Spotlight

SHIFTING PERSPECTIVES

AI: Friend or Foe

Evolving Role of the Regulator and the Shifting Risk Landscape

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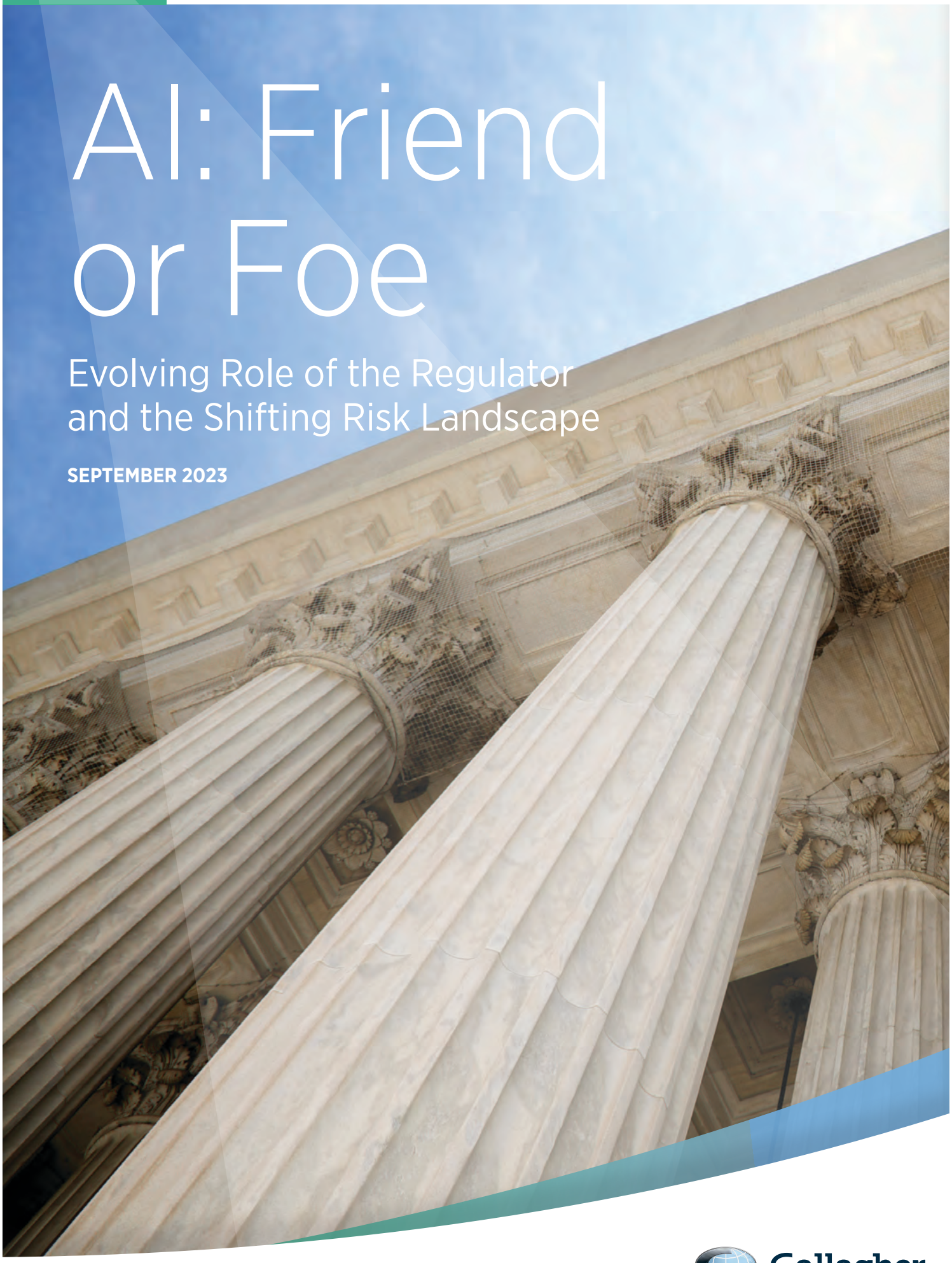


Gallagher

Key findings

1. **Generative artificial intelligence (AI) shows every potential of becoming a global boom economy,** with Goldman Sachs Research predicting it will contribute to a 7% increase in global gross domestic product (GDP) by 2030[1] (USD7 trillion equivalent).

