Edelman
Global Advisory

Artificial Intelligence:

The Global Regulatory and Policy Environment and What It Means for Business

AN EGA SPECIAL REPORT

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Artificial intelligence (AI) has in a short time gone from fringe interest to dominating global discussions around it being both a game-changing opportunity and a potential threat.

AI has significant potential to transform business practices, outputs, and operations across a range of sectors. For Governments, it has the potential for smarter policymaking, more efficient service delivery, and a more personalized citizen experience. At the same time, Governments around the world are facing the challenge of how to regulate AI in an effective way, to pre-empt the pace of innovation and development of this rapidly advancing technology and ensure AI is delivered safely. Policymakers are facing calls from some in the tech sector itself for immediate action to prevent this technology from running out of control.

As AI plays a greater role in our lives and its potential for significant disruption endures, Governments will be thinking long-term and, in some cases, multilaterally about how exactly AI should be developed, deployed, and regulated.

In this report, Edelman Global Advisory's team of policy and political experts share insights on the state of play of AI regulation in key markets across the globe to help companies navigate this evolving policy and regulatory framework and better understand what the key drivers are.

Executive Summary

The EU, US, and China, as the big players in AI, are striving to set the standards for AI development, safety, and regulation. While the US has no federal regulation, the EU is on the brink of agreeing on wide-ranging legislation in its Artificial Intelligence Act. China is balancing the desire for innovation and international competitiveness with its attentiveness to national and data security risks—its generative AI measures have now been finalized and will enter into force in August.

Meanwhile, the UK, India, and Japan are all contributing to a global discussion on how to foster innovation, deliver AI safely, and secure agreement on the guardrails for regulation. The UK's AI White Paper sets out its domestic priorities and Prime Minister Rishi Sunak has stated his intention to make the UK a global center for AI innovation and regulation. Prime Minister Modi is keen to use his role as G20 Chair to advance India's role in AI leadership. And Japan is seeking to create a relatively low regulation environment that can build market share, taking advantage of its location among Asian markets and strong connections to the US and Europe.

In the following report, EGA lays out in more detail how each of these jurisdictions—the EU, US, China, UK, India, and Japan—are approaching AI regulation and global interoperability as well as what it all means for businesses.

Broadly, across all these jurisdictions, the principal issues being wrestled with are:

Allowing innovation to flourish. Innovation is at the core of all government priorities—no one wants to be caught behind the curve. The EU is creating regulatory sandboxes to allow innovators to test new uses in a "safe space." The UK wants to be the global AI tech hub, while China aims to be the world center of AI innovation by 2030. India, leveraging its massive datasets, is setting up Centers of Excellence for AI.

Building trust. Trust is central to broad adoption of AI. Regardless of market, if consumers and citizens are to use AI products and technologies, then they must be confident in the safety, security, and fairness of those underlying AI systems. Governments are exploring various approaches to AI guidelines and regulation to establish trust—a key emphasis of the EU Act and UK White Paper.

Privacy and bias. AI has the ability to consume huge amounts of personal data and make decisions on the back of that. Every jurisdiction is considering its interaction with existing data protection legislation and what new frameworks are needed. In all of these subjective decisions, the risk is reinforcing existing inequalities and excluding sections of society from critical products and services.

Chip production. AI requires a new generation of semiconductor chips. Incentive programs, such as the US CHIPS Act, new chip fabs in the US, Europe, and China, and export controls on chips to China from the US, Japan, and the Netherlands are reshaping the incredibly complex supply chains that underpin this technology. As the production of this critical technology evolves, chip access may dictate who is able to lead on innovation and industry standards.

Human fallback and redress. Jurisdictions are considering how decisions by AI technology can be appealed or unwound: What element of human oversight and responsibility should exist in the products AI develops or in the way AI is used going forward? Governments, regulators, and developers are also considering how AI technologies can be stopped—how can the machine be turned off?

Jobs. While on the face of it this isn't an issue for regulation, it is central to the political debate. Politicians are desperate to grasp the opportunities of AI for their nations. But considering the impact of AI on the future of work, supporting those whose professions disappear will be central to ensuring political stability during this transformational moment.

While China, the US, and EU compete to win the race, the success of this global technological revolution will require systems to be interoperable. The world has come together to broadly agree on global standards and decision making on economic coordination, environmental protection, and nuclear non-proliferation, among other issues. Political leaders are also racing to define the terms of AI coordination, safety, and regulation.

Artificial intelligence will be embedded in every aspect of the economy within a few small years so governments are shaping the landscape for that now. Somehow or other a global framework of regulation will fall into place.

Business must also play its part in shaping that landscape so the opportunities of this transformation are not lost.

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European Union

Context

While the EU recognizes AI's strong potential to bring societal benefits and economic growth, as well as enhance Europe's innovation and global competitiveness, it also acknowledges that specific characteristics of certain AI systems raise concerns around safety, security, and protection of fundamental rights. The EU has been looking at how to balance and address these concerns, resulting in the EU Artificial Intelligence Act (the AI Act) proposed by the European Commission in 2021. Like other EU tech regulation, this legislation is set to affect companies beyond the EU's borders because it will regulate AI systems developed anywhere in the world if they are used in the EU. Users outside the EU will also have to follow the rules if the outputs of an AI system are intended for use in the EU.

The AI Act is now in the last stage of the legislative process, with substantive negotiations—so-called trilogues—now underway between the Council, European Parliament, and European Commission. These trilogue negotiations have no time limit and may drag on but, in principle at least, the Act should be finalized before the end of the current parliament's term early next year. The European Parliament has suggested additional extensive rules for so-called foundational (large generative) AI models, but these are far from agreed. Generative AI developers and European industry fear such measures could make large generative models complex to offer and difficult to develop inside the EU.

