IMC
Chamber of Commerce and Industry

NAVIGATING ETHICAL CHALLENGES in Generative AI

A Business Perspective

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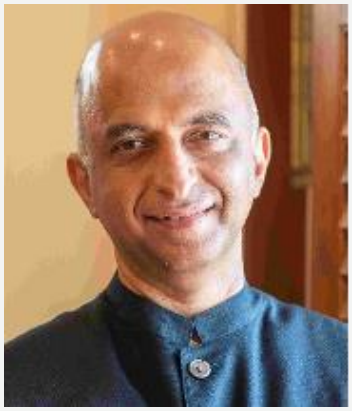
FOREWORD



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Artificial Intelligence : The New Paradigm

Technology is a part and parcel of our lives. Over the centuries, there are waves of technologies that come and change our lives in a manner that we could not have imagined or envisaged before that technology envelopes us. Whether that be the genome, the mobile phone, the internet, computers, the telephone, the television, the airplane, the automobile, the printing press, electricity, and I could keep going back in time.

Artificial intelligence that was once a part of dreams is now enveloping us in a new wave. This field has vast potential benefits and associated perils. Artificial Intelligence is now becoming part of every business conversation and promises to revolutionise the world of business like nothing before. The speed of change is also blistering.

Web 1.0 was about the power of information, easy access to information using the World Wide Web. Web 2.0 was about the power of networking, everyone getting connected to everyone else using social channels. Web 3.0 is going to be about the power of intelligence. Intelligence available at our fingertips, in everything we do and in every device that we use.

New opportunities create new challenges. And the growth of Artificial Intelligence is no different. Artificial Intelligence (AI)I in general and Generative AI in particular bring forth ethical questions that Industry, Government and Academia need to work together to address. This white paper is a thought starter in that direction.

FOREWORD

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Ethics and Artificial Intelligence

One of the big questions in everyone's mind is around safety and ethics of AI systems.

How does one ensure that an AI as a system is not biased in favour of a specific gender or race or ethnicity, because it has been trained on a certain data set? How can one be sure that the AI platform is not using copyrighted data and being fully transparent in all its disclosures? Also, how to ensure safety of an AI system so that it does not go rogue?

All these, and many more such questions beget answers, and proper internal and external governance. Governments world over have already started addressing this question and putting in place checks and balances to ensure correct direction for growth of future AI systems.

This white paper, explores the various challenges posed by Generative AI and also how other countries are trying to address this problem. Hopefully, this white paper will form a basis for a fruitful discussion in the public domain on how best can we evolve a good regulatory framework for AI.

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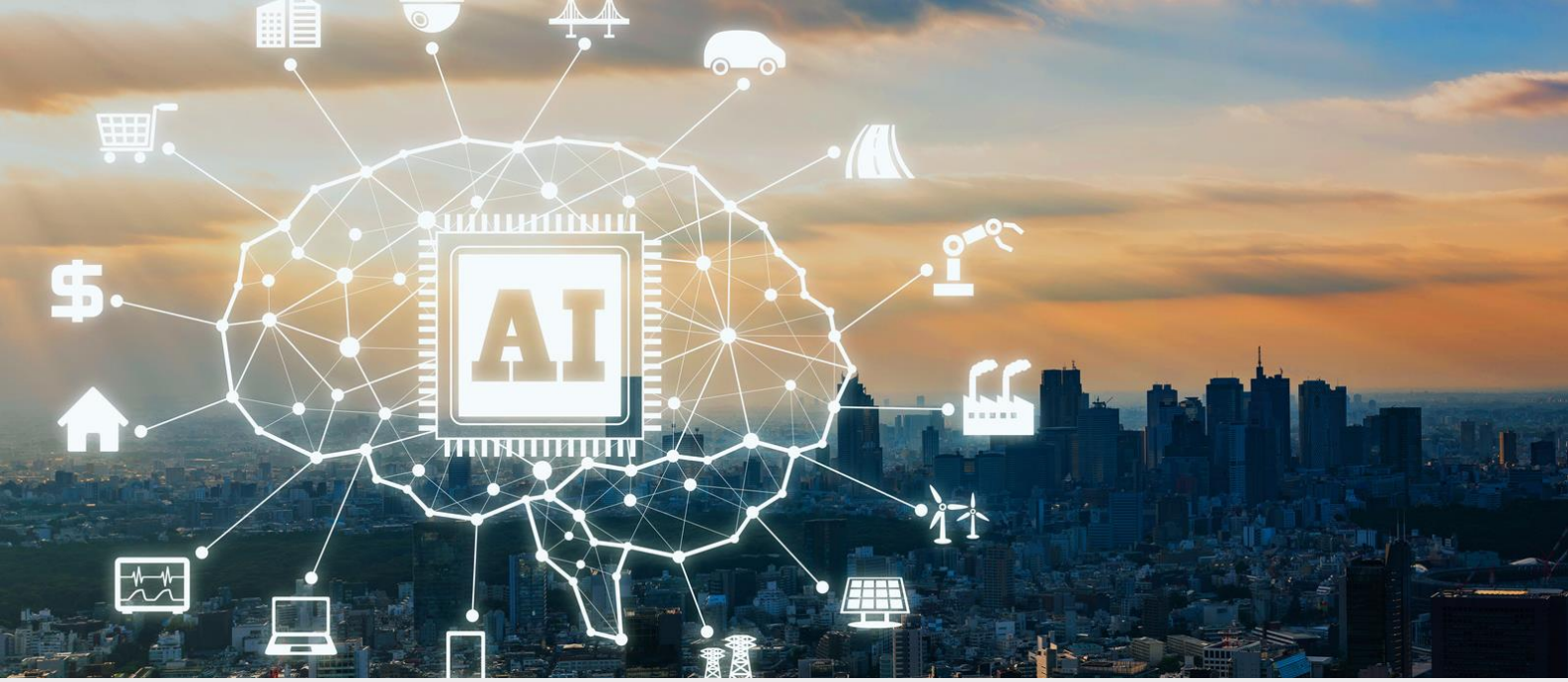
EXECUTIVE SUMMARY

Generative Artificial Intelligence or Generative AI (Gen AI) has remarkably democratised AI, thereby revolutionising various industries. With multiple emerging use cases for AI that are integrated into processes, services, products, decision-making and transactions across industry verticals, ethical concerns surrounding its use have become increasingly prominent. The key principles of ethics in focus include Transparency, Impartiality, Accountability, Reliability, Security, and Privacy. At present, Governments globally deliberate to put together regulatory policies that pave the way for responsible and ethical AI development.