2. **The regulatory brief for AI is complex**—uncertainty, unpredictability and a rapidly evolving use case are challenging international regulators to land on a solution that introduces risk controls that are fit for purpose and can be enforced.

3. **Rapid advances in generative AI technology is complicating governments' efforts** to agree laws governing the use of the technology, with Ireland, Japan, Israel, Spain and Australia joining the list of governments reviewing their regulatory frameworks.[2]

4. **Discrimination, decision-making bias, disinformation and message distortion** are omnipresent risks created by AI-driven tech. Deepfakes and disinformation distorting and polarizing the political agenda, the US entertainment sector demanding clear parameters for AI application,[3] and generative AI outstripping the policymakers have raised heightened concerns, and calls for action are becoming more vocal.

Insights

- **2023 looks set to be a pivotal year for developments in AI regulation and policy** in the European Union (EU) and the adoption of the AI Act.[4] Talks have commenced with EU countries in the council on the form the final law will take.
- In May, OpenAI chief executive Sam Altman **called for regulators to "start setting limits on powerful AI systems,"** agreeing with lawmakers that government oversight will be critical to mitigating the risks.[5]
- **Although regulatory review is progressing in Europe, the UK and China, it is in its early stages in the US and other jurisdictions.** With the majority of breakthrough AI models originating from the US,[6] concerns persist, and public confidence varies on how AI will be used.
- **The UK reportedly has no immediate plans to introduce AI-specific legislation,** instead opting to publish its "Pro-innovation approach to AI Regulation" whitepaper[7] in March 2023. Meanwhile, the Competition and Markets Authority (CMA) has set out specific principles to help guide AI regulations and companies that develop generative AI use cases using systems such as GPT-4, Llama 2 and other large language models.
- **The global artificial intelligence (AI) market is forecast to grow to almost USD2 trillion by 2030.[8]**
- McKinsey's[9] "The state of AI in 2023: Generative AI's breakout year" report highlights that **many organizations are underprepared for the explosive impact of generative AI.** Elsewhere, government regulation is viewed by some as critical to prioritizing AI ethics and implementing responsible AI practices.[10]

AI in the global spotlight

The AI landscape is evolving fast, pushing boundaries for innovation and human capabilities, giving businesses incredible breakthroughs to resolve critical challenges. Content generation at speed and scale, virtual assistants, autonomous cars, advanced robots, personalized education and better customer experience—groundbreaking AI use cases are being regularly reported, with positive strides being made in the healthcare sector and pharmaceutical industry.

Shifting perspectives on AI

The first fully AI-generated drug entered clinical trials[11] in mid-2023; developed by a Hong Kong-based biotech startup and a mix of factors, including improved efficiency and reduced human error, AI looks set to transform clinical research and drug development.[12] A noteworthy point is how quickly this development moved from concept to production.

Insurance companies have joined forces with AI, exploring transforming sections of the traditional operating model from underwriting, pricing and claims management to fraud detection, customer service and other repetitive back-office processes.

On the flip side, AI presents a darker picture. There have been a growing number of reported cases of AI misuse, raising questions and concerns regarding the ethics of artificial intelligence. The opacity of "black box" AI applications, the potential for weaponization and cybercrime, and the philosophical challenge of technology outpacing human control are examples of a broader range of risks that need to be considered as part of the argument for introducing tighter AI regulatory controls.

On balance, the disruptors who took the leap of faith with new AI solutions and the incumbents who joined the bandwagon have created an industry with significant market value and the propensity to grow further. Global AI private investment was $91.9 billion in 2022.[13] Yet this growth has come at the cost of ethical practices, disinformation, job insecurity and industrial action,[14] privacy violations, discrimination, accidents, manipulation of political systems and more.

Spotlight

AI is not a new phenomenon

In 1950, Alan Turing[15] proposed a test to measure the intelligence of a machine. In the same year, Claude Shannon[16] was a catalyst for machine-based learning that unlocked the future of artificial intelligence. Scientists, researchers and tech companies have driven rapid progress to deliver transformational AI applications that can perform cognitive functions. The pace and trajectory of AI have accelerated, with rapid growth and evolution witnessed since 2020.