Tech policy Commissioner Thierry Breton has suggested a stop-gap "AI Pact" in which AI developers apply the Act's rules voluntarily as soon as they are agreed. Google CEO Sundar Pichai agreed in May 2023 to work toward this.

Approach to AI regulation

The AI Act was proposed explicitly to address risks such as disinformation and privacy issues as well as to position the EU to play a global role in the development of AI. According to Executive Vice President of the European Commission Margrethe Vestager, "The reason why we have these guardrails for high-risk use cases is that cleaning up…after a misuse by AI would be so much more expensive and damaging than the use case of AI in itself." Nonetheless, the AI Act also aims to strengthen Europe's position as a global hub of excellence in AI while harnessing the potential of AI for industrial use.

The AI Act is focused on reducing risk while also trying not to damage opportunities, but the focus on maximizing opportunities is found more in public research funding rather than in regulation. The Commission explains its approach as taking *"a balanced and proportionate horizontal regulatory approach to AI that is limited to the minimum necessary requirements to address the risks and problems linked to AI, without unduly constraining or hindering technological development or otherwise disproportionately increasing the cost of placing AI solutions on the market."* The AI Act maintains a central focus on "trust," with 48 mentions in the original Commission proposal.

The AI Act, as originally proposed, assigns applications of AI to four risk categories. First, applications and systems that create a risk the EU deems unacceptable, such as government-run social scoring, are banned. Second, high-risk applications, such as recruitment and selection—including a CV-scanning tool that ranks job applicants—are subject to specific legal requirements. Lastly, under limited and minimal risk, applications not explicitly banned or listed as high-risk are largely left unregulated, side from some requirements to inform users or recipients of outputs that AI is used. Coordinated AI "regulatory sandboxes" will foster innovation in AI across the EU. These should incentivize innovators to experiment in a controlled environment, allowing regulators to better understand the technology and fostering consumer choice in the long run.

Steep non-compliance penalties for companies include fines which could reach up to EUR 30 million or 6% of global income. Submitting false or misleading documentation to regulators would result in fines, too.

The European Parliament wants to include additional elements:

- A ban on all use in public places of real-time AI-powered facial recognition and tools using other biometrics, plus the use of biometric analysis tools after the event only for law enforcement of serious crime and, then, only after judicial authorization. Facial recognition in public has become the pivotal AI issue for the Parliament.
- The use of emotion recognition AI-powered software to be banned in the areas of law enforcement, border management, workplace, and education.
- A ban on using AI for predictive policing to be extended from criminal offenses to administrative ones.
- High-risk AI systems to keep records of their environmental footprint, and foundation models to comply with European environmental standards.
- Foundation model developers to conduct formal risk assessments, register their models in an EU database, and meet extensive requirements for model development and training. These include using only training data which meets sourcing rules, providing a summary of any copyrighted training data, and providing technical documentation that allows downstream providers to prove their compliance with the AI Act.

Global interoperability and geopolitical context

Parts of the tech sector have raised concerns over the AI Act, calling for self-assessments of high-risk AI systems and the exclusion of general-purpose AI from the AI Act. The US Government has voiced similar concerns, pushing for a narrower definition of AI, a broader exemption for general purpose AI, and an individualized risk assessment in the AI Act.

Overall, however, and despite these differences, Washington has preferred to work via the EU-US Trade and Technology Council to harmonize regulatory approaches to AI and increase interoperability. With escalated geopolitical tensions globally, civil society and Western governments are increasingly raising concerns about authoritarian regimes leveraging AI to monitor citizens or strengthen disinformation—namely in the creation of difficult-to-spot deepfakes.

What it means for business

Proposed regulation could increase compliance costs and reduce investment in AI. The burden of any regulation on business has been considered and remains contentious. A 2021 study by the Center for Data Innovation (representing large online platforms) found that the compliance costs incurred under the proposed AI Act would likely provoke a chilling effect on investment in AI in Europe and could particularly deter small- and medium-sized enterprises (SMEs) from developing high-risk AI systems. The Center also found that the AI Act would cost the European economy EUR 31 billion over the next five years and reduce AI investments by almost 20%.

In June 2023, over 150 European business leaders, entrepreneurs, and researchers, including France's former tech minister, put their names to an open letter warning that the European Parliament's approach of applying "rigid compliance logic" to foundation models would stymie attempts to develop generative AI models in Europe. Given how little is currently known about the real risks of generative AI, they favored risk-based regulation using broad principles.

"The reason why we have these guardrails for high-risk use cases is that cleaning up…after a misuse by AI would be so much more expensive and damaging than the use case of AI in itself."

Margrethe Vestager, Executive Vice President of the European Commission

United States

Context

Currently, the US has no federal legislation focused on protecting people from the potential harms of AI. However, Congress and the White House have taken measures to help combat the uncertainty surrounding AI. This includes measures such as the National Artificial Intelligence Initiative Act of 2020 (NAIIA), the main purpose of which is to ensure continued US leadership in AI R&D, lead the world in the development and use of trustworthy AI systems in public and private sectors, prepare the present and future US workforce for the integration of AI systems across all sectors of the economy and society, and coordinate AI activities across all federal agencies to ensure that each informs the work of others.

That said, AI is developing far faster than regulators can operate and, already, it has moved into an era of deployment—throughout 2022 and the beginning of 2023, new large-scale AI models have been released every month.

These models, such as ChatGPT, are advancing so quickly that tech leaders in the industry and lawmakers across the country are petitioning the White House for rules of the road to help guide companies through the uncharted territory.

States such as California, Texas, Illinois, and Connecticut have started introducing bills. Policymakers are discussing AI more than ever before and there is a debate on what constitutes AI. Lawmakers such as Ted Lieu, Democrat of California, have been pushing for more regulation when it comes to AI. Jay Obernolte, a Californian Republican and the only member of Congress with a master's degree in AI, says that lawmakers do not fully understand what AI is, resulting in the lack of regulation.