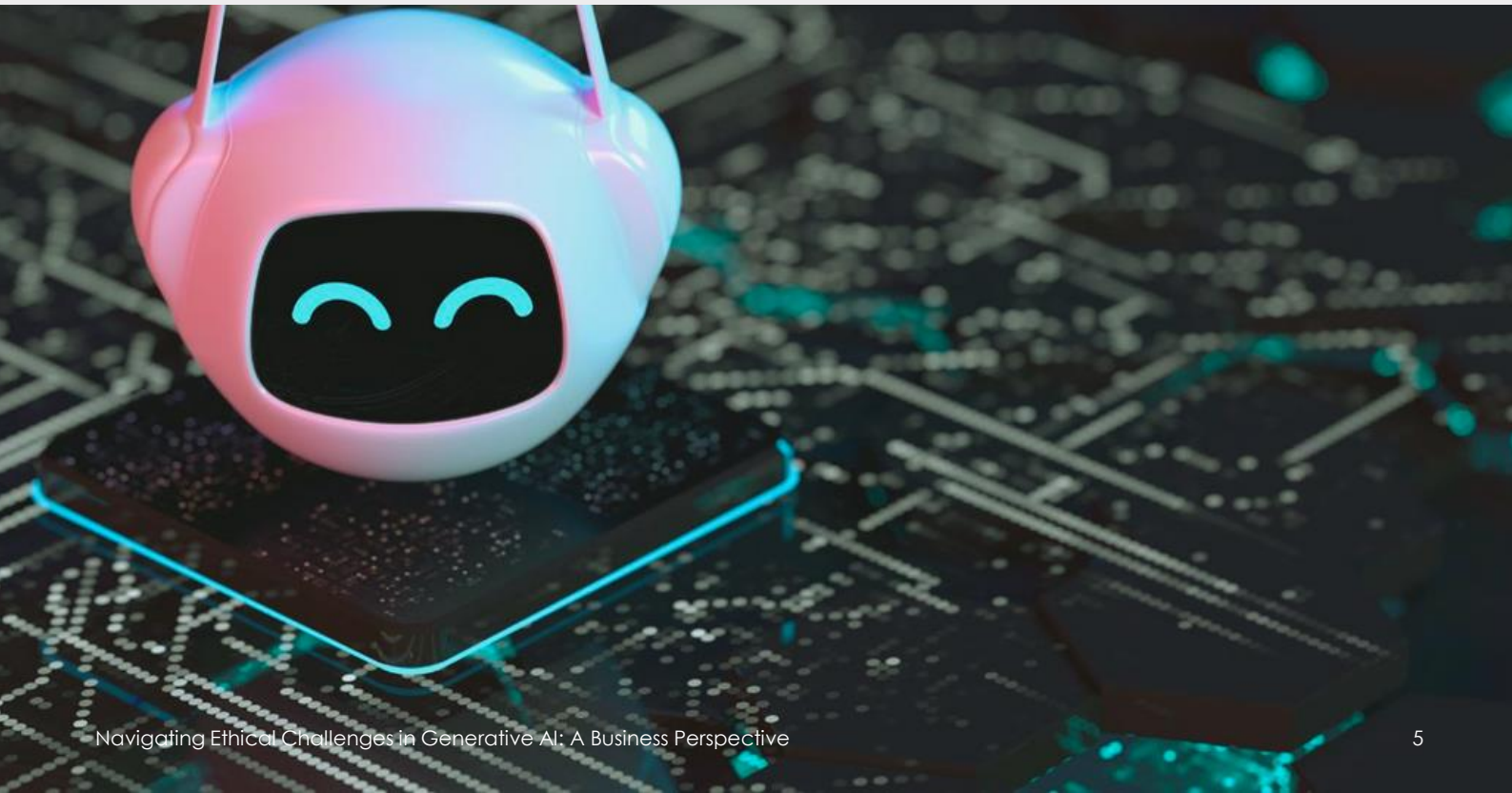
In this paper, we aim to present a perspective on the ever-changing AI landscape and provide suggestions for a robust regulatory framework.



Introduction

In the past few months, Generative AI has propelled technology innovation to new heights, reshaping industries and economies. However, this transformation has not come without its ethical challenges: a concerted demand for the deployment of "Responsible AI" to ensure the protection of users from emerging threat vectors. This transformation signifies a departure from the past when implementing AI technologies was often viewed through the narrow lens of Return on Investment (ROI). The business landscape has evolved, and ethical considerations now hold equal importance alongside financial gains.

Responsible AI encompasses principles such as transparency, fairness, accountability, and ethics in AI development and deployment. Businesses are increasingly recognising that embracing these principles is not only ethically sound but also integral to building trust with consumers and stakeholders. Neglecting ethical concerns can result in reputational damage and legal consequences. It is essential that the threat challenges are understood and acknowledged, and strategies implemented to mitigate the risks.