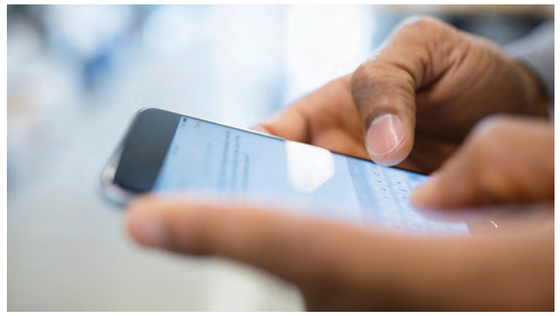
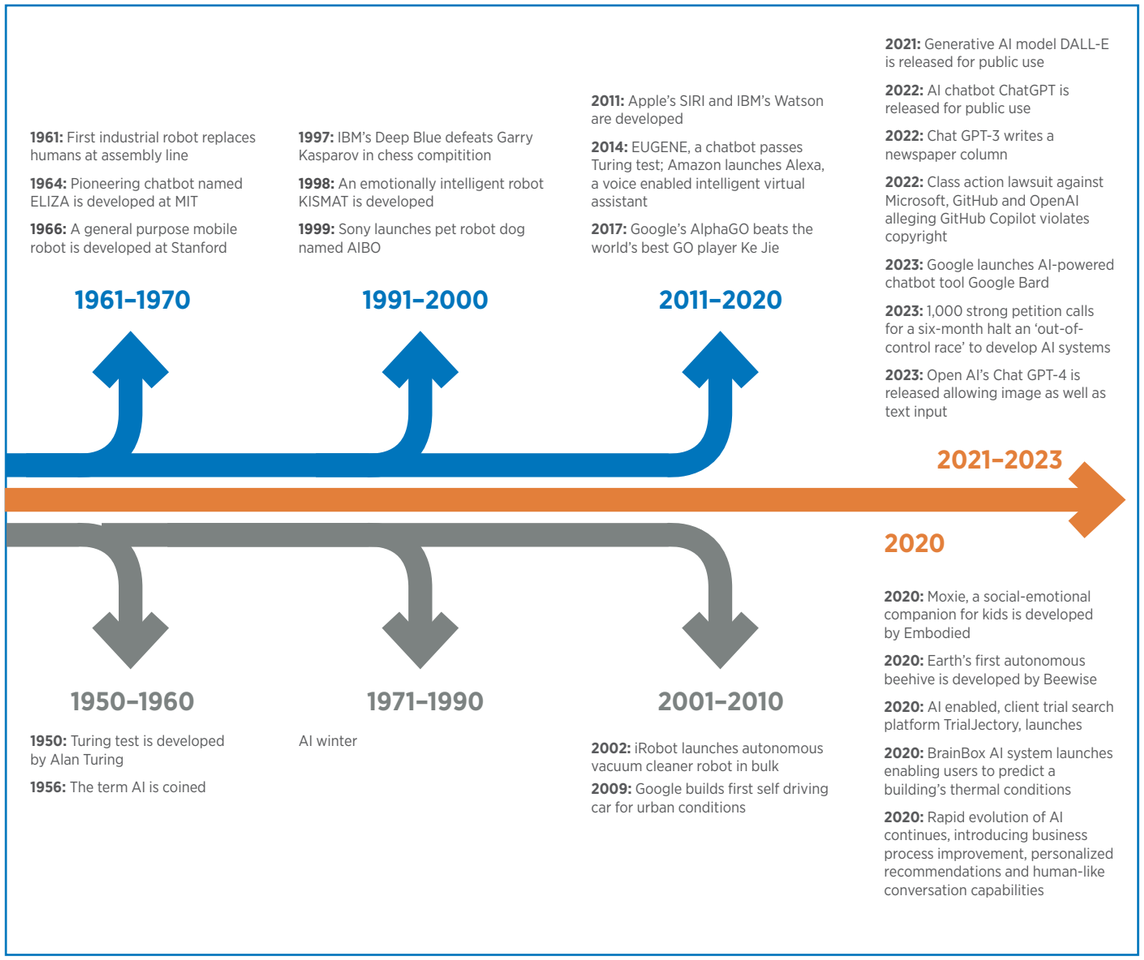


Illustration: The AI timeline[17]