Approach to AI regulation

In response to public and industry calls for regulatory clarity, the White House Office of Science and Technology Policy recently released a Blueprint for an AI Bill of Rights which identifies five principles to help guide the design, use, and deployment of AI systems to protect the American public in the age of AI. The five principles are:

- **Safe and Effective Systems:** You should be protected from unsafe or ineffective systems.
- **Algorithmic Discrimination Protections:** You should not face discrimination by algorithms and systems should be used and designed in an equitable way.
- **Data Privacy:** You should be protected from abusive data practices via built-in protections and you should have agency over how data about you is used.
- **Notice and Explanation:** You should know that an automated system is being used and understand how and why it contributes to outcomes that impact you.
- **Human Alternatives, Consideration, and Fallback:** You should be able to opt out, where appropriate, and have access to a person who can quickly consider and remedy problems you encounter.

Global interoperability and geopolitical context

There is growing concern throughout the US on how to properly regulate AI domestically and globally.

Millions of people are interacting with AI models daily making AI a critical point for US geopolitical strategy.

While the US has no federal legislation, some industrial policy initiatives, such as the CHIPS Act, are aimed at strengthening certain aspects of the AI supply chain. These initiatives combined with other "choke point" strategies have escalated tensions between the US and China. As the two countries are locked in a race to develop the next generation of AI, pressures are increasing in Washington on how to protect Americans from the potential threats of this technology. Concerns surrounding this technology, such as ChatGPT's potential to provide false information, have policymakers scrambling since it could pose a threat to fundamental rights. As more people gain access to this technology, China is ahead in implementing regulations to gain trust with the public by delivering legislation and mitigating risk, whereas the US is in discussion regarding legislation. For the US to keep its competitive edge, it will need to look at several essential components such as computing power with microchips, the management of large amounts of data, advanced algorithms, and talented engineers.

What it means for business

Outsourcing will decline. AI is changing how businesses operate, specifically in the outsourcing sector. Firms are starting to incorporate AI due to its greater efficiency, cost reduction, and improved customer experiences. US businesses that can outsource less will do so, and will direct funds to US technology companies. More US businesses outsourcing less also raises concerns about fewer jobs available and unemployment.

Businesses will feel the effects of geopolitical tensions. Production of powerful graphics processing units (GPUs)—a core component of AI—will need to happen without foreign governmental interference. The US, along with Taiwan, are at the forefront of production and AI escalates the stakes between Taiwan-China-US. As the US continues to try to stop key technologies from reaching China, businesses will feel the effects in their supply through shortages, sanctions, and potential restructuring of the supply chain.

There will be an influx of misleading information. Disinformation and attempts to poison the AI knowledge base of future AI is a critical national security issue. Deepfakes, which the FBI describes as "the broad spectrum of generated or manipulated digital content, which includes images, video, audio, and text," have spiked with the use of AI, increasing from 100,000 to over one million between January and March 2020 alone. Along with deepfakes, AI is being used to manipulate the stock market, commit payment fraud, and more. The spread of disinformation will continue to be a huge concern for businesses.

A steep learning curve exists—for businesses and consumers—because AI technology is not fully understood by all. During a survey carried out by the US in January 2023, 45% of responding consumers expressed a lack of understanding of how AI and machine learning (ML) technologies worked. AI and ML technologies are huge and complex, and those without an understanding of these technologies still have difficulty fully grasping the opportunities and risks at hand.

Businesses need to be aware of the social, legal, ethical, and governance issues that AI presents. If businesses are to incorporate AI into their daily operations, they must invest in continuous technical education and training.

China

Context

The last several years, AI has garnered much attention—and investment—in the China market. As of 2021, China's AI market was worth about RMB 150 billion (USD 23 billion), accounting for almost 9% of global investment and ranking second only to the US. In 2021, AI start-ups in China obtained RMB 121 billion (USD 17 billion) in funding from private equity and venture capital investments, representing nearly one-fifth of the global total. And by 2030, the Chinese government aims for the AI industry to create RMB 1 trillion (USD 155 billion) worth of annual revenues and have related industries generating RMB 10 trillion (USD 1.55 trillion) annually.

China's AI ambitions are grand. In 2017, China released its Next Generation Artificial Intelligence Development Plan (AIDP) with the aim to make China the world center of AI innovation by 2030 and to make AI "the main driving force for China's industrial upgrading and economic transformation."

This comprehensive AI strategy sits alongside broader schemes already in place to stimulate development of China's AI industry, including Made in China 2025—the 2015 industrial strategy that stressed, in part, self-sufficiency—and the Action Outline for Promoting the Development of Big Data. Amid broad support for AI development—and triggered by last November's launch of ChatGPT—search engine giant Baidu, e-commerce behemoth Alibaba Group, video gaming company NetEase, and AI firm SenseTime have all launched their own ChatGPT-like services.

But the Chinese Government's support for AI innovation is not unfettered. In late April, top decision-makers in the country's ruling party articulated their great interest in the development of AI as well as concerns about risks in its development. The Politburo meeting, chaired by Chinese President Xi Jinping, called on leaders to create "an ecosystem for innovation but at the same time take risk prevention into account."

Control remains priority, so China is working to create a self-sufficient AI ecosystem with its own standards—much like its internet ecosystem—that drives progress through innovation but, first and foremost, serves social and economic stability.

China's long-standing drive for self-sufficiency has been pushed further by the external environment, with recent export controls from the US, the Netherlands, and Japan on advanced chips and manufacturing equipment—critical components in developing a thriving AI industry. So, China finds itself with grand ambitions, huge market opportunity, unique domestic priorities, and a challenging geopolitical environment as it develops its regulatory framework on AI.