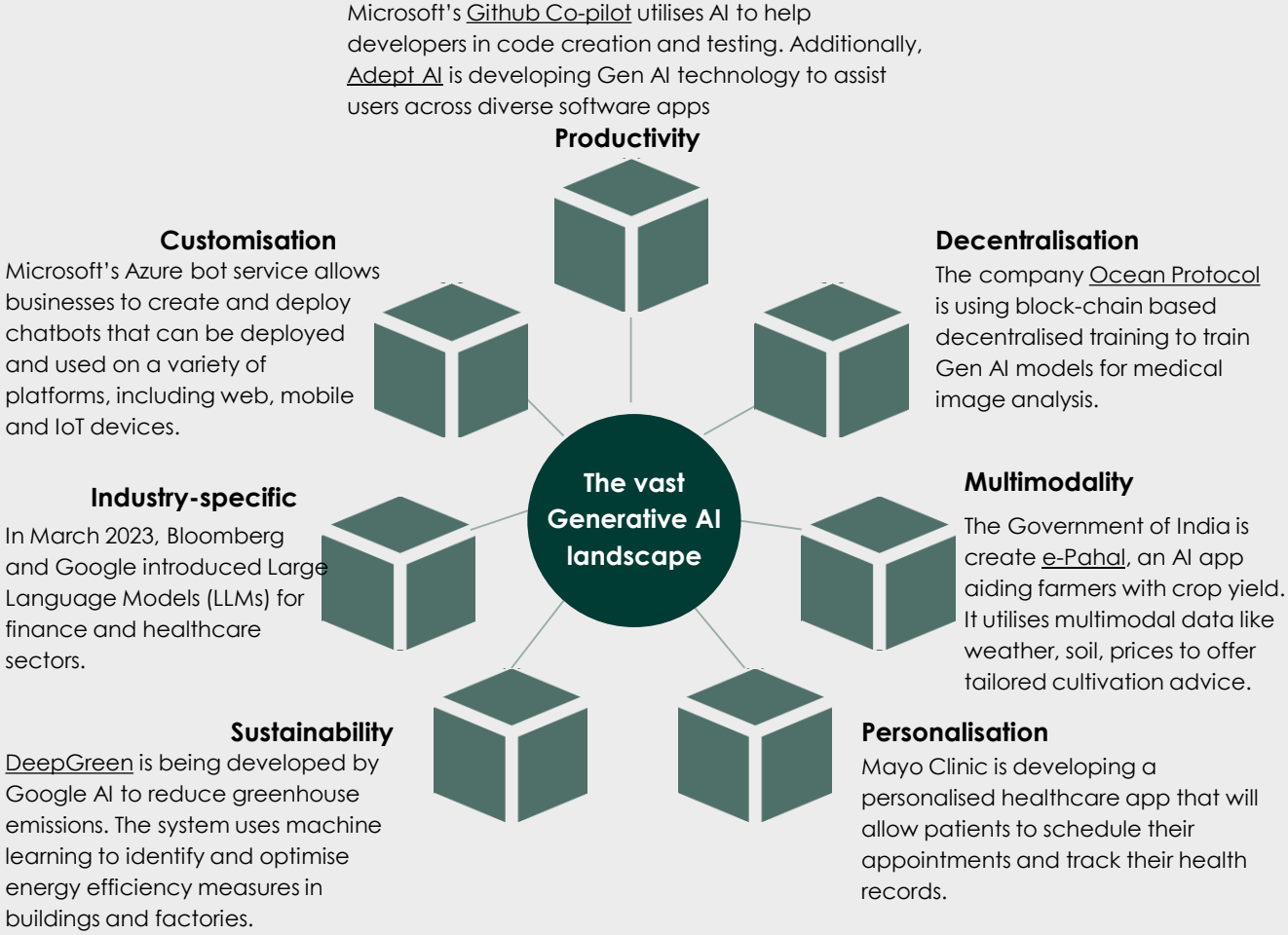


What is Generative AI and what are the ethical challenges it poses?

Generative AI has the remarkable ability to produce artefacts in various forms, such as text, images, and multimedia, through the utilisation of generative models. These Generative models acquire a profound understanding of the patterns and structures embedded within their input training data. Subsequently, they leverage this knowledge to generate novel data that shares striking similarities with the original dataset. This capability is possible through the application of Machine Learning (ML), which empowers practitioners to cultivate artificial intelligence models capable of autonomous refining and adapting to data patterns without human intervention.

The overwhelming volume of complex data on the internet cloud today has ushered in a new era of machine learning that will revolutionise the approach to generating insights. By harnessing the available data and information, ML can automate the generation of valuable insights and facilitate transformative advancements across diverse domains.
The emergence of generative AI has triggered rapid changes and new advancements in the AI landscape. Below is a representation of how the Generative AI landscape has evolved and it is being used across various industries.

(a) The vast Gen AI Landscape



(b) Businesses are swiftly incorporating generative AI into multiple aspects of their operations.

Use Cases	Description
Product Development	• L'Oréal is using generative AI to develop new cosmetics products. The company has created an AI-powered platform that can generate new formulas for lipsticks, foundations, and other products. • Bosch is using generative AI to develop new automotive components. The company has created an AI-powered platform that can generate new designs for car parts, such as engines and transmissions.
Content Generation	• Disney is using Generative AI to create realistic videos, such as movies, TV shows, and commercials. • Spotify is using Generative AI to create personalised playlists and filmmakers to create more immersive soundscapes.
Content Moderation	• In 2017, Google's subsidiary, Jigsaw, launched Conversation AI, a collaborative research project designed to detect toxic comments online.
Financial Forecasting	• Goldman Sachs is using Generative AI to forecast financial markets and predict future trends helping make more informed investment decisions.
Customer Service	• Amazon is using Generative AI to create chatbots that can answer customer questions and resolve issues to provide better customer service.
Education	• Pearson is using Generative AI to create personalised learning experiences and to provide feedback to students to improve education outcomes.
Drug Discovery	• Pfizer is using Generative AI to design new drugs to predict their effectiveness and develop new treatments for diseases.

(c) Risks & Concerns Associated with Generative AI

Use Cases	Description
Ethical AI and data privacy concerns	• In March 2023, more than 1,100 business leaders, including Elon Musk and Steve Wozniak, signed a petition to halt the development of AI systems more powerful than GPT-4 for six months to address rising concerns around the ethical use of AI. • In March 2023, over seven countries, including Russia, China, Italy, North Korea, Iran, Cuba, and Syria, banned ChatGPT due to concerns over data privacy and the spread of misinformation. Similarly, companies such as JPMorgan Chase, Amazon, and Samsung have banned ChatGPT for business use.
IP copyright concerns	• In January 2023, Getty Images sued Stability AI, an open-source generative AI company, for using its 12 million images without permission to train the Stable Diffusion AI image-generation system.

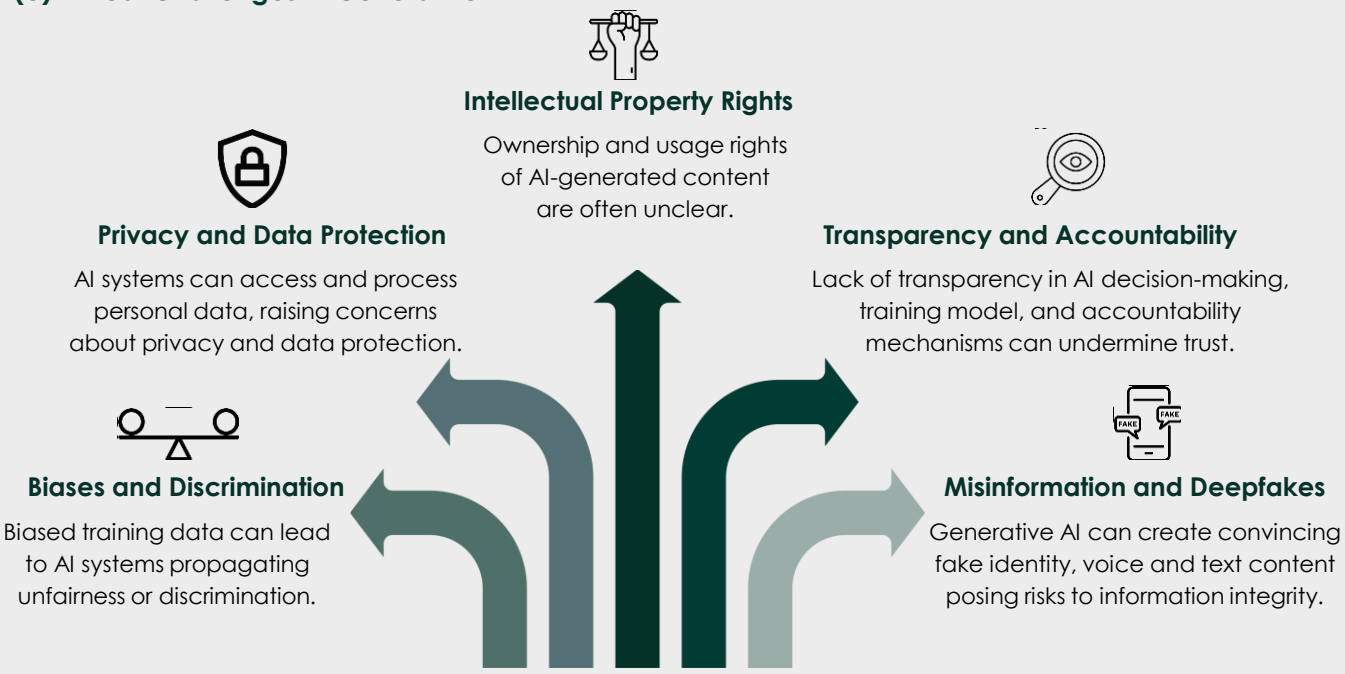
(d) Advancing Ethical and Responsible AI: Industry & Government Initiatives

