adaptation

Hikvision maintains open communication with stakeholders, offering training, technical support, and regulatory updates to support compliance across the value chain. Its in-house teams continuously refine policies, processes, and employee education in response to regulatory changes, technological advances, and practical feedback, strengthening AI governance.

Ethical Guardrails and Responsible Innovation

Hikvision embeds ethical principles into its AI development lifecycle, guided by a Technical Ethics Committee at the management level that ensures ethics are considered in new technologies and applications. The company also upholds ethical standards in the procurement and deployment of AI systems.

Hikvision's Responsible AI Principles

Hikvision prioritises compliance with all applicable laws and regulations in every region where it operates.

Recognising that legislation may lag behind emerging technologies, the company also follows industry best practices by maintaining a technology ethics system, guided by a Technical Ethics Committee.

The Committee unanimously decided that the company will not develop AI technologies for identifying race, ethnicity, religious beliefs, skin colour, or similar sensitive attributes.

The Technical Ethics Committee supports the implementation of the company's "Tech for Good" initiative by:

- Evaluating ethical risks associated with AI research, development, and deployment
- Advising business decisions to ensure responsible innovation
- Promoting inclusive governance, considering the diverse expectations and legal requirements of stakeholders across different regions

By embedding **the Five Principles of Responsible AI Technology** into its operational decision-making, Hikvision ensures that its AI technologies are developed and applied with integrity, transparency, and respect for global societal values.

- **Fairness**

Ensure that AI technologies and their applications are developed and used in a fair, unbiased, and non-discriminatory manner.

- **Accountability**

Maintain human oversight of AI systems and provide clear mechanisms for feedback, explanation, and appeal where appropriate.

- **Openness and Sharing**

Empower the industry by providing technical platforms and tools that help address societal challenges and promote human well-being.

- **Security and Reliability**

Continuously enhance the security and reliability of AI technologies and AI-powered products to prevent harm to individuals, communities, and society at large.

- **Respect for Privacy**

Respect individuals' privacy and other fundamental rights by ensuring that AI development complies with applicable local laws and adheres to internationally recognised ethical standards.

Hikvision's Responsible AI Development Lifecycle

As Hikvision strives to position its AI technologies as the foundation for clearer, smarter, and more insightful solutions, it remains deeply committed to embedding the principles of responsible AI at every stage of the product development lifecycle. This comprehensive approach ensures that each Hikvision AIoT product operates safely, reliably, and ethically across diverse industries and scenarios.

■ Model Safety

Model safety is a crucial aspect of responsible AI, ensuring that these systems are reliable, fair, and aligned with ethical standards.

Hikvision's large-scale AI models are equipped with a range of capabilities designed to be industry-specific and task-oriented, enabling products to deliver enhanced performance and accuracy while meeting the precise needs of real-world applications. To ensure model safety and reliability, Hikvision is implementing a range of best practices and technical measures. These include rigorous training data governance, value alignment and retrieval augmented generation (RAG), specifically aimed at mitigating the common challenge of biases and hallucinations in AI systems.

■ System Safety

System safety is vital to responsible AI, ensuring that AI systems are protected from malicious attacks, data breaches, and unauthorised access.

Hikvision strictly complies with all applicable laws, regulations, norms, and industry best practices regarding system safety through key measures such as data isolation, data encryption, infrastructure protection, and identity authentication, ensuring that every aspect of the system remains secure and resilient. Hikvision's latest flagship AI-powered products process video data locally within the user's network. This self-contained architecture ensures that data remains under the direct control of end user at all times, reinforcing the system's overall security and reliability.

■ Application Safety

Application safety ensures that AI models are deployed ethically and responsibly in real-world settings, prioritising the protection of users and society as a whole.

Hikvision is committed to supporting the safe and ethical use of AI technologies by adhering to the United Nations Guiding Principles on Business and Human Rights (UNGPs). The company applies risk assessments and implements control measures to contribute to responsible application.

To further support this, Hikvision offers dedicated training resources through regional events and online sessions. These, along with ongoing safeguard tools and technical support, empower downstream users to utilise the products in good faith. For products requiring careful usage, clear guidelines—such as user manuals—are available on the product information page, supporting safe and ethical application.

Recognised for Upholding Responsible AI Standards

As part of its commitment to responsible AI practices, Hikvision has achieved certification under ISO/IEC 42001, the world's first international standard for Artificial Intelligence Management Systems (AIMS).

ISO/IEC 42001 is designed for entities that provide or use AI-based products and services. It specifies the requirements for establishing, implementing, maintaining, and continuously improving an AI management system, while offering structured guidance to address the unique challenges of AI, including ethical considerations, transparency, accountability, and continuous learning. By aligning with this standard, organisations can effectively balance innovation with governance and proactively manage AI-related risks and opportunities.

Hikvision's certification highlights both its strong commitment and proven performance in leveraging AI responsibly, mitigating potential risks, building trust, and setting a benchmark for ethical AI in the industry.



Building a Better Future Together with Responsible AI



As AI technologies evolve, so must our standards, expectations, and shared responsibilities. At Hikvision, we remain open to public feedback, interdisciplinary dialogue, and ongoing regulatory developments, recognising that responsible AI is a journey, not a fixed destination.

We invite policymakers, industry partners, researchers, and other stakeholders across sectors, and society at large to join us in shaping a responsible, inclusive, and ethical AI ecosystem. Together, we can ensure that innovation is safeguarded by responsibility, guided by integrity, and grounded in shared values.



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