

AI's Promise for Security and Prosperity—And What We Need to Do to Fulfill It

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Last year, artificial intelligence burst into public consciousness. The technology is proving not just a scientific breakthrough, but a breakthrough in how we create breakthroughs. Science at digital speed is [accelerating medicine and drug discovery](#), [pushing the boundaries of materials science](#), and promoting progress in everything from [quantum](#) to [protein science](#).^{1,2,3,4} The economic benefits are striking, [comparable to America's entire annual GDP](#).⁵

From a security perspective, how are AI's accessibility and breadth of applications altering the course of cyber and information wars?

Digital conflicts are already growing, with cyberattacks against NATO countries quadrupling and Hamas and Iran-linked groups using cyber operations as a [tool of first resort](#) against Israeli and American critical infrastructure.^{6,7}

Will AI make an already difficult threat environment even more dangerous? Will authoritarian regimes weaponize AI capabilities to suppress dissent, turbocharge [information operations](#), and undermine global security?⁸

Or can democracies lead the charge, using AI to improve threat detection, malware analysis, vulnerability detection, and incident response, giving the edge to cyber-defenders?

And if this more optimistic vision is possible, what do we need to do to achieve it?

Maintaining Our AI Edge

We're optimistic that AI can tilt the scales in [favor of the defenders](#). Here's what we need to do today to make that happen.⁹

At last year's [Aspen Security Forum](#), we said the countries most likely to lead in competitiveness and AI cyberdefense would be the ones that develop and deploy AI boldly and responsibly.¹⁰

This year, it's clear leading companies in democracies are off to a strong start, with advances in AI capabilities and fundamental AI research. But while America and our allies lead in some AI fields, we're [behind in others](#).¹¹

To keep our advantages and catch up where we need to, we need to approach AI with the same urgency we brought to the space race in the 1960s. That means establishing a collaborative and consistent approach that supports innovation.

We don't need government subsidies. What we do need are [regulatory frameworks](#) that promote AI progress in science, medicine, security, and more.¹²

Smart AI Regulation Is...

1. **Balanced.** We need to protect the public interest while promoting AI innovation and economic growth. We do that [not by reinventing the wheel](#), but by working to improve our current legal frameworks and

identifying and filling gaps where they don't adequately cover AI applications.¹³ The goal should not be perfection, especially at this early stage, but improving our current systems and striving for fairness.

Taking a balanced approach to regulation means applying fair use, copyright exceptions, and rules governing publicly available data to unlock scientific advances and the ability to learn from prior knowledge, while still ensuring website owners can use machine-readable tools to opt out of having content on their sites used for AI training.

- 2. Aligned.** We need national laws that align with the policy frameworks of other leading democracies promoting AI innovation. Consistent regulations will help us to avoid a patchwork of conflicting rules that hamper international AI collaboration and innovation.

The good news is countries don't need to start from scratch: International organizations like the OECD have already set out [AI frameworks](#).¹⁴ And governments are harmonizing rules to support a cohesive approach to AI governance, from the G7's [Hiroshima Process](#) to the AI Safety Summits in the [UK](#) and [South Korea](#) to the [UN High-Level Advisory Body on Artificial Intelligence](#).^{15, 16, 17, 18}

Finally, international organizations like the [International Organization for Standardization](#) are developing standards to ensure AI systems are safe, secure, and trustworthy.¹⁹

We can incorporate these standards into national regulations and provide companies at the forefront of AI innovation with uniform benchmarks against which they can be assessed and compared, while serving as a "seal of assurance" recognized by users or purchasers of AI systems.

- 3. Targeted.** We need rules of the road for AI that are proportionate based on risk—recognizing that *high-risk* activities are also *high-value* activities, and that there's a cost to unduly slowing implementation.

To support broadly beneficial AI advances, we should focus on regulating outputs—and let regulators intervene where risks and harms happen, rather than interrupt innovation by micromanaging fast-evolving computer science and deep-learning techniques.

Issues in banking will differ from issues in pharmaceuticals or transportation, which is why regulators in each sector should draw on their unique expertise while ramping up their understanding of novel AI issues.

In short, every agency will need to become an AI agency. We certainly don't need one AI agency to rule them all, any more than we need a Department of Engines or a single law governing all the uses of electricity. Instead, we should adopt a hub-and-spoke model with a center of technical expertise at an agency like America's National Institute of Standards and Technology that can advance government understanding of AI and support sectoral agencies.

Lastly, we should also distinguish AI developers from AI deployers from AI users. With AI touching every industry and every facet of our daily lives, model developers won't be able to anticipate and protect against all possible misuses of AI, but that doesn't mean there shouldn't be safeguards. Liability regimes should focus on reasonable development processes and communication of model limits, while making product deployers (who have more control and greater knowledge of specific applications) and users accountable for misuse that they control.

Finally, to ensure wide support for broad AI adoption, we also need to get serious about laying the groundwork for AI-driven job transitions. AI will give a boost to businesses of all sizes and allow workers to focus on non-

routine and more rewarding elements of their jobs. But in the short term, [jobs will change](#)—and it will take public-private partnerships and collaboration to prepare workforces for what’s ahead.²⁰

Securing AI’s Benefits Together

Whether you’re talking about security regulations or AI regulations, when governments consult with each other and align on principles with input from all stakeholders, they have a better shot at developing cohesive frameworks.

Companies and civil society can complement the work of governments by advancing standards and innovation in [cutting-edge model safety](#), [watermarking and provenance](#), [evaluations and benchmarking](#), cybersecurity, [deepfakes and election protection](#), and more.^{21, 22, 23, 24}

The race is on. Geopolitical competitors are [taking steps to integrate AI across all sectors of their economies](#) and are now hot on our heels.²⁵

If we want to bolster our national security, [help defenders](#) prevail over hackers, and maintain economic leadership, we need to roll up our sleeves and get to work.²⁶

An AI future underpinned by democratic values won’t happen overnight—and it won’t happen by accident.

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