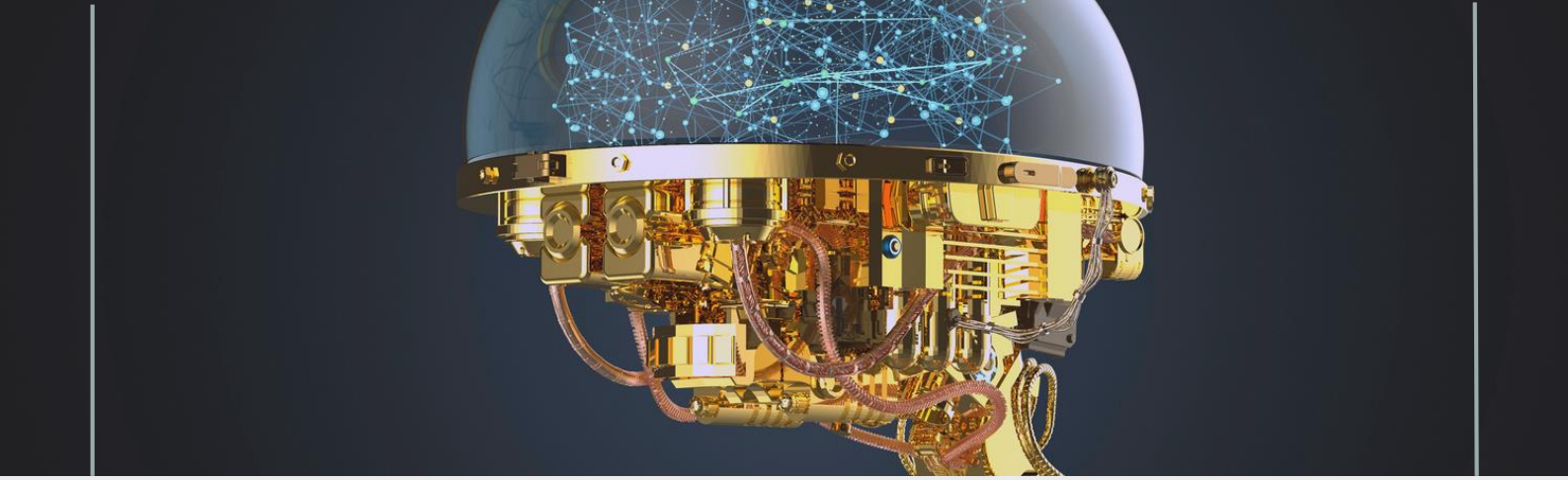
Use Cases	Description
AI Governance	• In Jan 2023, the Singaporean government introduced AI Verify, a governance testing framework and toolkit, to ensure that AI systems meet their declared performance benchmarks. • Credo AI introduced AI governance and monitoring SaaS in April 2022, with built-in support for industry-specific (insurance), domain-specific (human resources), and technology-specific (generative AI) models.
Ethical AI	• In March 2022, the World Economic Forum issued ethical AI procurement guidelines, offering businesses a framework to follow when choosing and integrating AI solutions. • In February 2023, Google invested over $300 million in Anthropic, an AI research firm specialising in building generative AI applications with a strong emphasis on AI safety and ethics.
Content Moderation	• In December 2022, the UK government unveiled policies within the Online Safety Bill, which involve actively monitoring AI platforms like ChatGPT and Bard for content generated and shared online. • In June 2022, HPE injected over $20 million into TruEra, a tech firm delivering a suite of AI quality management tools, emphasising model stability and explainability.

The guiding principles for developing and deploying AI so that they adhere to ethical principles of respect for human autonomy, prevention of harm, fairness and explicability.

There are five key principles of AI ethics, which are: Transparency, Impartiality, Accountability, Reliability, Security, and Privacy.

(e) Ethical Challenges in Generative AI





What are the Emerging Threat Vectors that need to be effectively managed for the deployment of Ethical and Responsible AI?

Data Protection

As AI systems generate and process vast amounts of data, businesses must ensure the privacy and security of this data. Stringent data protection regulations, such as GDPR in Europe, demand compliance to avoid substantial fines.

Content Moderation

Integral in preserving the overall integrity of AI-generated content. It is of paramount interest that AI-generated content adheres to ethical and legal standards. This involves: Threat Management, Maintaining Profanity Checks and Ensuring Compliance

Copyright issues

AI-generated content blurs the lines of ownership and raises questions about intellectual property rights. Ensuring proper attribution and compliance with copyright laws is essential to avoid legal disputes.

Cybersecurity

Adversarial attacks can manipulate AI models, leading to undesirable outcomes. Businesses must invest in robust cybersecurity measures to protect AI systems from malicious actors.

(f) The key issues that need to be addressed for AI-generated Content are,

Threat Vectors	Description
Data Protection	• Given the substantial volumes of data that AI systems generate and handle, businesses must prioritise the safeguarding of data privacy and security. Adherence to rigorous data protection regulations, exemplified by GDPR in Europe, is imperative to mitigate the risk of substantial fines and regulatory consequences.
Copyright Issues	• Copyright concerns pose yet another pivotal challenge in the context of AI-generated content. The content created by AI removed the traditional boundaries of ownership, giving rise to complex inquiries regarding intellectual property rights. It becomes imperative to guarantee appropriate attribution and adherence to copyright legislation to proactively prevent potential legal disputes.