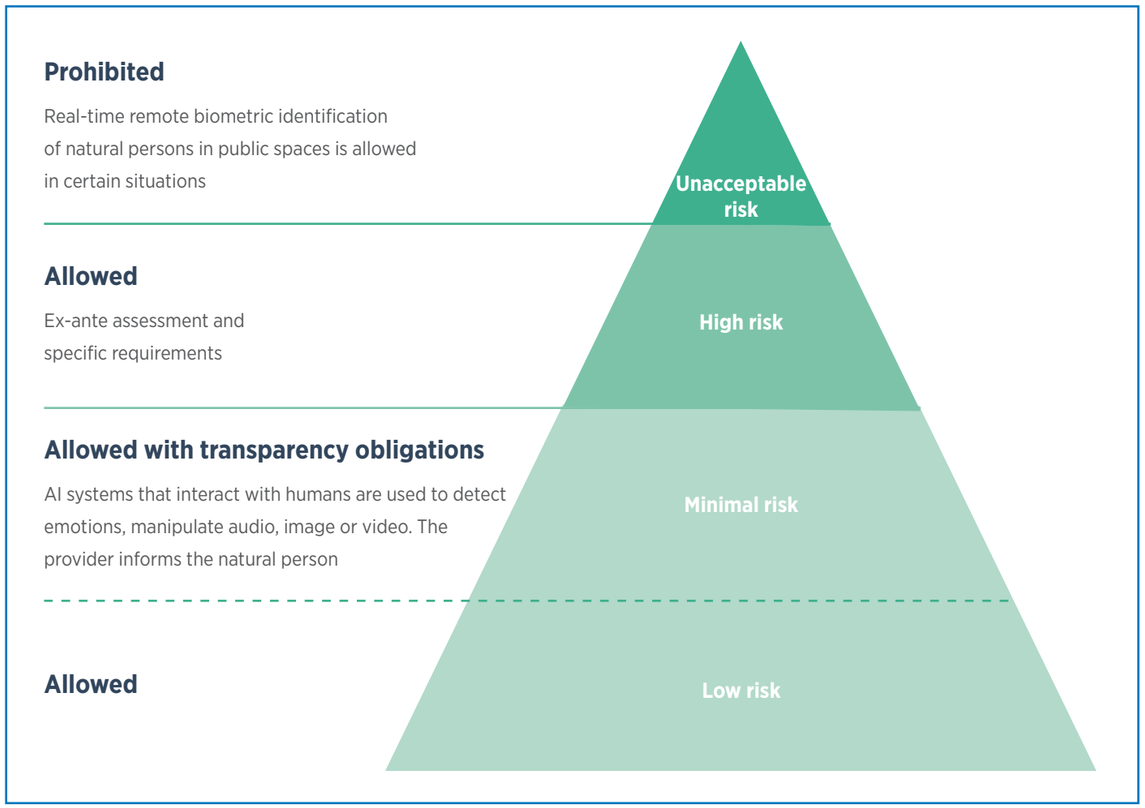


Regulate or not to regulate—is that the question?

Predicting the future AI landscape and how and where regulatory guardrails will enable big tech to grow in a risk-controlled environment is challenging. Amidst growing calls for clarity on AI's potential misuse, understanding complex technology and weighing up the pros and cons of multiple use cases is a significant hurdle for the regulator. Given the rapidly evolving use case, applying a set of regulatory guidelines as a catch-all solution for all AI applications is realistically unlikely to cover everything.

- **Deep-fake technology and other malicious use cases of AI are omnipresent.** In the hands of threat actors, technology has the potential to create job disparity, perpetuate bias, plagiarize and endanger humanity. Against this backdrop of heightened uncertainty and unpredictability, designing strong guidelines is arguably essential.
- **Presenting a balanced argument.** Supporters and champions of AI are celebrating the possibilities of transforming businesses and global crises with robust AI technology. Microsoft co-founder Bill Gates[18] believes AI can reduce global social inequality. In contrast, while being generally optimistic about AI's potential benefits,[19] Nikhil Rathi,[20] head of the Financial Conduct Authority, is calling for banks, investors and insurers to be mindful of the potential cyber fraud, cyber attacks and identity fraud.
- **Technology is firmly embedded into healthcare, transportation and other critical service sectors.** There's no blank sheet of paper for the regulator to work out from. Malfunctions in autonomous cars, integrated healthcare systems and transportation facilities have a series of connected risks, including technical failure, people and process-related error, and financial and regulatory risks. Ongoing experiments and the continuous evolution of AI are expanding the risk landscape of AI.
- **Assessing risk control sensitivity** is one area where the workplace risk and the regulator come together. The following illustration presents a scenario where AI could be regulated within an employment/workplace setting to monitor employee/people movement within a pre-specified space, showing the potential scope of AI application versus the risk tolerance and controls to guide that application, including identifying prohibited activity. This example illustrates the fine line between appropriate and transparent application versus privacy breach and using AI data in a policy testing scenario using ex-ante assessment style experimentation.