Approach to AI regulation

China's ambition for self-sufficiency means that it is, in fact, far ahead of some other jurisdictions in thinking about relevant regulations. It has already laid out its regulatory framework to control data—the fundamental input for AI. Existing legislation, such as the Cybersecurity Law (CSL 2017), Data Security Law (DSL 2021), and Personal Information Protection Law (PIPL 2021), all address certain aspects of developing, providing, deploying, and using data within AI systems. The recent establishment of its National Data Bureau is an effort to control and capitalize on all that data.

Now, China's regulatory focus turns to AI itself. While the national legislature has not yet adopted a law comprehensively regulating AI, the State Council's 2023 legislative plan includes the submission of a draft AI law, with more than 50 measures up for review by the country's lawmakers this year.

These measures reflect the Government's prioritization of control over innovation, vowing to "strengthen forward-looking prevention and restraint guidance, minimize risks, and ensure the safe, reliable, and controllable development of AI."

The law would give the Government broad authority to restrict activities that endanger national security interests, damage China's national image, or disrupt the economy.

Other legislation takes a similar approach. The Internet Information Service Algorithmic Recommendation Management Provisions (March 2022), which governs companies' use of algorithms in online recommendation systems, mandates that AI services be moral, ethical, accountable, transparent, and "spread positive energy." In July, the Cyberspace Administration of China (CAC), China's national internet regulator, published The Interim Regulations for Managing Generative Artificial Intelligence Services to go into effect August 15. The measures regulate generative AI services like ChatGPT and require that such services obtain a license to operate from the CAC, AI-generated output be censored, and training data be "authentic, accurate, diverse, and objective." Specifically, the measures state that generative AI content must "reflect the core socialist values and must not contain any content that subverts state power, advocates the overthrow of the socialist system, incites splitting the country or undermines national unity." While it's still unclear how measures will be enforced, this clause grants regulators' broad authority to ensure that generative AI's content aligns with China's existing censorship rules.

Compared to an earlier draft published in April, however, the new regulations have a more supportive tone toward AI with authorities pledging "to encourage innovative development of generative AI." The new measures also narrow the scope of regulation from the previous draft, including only generative AI services providing "text, pictures, audio and video" to the Chinese public, rather than all technology development and AI-based content. In other words, AI-based services intended for industrial or internal corporate use are not covered by the regulation, suggesting that authorities seek to regulate public-facing AI services, rather than all AI technologies writ large. Finally, by utilizing a license-based system instead of the stricter registration-based regime previously forecasted, tech companies will face fewer compliance issues and have more flexibility to operate.

Global interoperability and geopolitical context

China's AI industry still depends heavily on advanced foreign-made chips.

As such, the future of its industry depends heavily on external policy changes and its ability to develop domestic self-reliance.

As early as 2018, the US Congress passed the Export Controls Reform Act to limit the export of emerging and sensitive technologies. More recently, as China and the US race to increase respective commercial and technical competitiveness in AI, the US has imposed a series of export restrictions focused on advanced chips and manufacturing equipment while pressuring allies such as Japan and the Netherlands to do the same.

The measures are already affecting China's AI industry. In the first five months of 2023, China's chip imports dropped by over 10% year-on-year and China's chip manufacturing equipment imports dropped by nearly 50% year-on-year in the first four months of 2023. A record number of Chinese chip firms have already closed—as many as 3,470 since January—delivering a massive blow to China's AI development.

As China strives to develop its AI industry, even amid chip restrictions, it remains clear that—from the outset of this nascent technology—the Chinese government is establishing an independent AI ecosystem.

Similar to internet decoupling where China has developed its own domestic players, ChatGPT is not available for China-based users and, instead, China is intent on developing domestic AGI efforts such as Baidu's Wenxin Yiyan and Alibaba's Tongyi Qianwen. At the same time China is also successfully focusing on exporting and developing "new infrastructure" and advanced technologies including AI in non-US markets including Latin America, Africa and the Middle East.

China
(Cont.)

What it means for business

With room for commercial expansion and scalable enterprise, China's AI sector is still promising. The sector is expanding quickly and is a national priority for growth. US restrictions on technology will encourage China to make more assertive investments and accelerate its transition to self-sufficiency. Although China lacks certain advanced AI-related software and hardware, the market is still open to outside talent and investment. Businesses must adjust to the shifting economic and political environment or risk decline or closure, but companies have opportunity to leverage a variety of incentives for R&D innovation.

Compliance with strict and vague regulation is a challenge. Regulation on AI and AI-generated content in China is strict relative to some other countries. While some restrictions pre-empt privacy and ethical issues for businesses, others fail to provide legal clarity on terms or who decides the meaning of terms, which creates an opaque operating environment for businesses. And for providers that fail to comply with the short but comprehensive list of requirements, penalties can be severe, including suspension of services, fines, and criminal liability. Furthermore, regulation targets any provider of generative AI available to "the public within the territory of China," leaving the door open on whether providers based in the US or elsewhere would be subject to these rules.

China's push for data localization and control will severely restrict interoperability. Very limited types of data will be allowed to transfer across borders and, given China's push for its own AI ecosystem, interoperability with foreign AI players will be limited. Businesses in the China market will have to conform to China's AI standards or forfeit access to the market entirely.

United Kingdom

Context

The UK Government is trying to put itself at the center of the global debate on AI innovation, safety, and regulation, and to position itself as a fair arbiter, convenor, and international thought leader. Prime Minister Sunak had extensive discussions on this issue with President Biden during his recent visit to Washington. He has said the UK will host a global summit on AI regulation in the autumn and he wants the UK to be the "global home for AI regulation." Alongside his desire for standards to be set in the UK, he wants London to be an AI tech hub to foster innovation and global collaboration—a "CERN for AI," he has said, much like the European Organization for Nuclear Research has done for particle physics near Geneva.

Before the recent flurry of activity, the UK Government issued a White Paper in March 2023. This continues to underpin the UK's approach of creating a context-based, proportionate approach to regulation that will help strengthen public trust and increase AI adoption.