Threat Vectors	Description
	• Watermarking of AI generated content is one of the areas that can be looked at as a means of segregation between real and synthetic data. However, other means such as provenance disclosure and metadata, algorithm audits, and in some cases ensuring the consent of users before their data is used for training models should also be deliberated by businesses, policymakers, and stakeholders to avoid any compromises. • Another area that needs attention is using copyrighted input to generate AI output, and then using that output as input for another AI system. This doesn't magically transform the subsequent output into something exempt from copyright. It remains connected to the copyrighted input, and the original copyright holder's rights may still apply to some extent. This highlights the need to be cautious and considerate of copyright issues when dealing with AI-generated content derived from copyrighted sources.
Cybersecurity	• Cybersecurity threats posed by adversarial attacks can manipulate AI models, yielding undesirable outcomes. Businesses must prioritise substantial cybersecurity investments to shield their AI systems from malicious actors and mitigate the escalating risks in the landscape of Generative AI.
Content Moderation	• Content moderation has become integral in preserving the overall integrity of AI-generated content. It is of paramount interest that the AI-generated content adheres to ethical and legal standards. This involves: • Threat Management: Businesses must identify and guard against prompt injection attacks, jailbreak attempts, and other forms of malicious manipulation of content. • Maintaining Profanity Checks: Content moderation extends to maintaining profanity checks to prevent the dissemination of offensive or harmful content. Businesses need to strike a balance between freedom of expression and responsible content curation. • Ensuring Compliance: AI-generated content must align with internal policies and external regulations. Businesses need robust content moderation mechanisms to ensure compliance with industry standards and legal requirements.

The Need for Regulating Generative AI

Globally, countries and corporations have started recognising the need for regulating Generative AI,

- To protect user rights & privacy
- To ensure fairness & non-discrimination
- To safeguard intellectual property
- To counter misinformation and deepfakes
- To foster trust in AI technologies.

Worldwide, countries are actively working towards putting in place regulatory frameworks and policies, with active stakeholder involvement, to catalyse the rollout of AI solutions.

(g) Initiatives pursued by North America, Europe, and Asia in Regulating Generative AI

 **USA**	• Federal Agencies like the National Institute of Standards and Technology (NIST), the Federal Trade Commission (FTC), the Food and Drug Administration (FDA) and Department of Defence (DoD) are contributing to development of guidelines for ethical AI development • The US government released a blueprint for an AI Bill of Rights. Legislative proposals like AI in Government Act and Algorithmic Accountability Act have been enacted. The US has also signed the most expansive AI executive order to harness the potential and tackle the risks associated with AI.
 **Europe**	• GDPR principles are being applied to AI systems, focusing on data protection and transparency. • European AI Act being framed on priority to make sure that AI systems used in the EU are safe, transparent, traceable, non-discriminatory & environmentally friendly.
 **United Kingdom**	• The UK has come out with a white paper which sets out the government's proposals for implementing a proportionate, future-proof and pro-innovation framework for regulating AI. • The UK Science and Technology Framework sets out the government's strategic vision to make the UK a science and technology superpower by 2030.
 **Singapore**	• Emphasis on ethical AI practices, AI Ethics and Governance Initiatives.
 **South Korea**	• Have set up AI Ethics Committee and launched AI Transparency Initiative.
 **Thailand**	• Updating copyright laws and focusing on ethical considerations.
 **Brazil**	• Presented a draft on the regulation of AI.
 **China**	• Introduced ethical guidelines in 2021, and framed 2 specific AI-related laws in 2022.
 **Japan**	• The legal framework aims at countering social problems with innovation.
 **India**	• Setting up a supervisory authority on AI.
 **Canada**	• Has framed Artificial Intelligence and Data Act to regulate international and interprovincial trade in AI systems.

(h) Summary of the initiatives in North America, Europe and Asia:

Country	AI-related Laws and Initiatives
USA	• The Department of Defence, the National Institute of Standards and Technology (NIST), the Federal Trade Commission (FTC), and the Food and Drug Administration (FDA), are actively pursuing the development of ethical AI guidelines. Legislative measures such as the AI in Government Act and the Algorithmic Accountability Act have already been passed, along with the blueprint for an AI Bill of Rights to further emphasise ethical AI practices. The US has also signed the most expansive AI executive order to harness the potential and tackle the risks associated with AI.
Europe	• GDPR principles are being applied to AI systems, focusing on data protection and transparency. • The European AI Act is being framed on priority to make sure that AI systems used in the EU are safe, transparent, traceable, non-discriminatory and environmentally friendly. AI systems should be overseen by people, rather than by automation, to prevent harmful outcomes. It is intended to be a comprehensive regulation addressing high-risk AI systems, data usage, and transparency.
United Kingdom	• The UK has come out with a white paper which sets out the government's proposals for implementing a proportionate, future-proof and pro-innovation framework for regulating AI. The UK Science and Technology Framework sets out the government's strategic vision to make the UK a science and technology superpower by 2030.
Singapore	• Singapore emphasises ethical AI practices, AI Ethics and Governance Initiatives.
South Korea	• South Korea has introduced the AI Ethics Committee and is leading the AI Transparency Initiative.
Thailand	• Thailand is updating their copyright laws while focusing on ethical considerations.
Brazil	• Brazil has presented a draft on the regulation of AI which is being considered as the starting point to craft the new AI legislation.
China	• China introduced the Next Generation Artificial Intelligence Development Plan in 2017 followed by the ethical AI guidelines in 2021 and subsequently two specific AI-related laws were framed in 2022. However, to combat Deepfakes, the Algorithm Provisions are still in the draft phase as of March 2023.
Japan	• In Japan, the legal framework around AI is centred around "Society 5.0", which aims at countering social problems with innovation. • In 2019, the Social Principles of Human-Centric AI was adopted by the Japanese government. The government enforces seven social principles for AI to adhere around (1) human-centricity, (2) education/literacy, (3) data protection, (4) ensuring safety, (5) fair competition, (6) fairness, accountability and transparency, and (7) innovation. Later R&D and utilisation guidelines were included for AI developers and companies.

Country	AI-related Laws and Initiatives
Japan	• The government of Japan in 2021 has also published governance guidelines for implementation of AI principles that cater to developers, service providers and companies. • However, none of these guidelines are legally binding.
India	• India is contemplating setting up a supervisory authority on AI to establish and administer principles for responsible AI and provide guidelines and standards for various AI sectors.
Canada	• Artificial Intelligence and Data Act (AIDA's) purpose is to regulate international and interprovincial trade in AI systems and reduce the risks associated with high-performance AI systems, such as harm and biased outcomes. • The provisions for public reporting grant the Minister authority to request the disclosure of AI system-related records.