The AI regulation risk-based approach (2021)[21]



AI risk controls

Navigating AI risks and exploring business opportunities together without an established regulatory framework is challenging. However, the unethical utilization of AI carries a reputational risk.

Given the rapidly evolving scope of AI risk and its application within operating models, organizations must build a strong knowledge of the technology, associated risks, future trends and its impact on the industry. Continuous learning and scenario testing will help operational teams to develop effective risk mitigation strategies and lay the foundation for ethical use of AI. A responsible and safe AI practice strategy should focus on fairness, transparency, interpretability, explainability, robustness and security.

Regulators will rely on proactive discussion and industry-wide collaboration to develop an AI framework that takes into consideration international perspectives and current thinking. An ecosystem or testing environment is needed where innovation encourages businesses to explore AI applications to solve critical problems. A robust and holistic governance and assurance framework will enable companies to assess risk and build resilience into systems and controls that allow the AI brief to evolve.

The case for AI regulation

The European Union (EU) has issued a comprehensive draft[22] to regulate the development and use of AI. Canada has enacted the Artificial Intelligence and Data Act (AIDA) to regulate companies using AI[23] with a modified risk-based approach. The United Kingdom (UK) has unveiled a new AI rulebook to govern the technology sector, promote innovation and boost public trust in AI. In addition to regional efforts, global organizations are taking the initiative to protect employees and customers from AI malpractice.[24]

The common theme across the various AI regulatory initiatives is the desire to build a socially responsible AI ecosystem with a strong focus on accountability, transparency, privacy, security, fairness and inclusiveness. Creating well-balanced AI laws is viewed in some quarters as essential to guide the application of AI in a coordinated and structured format.[25]

- **Transparency and explainability.** As AI becomes increasingly embedded into the fabric of businesses and households, the apps and systems need to be capable of explaining their' decision-making process in simple terms. Users of AI applications should have access to the data and any process involved in training the data, including the types and frequency of errors and biases. Taking one example into consideration where an AI solution helps an insurer develop a personalized insurance plan and risk recommendations for a prospective customer. In that case, the information provider(s) should have access to information regarding how the AI system makes the recommendations and the scope of data it uses.
- **Supportive and responsible AI guidelines are the need of the hour.** The ambition of creating a responsible AI platform requires a practical foundation. The Organization for Economic Co-operation and Development (OECD)[26] and the National Institute of Standards and Technology (NIST)[27] have developed AI principles and frameworks to guide organizations in researching, developing, and implementing safe and ethical AI. Amidst the concern of AI misuse, research on AI does not need to be compromised, and regulators can focus on providing a regulatory sandbox and other monitored/supported spaces to encourage innovation, research and pilot testing.
- **Deepfakes and disinformation distorting, and weaponizing the political agenda.** Creating a transparent and fair AI regulatory framework will also require keeping it free of any political interest. A powerful technology like AI must not be a tool for the political gain of winning elections, spreading misinformation, controlling citizens and other vested interests.[28] Global consensus and synchronized progress across nations is essential to foster AI innovation without making it difficult for innovators, developers and household consumers. The use of artificially generated content in campaigns[29] presents a range of risks for candidates and voters alike, given the potential for disinformation and bias-informed decision-making.
- **AI is ripe for litigation.** Although there are limited legal precedents to draw on to assess the scope and breadth of potential AI legal challenges, a rising number of malpractice examples offers warning signals on the potential scale of forthcoming legal challenges. The unregulated application of AI and connected technology raises significant questions about the scope of civil liability, data privacy violations, failure to spot compliance issues and human error related to data security breaches.
- **Algorithmic discrimination in decision-making and environmental impacts.** While AI can play a role in automating analysis and decision-making, bias and disinformation carry significant impacts and consequences for business leaders. Rigorous scenario testing to mitigate bias and aligning algorithm testing with regulatory guidelines will be viewed as a positive step by those looking to implement and leverage AI-driven systems.
- **Generative AI developed ransomware,[30]** enabling a relatively unskilled threat actor to instigate phishing and automated cyberattacks with increased complexity and sophistication. Targeting vulnerable supply chain links and software vendors, the lack of traceability, and inconsistent guidelines for use and ethical application form part of the deliberations on the scoping deepfakes of regulation for AI.