As part of this, the Government is keen to stress that its approach to AI regulation will be proportionate—balancing real risks against the opportunities and benefits that AI can generate—based on the three objectives below:

- **Drive growth and prosperity by making responsible innovation easier and reducing regulatory uncertainty.** This will encourage investment in AI and support its adoption throughout the economy, creating jobs and helping people to do them more efficiently. To achieve this objective the Government believes it must act quickly to remove existing barriers to innovation and prevent the emergence of new ones.
- **Increase public trust in AI by addressing risks and protecting our fundamental values.** Trust is a critical driver for AI adoption. If people do not trust AI, they will be reluctant to use it. Such reluctance can reduce demand for AI products and hinder innovation. Therefore, the Government must demonstrate that its regulatory framework effectively addresses AI risks.
- **Strengthen the UK's position as a global leader in AI.** The development of AI technologies can address some of the most pressing global challenges, from climate change to future pandemics. There is also growing international recognition that AI requires new regulatory responses to guide responsible innovation. The UK can play a central role in the global conversation by shaping international governance and regulation to maximize opportunities and build trust in the technology, while mitigating potential cross-border risks and protecting democratic values.

Approach to AI regulation

The UK Government recently published an AI White Paper underpinned by five principles that will guide the use of AI in the UK:

- **Safety, security, and robustness:** Applications of AI should function in a secure, safe, and robust way where risks are carefully managed.
- **Transparency and explainability:** Organizations developing and deploying AI should be able to communicate when and how it is used and explain a system's decision-making process in an appropriate level of detail that matches the risks posed by the use of AI.
- **Fairness:** AI should be used in a way that complies with the UK's existing equality and data protection laws, and must not discriminate against individuals or create unfair commercial outcomes.
- **Accountability and governance:** Measures are needed to ensure there is appropriate oversight of the way AI is being used and clear accountability for the outcomes.
- **Contestability and redress:** People need to have clear routes to dispute harmful outcomes or decisions generated by AI.

The principles will be issued on a non-statutory basis and implemented by existing regulators, making use of regulators' domain-specific expertise to tailor the implementation of the principles to the specific context in which AI is used. During the initial period of implementation, the Government will continue to collaborate with regulators to identify any barriers to the proportionate application of the principles and evaluate whether the non-statutory framework is having the desired effect.

More broadly, the Government is keen to ensure that the overall framework offers a "proportionate but effective response to risk" while promoting innovation across the regulatory landscape.

To this end, the Government will remain responsive and adapt the framework if necessary, including where it needs to be adapted to remain effective in the context of developments in AI's capabilities. The Government's approach will also assess and monitor risks across the economy arising from AI, support testbeds and sandbox initiatives to help AI innovators get new technologies to market, provide education and awareness to give clarity to businesses and empower citizens to make their voices heard as this framework is rolled out, and promote interoperability with international regulatory frameworks.

Global interoperability and geopolitical context

The UK Government wants to make the UK a global center for AI research to create and build innovative AI companies—with Sunak's "CERN for AI"—and also a global center for AI regulation as the place where global standards are set.

That is why the UK is planning to host the global summit on AI regulation later in 2023. As such, the UK's approach to both domestic regulation and international discussions will continue to be guided by the ambition to develop AI frameworks that champion what the UK Government says are its democratic values and economic priorities. The UK Government is keen to work closely with international partners to both learn from, and influence, regulatory and non-regulatory developments, promoting interoperability and coherence between different approaches and challenging barriers which may stand in the way of businesses operating internationally.

What it means for business

Improving the regulatory landscape should spare businesses from overregulation and spending excessive time and money navigating compliance.

It is the Government's view that the UK's AI success to date is, in part, due to its reputation for high-quality regulators and its strong approach to the rule of law.

However, while AI is currently regulated through existing legal frameworks, some AI risks arise across—or in the gaps between—existing regulatory remits. In addition, the Government has heard from industry that if regulators are not proportionate and aligned in their regulation of AI, businesses may have to spend excessive time and money complying with complex rules instead of creating new technologies. As such, the UK Government believes that intervention is needed to improve the regulatory landscape.

A pro-innovation regulatory framework is good for business. The hope is that improving the regulatory landscape will deliver a pro-innovation regulatory framework that is nimble, adaptable, and future-proof. It would be supported by tools for trustworthy AI, including assurance techniques and technical standards, while providing more clarity for investors and encouraging collaboration between government, regulators, and industry to unlock innovation.

Opportunity lies in the AI assurance industry. The Government has also set out that these tools for trustworthy AI—assurance techniques and technical standards—will play a critical role in enabling the responsible adoption of AI and supporting the proposed regulatory framework. To effectively assure AI systems, the Government needs a toolbox of assurance techniques to measure, evaluate, and communicate the trustworthiness of AI systems across the development and deployment life cycle. These techniques include impact assessment, audit, and performance testing along with formal verification methods. It is also unlikely that demand for AI assurance can be met entirely through organizations building in-house capability and, as such, there is an opportunity for the UK to become a global leader in this market as the AI assurance industry develops.

India

Context

Estimates hold that AI has the potential to add USD 957 billion to India's economy by 2035—a full 15% of its current Gross Value Added. The Government of India is of the firm view that AI will be an enabler of India's Digital Economy and make governance both smarter and more data-led. NITI Aayog, the Indian Government think-tank, has strongly advocated for a national AI strategy that is premised on a framework adapted to India's needs and aspirations. In its report, National Strategy for AI, NITI Aayog has stated that AI can effectively increase access to quality health facilities and inclusive financial growth, provide real-time advisory to farmers to increase productivity, and build smart and efficient cities and infrastructure to meet the demands of a rapidly urbanizing population.

Another aspect of India's potential as a leader in AI is its proven track record as a technology solution provider of choice. Indian IT companies have been pioneers in bringing technology products and development as solutions across the globe, and as AI matures and generalized applications become commonplace, India could have an advantage when it comes to large scale implementation.