European Union's Framework for Regulation of Generative AI Outputs: An Insight

Considering the rapid expansion of Generative Artificial Intelligence (AI) and the associated ethical dilemmas, the European Union (EU) has crafted an extensive set of policies and protocols aimed at overseeing Generative AI outputs. This framework underscores the EU's dedication to promoting the responsible, ethical, and transparent development and deployment of AI technologies. The key aspects of the EU's regulatory framework are:

(i) Features of EU regulations for regulating AI usage:

Scope and Applicability	• The framework applies to all AI systems that generate content, including text, images, and multimedia, irrespective of their application domains.
Risk-Based Approach	• The EU employs a risk-based approach, categorising AI systems into different risk classes based on their potential societal impact, with higher-risk systems subject to more stringent regulation.
Transparency and Explainability	• AI developers are required to provide clear explanations of how their systems generate content, enabling users to understand the AI's decision-making processes.
Data Privacy and Protection	• The framework mandates adherence to strict data privacy and protection regulations, ensuring that AI systems handle personal and sensitive data with utmost care and compliance with GDPR principles.
Ethical Guidelines	• Ethical considerations are integrated into the regulatory framework, emphasising fairness, non-discrimination, and accountability in AI content generation.
Algorithmic Accountability	• Developers are obligated to monitor and evaluate their AI systems continually, addressing any biases or discriminatory outcomes that may arise during content generation.
Content Moderation	• AI-generated content is subject to stringent content moderation guidelines to prevent the dissemination of harmful, offensive, or illegal content.
Copyright and Intellectual Property	• The framework includes provisions for the proper attribution of AI-generated content, protecting intellectual property rights and addressing copyright issues.

Auditing and Certification	• Independent auditing and certification processes are established to assess AI system compliance with regulatory standards and ethical guidelines.
Emergency Shutdown Mechanisms	• Higher-risk AI systems must incorporate emergency shutdown mechanisms to prevent the dissemination of harmful or inappropriate content.
User Education and Awareness	• The EU promotes user education and awareness regarding AI-generated content, enabling individuals to make informed decisions when interacting with such content.
Cross-Border Collaboration	• The framework encourages collaboration and information exchange among EU member states to ensure consistent enforcement of regulations.
Enforcement and Penalties	• Non-compliance with the regulatory framework may result in significant fines and legal consequences for AI developers and organisations.
Adaptive and Evolving	• The framework is designed to evolve with technological advancements and emerging ethical challenges, ensuring that it remains effective and relevant over time.
Global Impact	• The European Union (EU) seeks to establish a worldwide benchmark for the conscientious utilisation of Generative AI, exerting influence over global dialogues and partnerships related to AI ethics and regulatory matters.

The EU's regulatory framework for Generative AI marks a momentous stride in building a conscientious and ethical AI environment within the region. It confronts a broad spectrum of ethical and pragmatic issues linked to AI-generated content, with a focus on transparency, accountability, and safeguarding user interests. As AI evolution continues, this framework is expected to hold a pivotal role in shaping the global landscape of AI ethics and governance.

The AI Act employs a four-tier model, employing a risk-based approach that classifies AI systems according to the risks they pose to users and potential third parties. The greater the risks involved, the more stringent the regulatory demands placed on the AI system. European companies operating in this context are subject to various existing and forthcoming EU legislative measures, with the EU AI Act being a particularly prominent one.

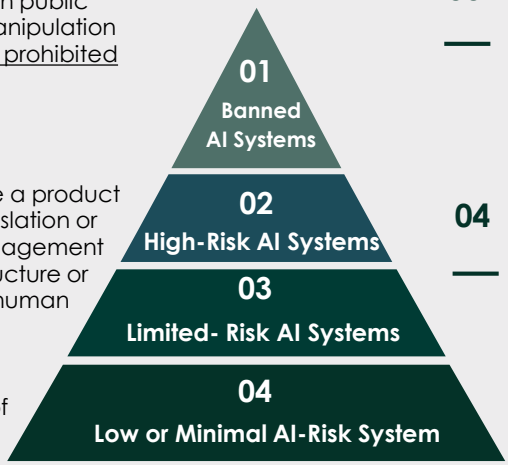
(j) Four-Tier Model of the European AI Act

01

- AI System for social scoring, real time biometric identification systems in public spaces, or harmful behaviour manipulation
- These AI systems are completely prohibited under Article 5 of the AI Act

02

- AI systems that are used in or are a product subject to EU product safety legislation or listed in Annex III (such as in management and operation of critical infrastructure or in the field of employment and human resource management)
- These are subject to extensive regulation and far-reaching obligations under Article 6 – 51 of AI Act.



03

- This category includes systems with which humans can interact directly (e.g., a chatbot)
- These systems are subject to the transparency obligation under Article 52 of the AI Act

04

- Example includes AI in computer games or AI-based spam filters
- These AI systems do not fall within the scope of regulation and therefore not subject to any restriction

AI Regulation Landscape and Risk Management Framework in the US

The United States-based organisations encounter a continually shifting AI regulatory environment. Federal bodies such as NIST, FTC, FDA, and DoD are actively involved in shaping comprehensive regulations. Concurrently, as federal regulations evolve, some states are contemplating the expansion of privacy laws to encompass AI systems that handle specific categories of personal data. Additionally, there are a few sector-specific initiatives that provide insights into the U.S. federal government's perspective on AI and its potential future governance.

On January 26, 2023, NIST, an entity within the U.S. Department of Commerce, issued its Artificial Intelligence Risk Management Framework 1.0 (the RMF).

This framework serves as an optional, industry-agnostic, and versatile guide intended for technology companies involved in designing, developing, deploying, or utilising AI systems to effectively mitigate the various risks associated with AI. Beyond risk mitigation, the RMF aims to foster the development and use of AI systems that are trustworthy and responsible.

In its role as the federal AI standards coordinator, NIST collaborates with both domestic and international government and industry leaders to formulate technical standards aimed at advancing the integration of AI. Additionally, NIST has crafted an elective risk management framework for dependable AI systems, known as the RMF.

While the RMF is not mandatory, it offers valuable insights into the factors the federal government is likely to consider in potential AI regulation, and over time, it may potentially become an industry standard.

A key insight emphasised by the RMF is that individuals often assume that AI systems are impartial and highly efficient. This presumption can unintentionally lead to harm to individuals, communities, organisations, or even broader ecosystems, including the environment. Elevating the trustworthiness of an AI system can serve as a safeguard against such risks.