The case for guardrails with flexibility

- **Innovation and economic growth—self-governance with guardrails.** Regulatory sandboxes will incentivize innovators to test their innovations in a controlled environment, allowing regulators to better understand the technology and risks attached to the forthcoming innovations. According to a World Bank study, more than 50 countries[31] have developed regulatory sandboxes to experiment with AI technologies in financial services, healthcare and transportation.

What is a regulatory sandbox?

A regulatory sandbox allows businesses to explore and experiment with new and innovative technology under a regulator's supervision.

- **Fueling innovation and leveraging economic growth potential.** The UK is bucking the trend,[32] presenting an alternate playbook for AI offering a middle line between the US blueprint for an AI bill of rights and tighter regulation provided by the AI Act in the EU, arguing that AI can be leveraged as a pro-innovation driver of global economic growth. While the UK proposal has been met with lukewarm interest from other countries, the EU is close to settling its legislative framework, which could deliver a first-mover advantage and political leverage as others seek an effective solution. Striking an effective balance between regulation and innovation is essential to ensure that AI is developed and used responsibly and ethically.

- **Over-regulation, limiting flexibility and adaptability of AI application.** While some parties support broad-scale AI regulation, others hold a different perspective. Given AI's ability to cross borders, regulating AI would be challenging unless an internationally agreed framework is introduced. Add current geopolitical tensions into the mix, and ethical challenges could arise in the face of military or political intelligence threats and economic competitive threats from countries willing to exploit regulatory hurdles to gain competitive advantage from developing AI applications in an unregulated or more loosely regulated jurisdiction.

- **Increased operating costs, reduced competitive edge.** Compliance and introducing enhanced risk controls to manage AI within an operational model will likely increase the bottom line. If recent reporting[33] from a US think tank suggesting the AI Act will cost the European economy 10 billion euros a year in compliance costs by 2025 is to be believed, navigating the need to tighten risk controls versus the investment required to comply is a noteworthy consideration.

- **Lack of coordination between international regulators and jurisdictions, making it difficult for businesses to operate globally.** International operators looking to capitalize on AI innovation at scale may hit the challenge of navigating inconsistent regulation across borders, increasing development and implementation costs while hampering efficient time-to-market gains. In some cases, the scope of the AI application may render it inoperable in some countries due to regulatory constraints.

Closing remarks

The future of AI: Opportunities, challenges and risk

Early application of AI technology offers room for optimism and equally a message of caution. While AI technology has arguably infinite potential to contribute to economic growth and societal transformation, building trust, transparency and productive dialogue between business, industry and regulatory bodies will be integral to a sustainable future for AI. As the pace of generative AI evolution outstrips the policymaker and regulator, the question is whether regulation can realistically implement risk controls outside of commercial application, and where the legislative process takes over.

Generative AI shows every potential of becoming a global boom economy, with Goldman Sachs Research predicting it will contribute to a 7% increase in global GDP by 2030[34] (US$7 trillion equivalent). However, the full scope of AI applications to automate processes, drive increased productivity and deepen human-technology convergence remains uncertain.

AI is predicted to disrupt industries and replace jobs across the legal, financial services, education, healthcare and technology sectors, triggering growing concerns about the future. Meanwhile, the potential for weaponization and warfare has heightened international security concerns, and the regulator's role has become an evolving and increasingly complex brief.

On balance, AI offers significant value and presents strategic risk. Organizations exploring options to automate or innovate aspects of their operation require a deeper understanding of artificial intelligence's scope, trajectory and anticipated evolution. Risk preparedness, robust compliance measures and the space to test and learn will be key to harnessing the fullest potential of AI over the next decade and beyond.

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