"Solved in India"—or more accurately, "Solved by Indian IT companies"—could be the model going forward for AI as a service.

But there is also a flip side to the hope and optimism that AI creates. An AI-driven growth in a country like India is likely to raise socio-economic concerns. The information technology industry in India comprises IT services and business process outsourcing. The evolution of AI platforms over the past two to three years, particularly the emergence of AI-as-a-Service (AIaaS), has sparked fresh debate over looming fears of IT business moving out of India and job cuts in the sector as companies move towards complete automation.

According to a report by Computer Emergency Response Team-India (CERT-In), India observed a 51% increase in ransomware attacks in first half of 2022 year-on-year. The IT and IT-enabled services sector was the most impacted sector, followed by the finance and manufacturing sectors. A report by the Institute for Defense Studies & Analysis flagged the negative implications of easy accessibility of AI-based tools to non-state actors.

Approach to AI regulation

The Government of India is striving to create a framework for catalyzing growth and innovation in emerging technologies while laying guardrails for the ethical and safe use of AI. Under its National Strategy for Artificial Intelligence (NSAI), India has successfully brought AI to play a key role in the Government's reform agenda by underlining its potential to improve outcomes in sectors such as healthcare, agriculture, and education. The Government is working in partnership with academia, startups, and industry players to develop cutting-edge applications and scalable problem solutions in these fields. In its Union Budget 2023, the Government of India announced plans to set up three Centers of Excellence for Artificial Intelligence.

Regarding regulation, however, the Union IT and Telecom Minister Ashwini Vaishnaw recently said that the Government is neither considering bringing any law nor has any plans to regulate the growth of AI in the country. He did acknowledge that ethical concerns and risks exist around AI and that government agencies have started making efforts to standardize responsible AI and promote the adoption of the best practices, in accordance with AI concerns highlighted in the NSAI.

Released in 2018, the NSAI underlined the need for a robust ecosystem that facilitates cutting edge research to not only help solve societal problems and serve as a test bed of AI innovations, but also to enable India to take a strategic global lead by scaling these solutions globally. It also laid down actions for the Government to accelerate adoption and responsible development of AI in the country, instituting a data privacy legal framework to address and implement a data protection framework that protects human rights and privacy without stifling innovation in India. Further, to create sectoral regulatory guidelines, it suggested that the Government should collaborate with industry to come out with sector specific guidelines on privacy, security, and ethics in manufacturing, financial services, identity, telecommunications, and robotics, among others.

The Government's regulatory approach to the fast-moving AI landscape has been a cautious one. Some sector specific guidance has been identified for development and use of AI, but the Information Technology Act of 2000 (the IT Act) continues to be the backbone of data protection legislation in India. Work is in progress to replace this more than two-decade old law and has accelerated over the past year to create a comprehensive legal and executive architecture to support India's digital ambitions. So far, the plan includes two components:

- **The Digital Personal Data Protection Bill 2022:** This new law provides for vibrant data protection legislation where the law shall be supplemented with regulations and codes of practice, thereby making it easier for privacy to evolve with evolving technologies. It covers limitations on data processing, security safeguards to protect against data breaches, and special provisions relating to vulnerable users such as children. Designed as comprehensive legislation outlining various facets of privacy protections that AI solutions need to comply with, it will apply to organizations that develop and facilitate AI technologies. As AI developers will be collecting and using massive amounts of data to train their algorithm to enhance the AI solution, they might classify as data fiduciaries. This implies that AI developers may comply with the key principles of privacy and data protection as enshrined in this law.
- **The Digital India Act:** This renewed law has been proposed to govern the digital ecosystem and the cyberspace in India, replacing the IT Act of 2000, which is India's main law addressing cyber-crime and e-commerce. Though still at a consultative stage, the Government has promised that the Digital India Act will be modern legislation that will ensure that the internet in India is safe and trusted for users. In April, while responding to the debate on monopoly risks of emerging tech such as AI, India's Deputy IT Minister Dr. Rajeev Chandrashekhar said, "The government is currently doing consultations on the Digital India Bill which will focus on openness of internet, safety, trust, and accountability as basic principles in detail."

Global interoperability and geopolitical context

India is playing a balancing act between the US-backed West and oil-rich Russia, its traditional arms supplier. India's strained relations with neighboring China has pushed it into alliances like the Global Partnership for AI, the Quadrilateral Security Dialogue, and the Indo-Pacific Economic Framework.

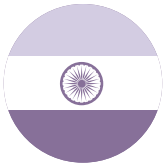
In February, India and the US launched the Critical & Emerging Technology (iCET) initiative, a joint statement issued by the White House after a meeting between the National Security Advisors of the two countries in January 2023 to discuss plans to deepen cooperation in areas such as quantum computing, artificial intelligence, 5G wireless networks, and semiconductors. The partnership will pave the way for research agency partnerships between the US National Science Foundation and India science agencies to counter China's dominance in industries and supply chains of the future.

More recently, in May India held its first Trade & Technology Council (TTC) meeting with the EU. The TTC consists of three Working Groups that report on roadmaps for future cooperation. The Working Group on Strategic Technologies, Digital Governance, and Digital Connectivity will work jointly on areas of mutual interest: AI, 5G/6G, high performance and quantum computing, semiconductors, cloud systems, cybersecurity, digital skills, and digital platforms. India already has a similar arrangement with Japan, a close ally. Prime Minister Modi's tenure has seen India-Japan relations peak, having recently finalized an agreement on AI co-operation among other strategic areas. With an eye on these partnerships, the Government of India is looking forward to developing a holistic national strategy for AI regulation to maximize economic, commercial, and strategic advantages.

"The government is currently doing consultations on the Digital India Bill which will focus on openness of internet, safety, trust, and accountability as basic principles in detail."