(k) The RMF delineates trustworthiness through seven specific attributes:

Safe	• Delivering monitoring, safeguards, or alternative measures within the AI system to preclude physical or psychological harm, or the jeopardy of human life, well-being, or assets.
Secure & Resilient	• Using plans or rules to prevent, defend against, or react to attacks on the AI system and to withstand bad situations.
Explainable & Interpretable	• Grasping and correctly understanding how an AI system works and what it produces in its proper context.
Privacy Enhanced	• Keeping people in charge of their own decisions and protecting their privacy, secrets, and ability to control things.
Fair & Unbiased	• Successfully handle harmful bias by promoting fairness and equal treatment while also addressing systemic, computational, statistical, and human thinking biases.
Accountable & Transparent	• Providing people with information about the AI system when they use it, and having rules and ways of doing things in place to make sure it doesn't cause problems.
Valid & Reliable	• Showing through continuous testing or checking that the AI system works as it should.

A group of U.S. lawmakers have proposed a plan for regulating AI. This plan focuses on four main rules:

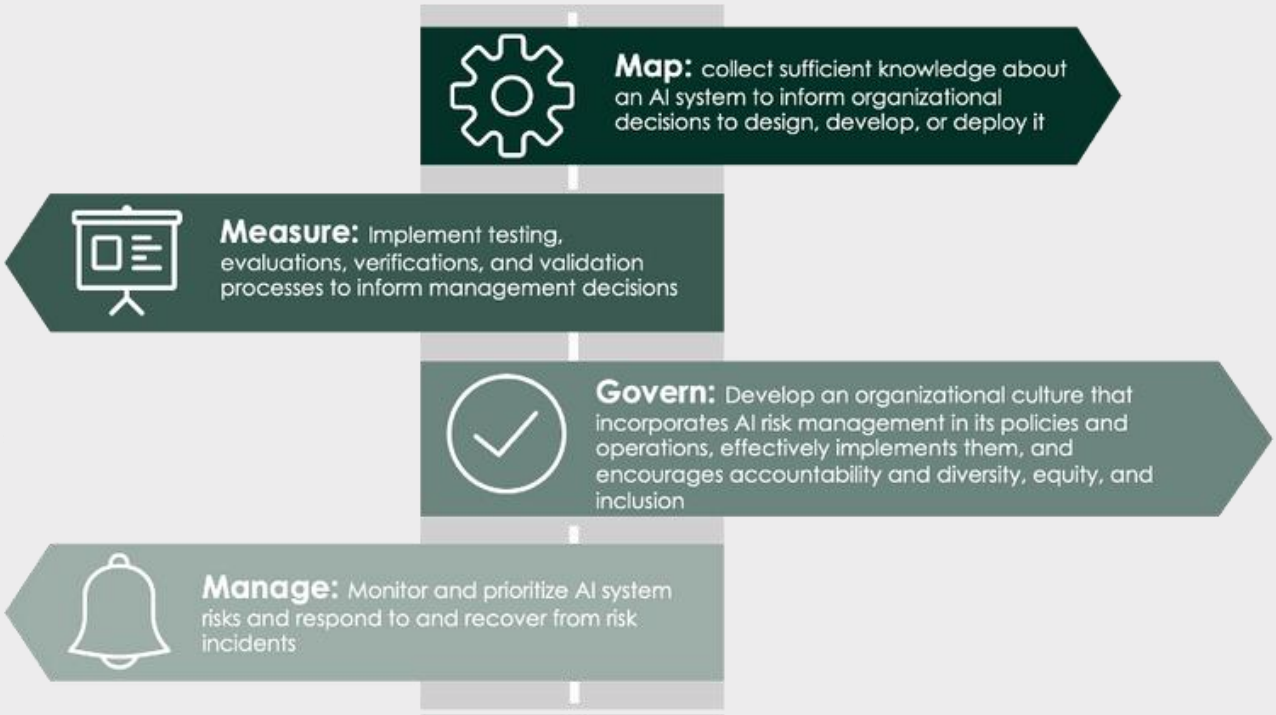
- Knowing who trained the AI and who it's meant for.
- Revealing where the AI got its information.
- Explaining how the AI comes up with its answers.
- Having clear and strong rules about what the AI should and shouldn't do, ethically.

The NIST RMF also points out that AI systems have special risks, like:

- If AI companies use personal data, they might have to follow state privacy laws or face extra privacy issues because AI can gather a lot of data.
- The data used to train AI might be protected by copyright.
- Problems with data quality, like data that's wrong or missing, can make AI less reliable.
- People don't agree on good ways to measure and check how well AI works.

The RMF describes four important tasks to use at different stages of the AI system's life to handle risk. It then divides these main tasks into smaller sub-tasks. The RMF's Playbook offers the following steps that companies can take to put these main tasks into action:

(I) Stages in Risk Management Framework (RMF)

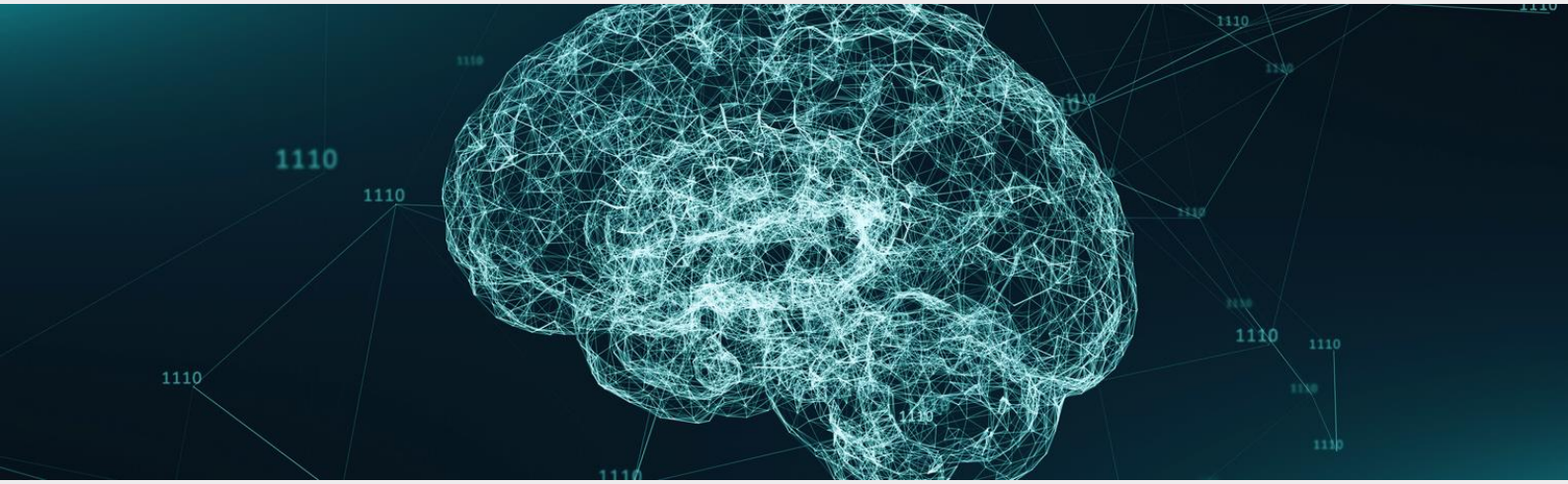


In addition to NIST releasing the RMF, there have been recent recommendations from other parts of the U.S. federal government. For instance, the FTC has indicated that it may increase its oversight of companies using AI. The FTC has recently published several blog posts cautioning businesses against engaging in unfair or deceptive practices, such as "Keeping your AI claims honest" and "AI deception, including chatbots, Deepfakes, and voice clones, up for sale." Similarly, the FDA has announced its plans to regulate many AI-driven clinical decision-support tools in the healthcare sector.