Dr. Rajeev Chandrashekhar,
India's Deputy IT Minister

India
(Cont.)



What it means for business

India is not considering any law to regulate AI growth. Any regulation would be limited to ensuring AI doesn't harm digital citizens and expanding opportunities for more investment through public-private partnerships in digital public infrastructure. However, the Government is in favor of an international framework for AI-enabled smart tech platforms, such as ChatGPT, including areas related to algorithm bias and copyrights. This would enable a level playing field while boosting growth for startups as well.

Key opportunities may revolve around Centers of Excellence for Artificial Intelligence. Announced recently, the Government of India plans to set up three Centers of Excellence for AI to support its AI program with one of the largest publicly available datasets in the world. These centers will focus on applying AI in healthcare to improve patient diagnoses, provide personalized patient management, and automate administrative tasks. With a vast pool of talent, this will boost India's booming startup ecosystem and further attract foreign direct investment in the fields of the Internet of Things and robotics.

India's G20 Chair positions it to lead on AI globally. As G20 Chair for 2023 and host of September's G20 Summit, India is organizing a series of conferences leading up to the summit for business leaders, top tech experts, and academics from the world's most economically and technologically advanced nations. This is an outstanding opportunity for India to leverage these deliberations and set a results-oriented agenda for the summit. India has already proposed a common framework for G20 nations to deal with crypto assets regulation, and a similar approach to regulate and govern future technologies such as AI would be in India's interest. This would create a favorable environment for AI-related businesses in India.

Japan

Context

Japan's IT industry has long been monopolized by traditional Japanese behemoths, such as Hitachi, Fujitsu, and NTT. While they have made impressive advances in mobile communications and robotics, the result has been the "Galapagosization" of Japan's technology, a term used in Japan to describe its isolated tech sector that has developed and evolved in notably different—and incompatible—ways from the rest of the world.

In the rapid digitalization of recent years then, Japan's divergent tech sector has not been able to align or keep up with globalized developments writ large, leading to a sense of crisis within the Government that it is lagging far behind the US, China, and other Asian countries in digital tech.

While there are calls for the establishment of regulations and rules,

the Japanese Government largely views generative AI as its opportunity to catalyze change.

Generative AI is considered to have the potential to fundamentally change existing technologies and services, so the Government has focused on fostering startup companies in recent years—albeit belatedly—and startups are actively trying to adopt generative AI technology.

Approach to AI regulation

Compared to the EU's regulatory-heavy approach, Japan's approach to AI regulation is much more passive.

Japan has no law or regulation on AI and is oriented toward flexible responses through corporate self-regulation or public-private guidelines rather than laws.

This, as things stand, is similar to Singapore's approach, which avoids direct regulation or specific ethical standards, and instead promotes responsible use of AI through tools and frameworks co-created with industry.

Five years ago Japan established a regulatory sandbox system for tech more broadly, including AI, and then two years ago made this system permanent, but it is not widely used. In 2021, the Government established its Digital Agency to centralize policies on digital, and the Government has recently launched its AI Strategy Council to discuss guidelines on the use of generative AI.

However, the ministries that have traditionally implemented digital policies, such as the Ministry of Economy, Trade and Industry (METI), the Ministry of Internal Affairs and Communications (MIC), and the Cabinet Office, stand toe to toe in a turf war so further strong political leadership is required.

Global interoperability and geopolitical context

With minimal regulation and positive relations with the West, Japan is positioning itself as an AI-friendly hub in Asia and an alternative investment destination to China. Given ongoing conflict between the US and China,

Japan hopes to attract AI companies that are skeptical of operating in China and seek a stable business environment in Asia with close ties to Western countries.

This dynamic was evident at the recent G7 meeting, where Japan indicated it would join the West in carefully reviewing its sales of high-tech products to China. Japan has said that it will not collaborate with Chinese companies, such as Baidu, on AI, and instead will seek collaboration with US players such as OpenAI, Microsoft, and Google. Whether this strategy proves successful remains to be seen.

What it means for business

Japan's AI sector is undeveloped and underregulated with high potential. The Japanese Government is more interested in fostering the AI industry than in tightening regulations. With little desire from the Government or business community for strong regulation, it is likely that the Government will establish a set of guidelines and attempt to integrate AI technologies into society through business. But with the public and private sectors working together to establish Japan's AI rules, companies should ensure they maintain a pulse on the dynamic sector and their government relationships to take advantage of the opportunity.

Amid geopolitical tensions in China, Japan is a strong candidate for alternative investment. Given Japan's strong ties with Western countries, it is a natural choice for AI development in Asia. While no Japanese companies are themselves positioned to become major players in AI, realistic opportunities in Japan include major Western companies investing in Japan and forming partnerships with Japanese companies.

With lack of regulation also comes risk. The disadvantages of generative AI, such as leakage of personal information and lack of human judgment, are widely recognized in Japanese society. Companies should bear this in mind as they conduct their activities. Japanese society has become more sensitive to compliance and personal information leaks in recent years, and companies that cause problems are forced to hold press conferences and apologize.

AI Regulation by Country

United Kingdom

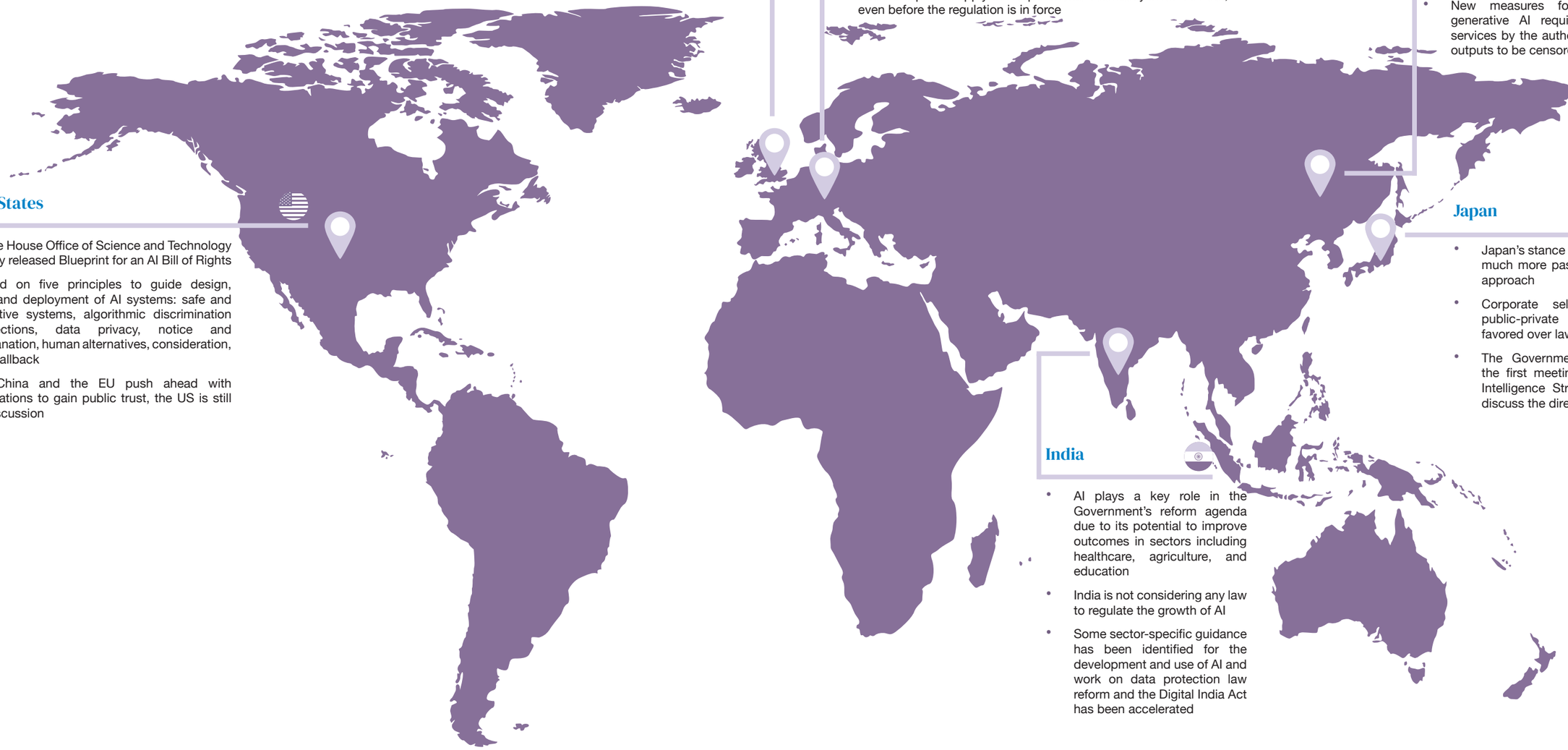
- The UK is trying to put itself at the center of the global debate on AI innovation, safety, and regulation
- The Government intends to issue non-statutory principles and make use of existing regulators' expertise in implementation
- Hosting a global summit on AI regulation later in 2023 is part of the Government's ambition to make the UK the place where global standards are set

European Union

- The EU's comprehensive AI Act has now entered the final stage of the legislative process
- It will place AI systems in different categories of risk, with some banned and specific requirements for those considered high-risk
- Like other EU tech regulation, the rules will affect companies beyond the EU if they want to operate systems in the EU
- There is a plan to apply the requirements voluntarily in an "AI Pact," even before the regulation is in force

China

- China has already laid out relevant regulations to control data and has now turned its focus to AI itself
- Measures reflect the Government's prioritization of control over innovation
- New measures for public-facing generative AI require licensing of services by the authorities and allow outputs to be censored



United States

- White House Office of Science and Technology Policy released Blueprint for an AI Bill of Rights
- Based on five principles to guide design, use and deployment of AI systems: safe and effective systems, algorithmic discrimination protections, data privacy, notice and explanation, human alternatives, consideration, and fallback
- As China and the EU push ahead with regulations to gain public trust, the US is still in discussion

India

- AI plays a key role in the Government's reform agenda due to its potential to improve outcomes in sectors including healthcare, agriculture, and education
- India is not considering any law to regulate the growth of AI
- Some sector-specific guidance has been identified for the development and use of AI and work on data protection law reform and the Digital India Act has been accelerated

Japan

- Japan's stance on AI regulation is much more passive than the EU approach
- Corporate self-regulation and public-private guidelines are favored over laws
- The Government recently held the first meeting of its Artificial Intelligence Strategy Council to discuss the direction of AI policy

Conclusion

Artificial intelligence, in all its forms, is moving at a great pace. The technology is outstripping the capacity of governments and leaders to conceptualize what an AI-saturated world looks like, let alone what to do about it or how to regulate it. That is why some tech leaders have been calling for immediate action to slow the pace of development.

The opportunities are vast: smarter policymaking and governments, truly personalized services, and automation on a grand scale.

Every country wants to encourage these opportunities. But great concerns remain about privacy, bias, and decision-making—issues that, writ large, are in the legislative responses of most jurisdictions across the world.

Governments are trying to achieve a balance between regulating AI to address risks and build trust and encouraging AI innovation to benefit their societies and economies.

As AI's impact grows, coordinated action will be needed to ensure interoperability and accountability. Businesses must engage to help shape policy and take advantage of opportunities.

As AI embeds in everything we do, as regulation is developed to protect consumers and citizens, and as global politics evolve around dynamic economic realities, Edelman Global Advisory's experts will keep you up to date so that you and your business can make the most of emerging opportunities.

Mohammed Hussein
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