It's evident that various U.S. government agencies are working in tandem and closely coordinating their efforts to establish a strong regulatory framework.

The recent US court ruling that only human-created content can be copyrighted has a number of implications, both for the United States and for other countries around the world. The implications can be in the following areas,

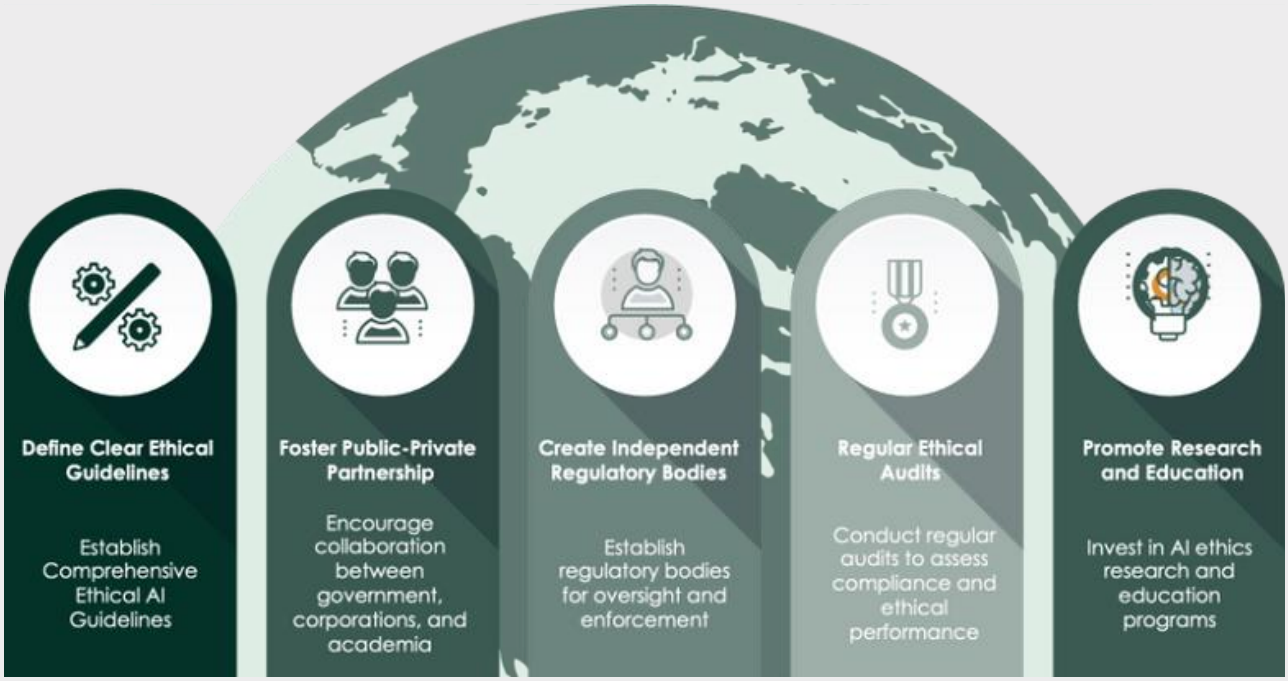
- Lesser incentive for innovation: It may lead to lesser incentive for companies to invest in developing and deploying AI powered creative applications. This could lead to slow down innovation in the field of artificial intelligence (AI).
- Content ownership & authorship: It may further complicate data piracy as creator may find it difficulty in dealing with content ownership.
- International Collaboration: Nations globally, may align to frame a global standard on AI generated content.
- Industry implications: For certain industries where AI is being use for creative content creation and generating artefacts, it will be difficult for organisations to prevent their content from being copied.
- Harmonisation of legal framework on AI: Nations globally may use the US court's ruling as a benchmark as they frame their own AI specific laws.



Snapshot of Best Practices for Developing a Regulatory Framework

While the evolving regulatory framework is being debated and adopted by most countries, the following common themes are apparent.

(m) Best Practices for Developing a Regulatory Framework



Rolling out an effective regulatory framework requires intense collaboration between the Government, Corporations, and the Public- with specific responsibilities being assigned.

AI systems should be trained on diverse set of data, including data from different cultures, backgrounds, and perspectives to make them transparent and accountable so that people can understand how they work and why they generate the outputs that they do. This will be a step towards ensuring AI outputs are pluralistic.

(n) Responsibilities of Stakeholder in Implementing Regulatory Framework

Government	• Establish regulatory agencies, enforce policies, and promote ethical guidelines.
Corporations	• Implement ethical AI practices, comply with regulations, and contribute to ethical audits.
Public	• Stay informed about AI ethics, demand transparency and hold organisations accountable.

Status of the regulatory environment for Generative AI in India

In India, the onus of framing AI-specific laws rests with the Ministry of Electronics and IT (MeitY) which is the regulatory body. At present, the Intellectual Property Law, Information Technology Act of 2000 (Sections 43A & 72A), has certain provisions that guard against any crime committed using AI. MeitY also has mentioned in Lok Sabha (Lower house of the Indian Parliament) that the government, at present, is not keen on regulating AI and plans to harness the potential of AI to provide personalised and interactive citizen-centric services through Digital Public Platforms.

In 2018, the Niti Aayog came up with the National Strategy for Artificial Intelligence (NSAI) which proposed setting up a panel to look over the regulation. The National Strategy stands out from other AI policy approaches in two significant ways. Firstly, it acknowledges that AI progress has mostly been driven by businesses so far. It also understands the importance of finding a middle ground between focusing solely on financial benefits and considering the greater good. Secondly, it acknowledges that AI should be embraced for the improvements it can bring to different fields, rather than solely for the idea of completely transforming them. The technology industry in India has also strongly opposed the creation of more laws or statutory authority to regulate artificial intelligence (AI) in the country.

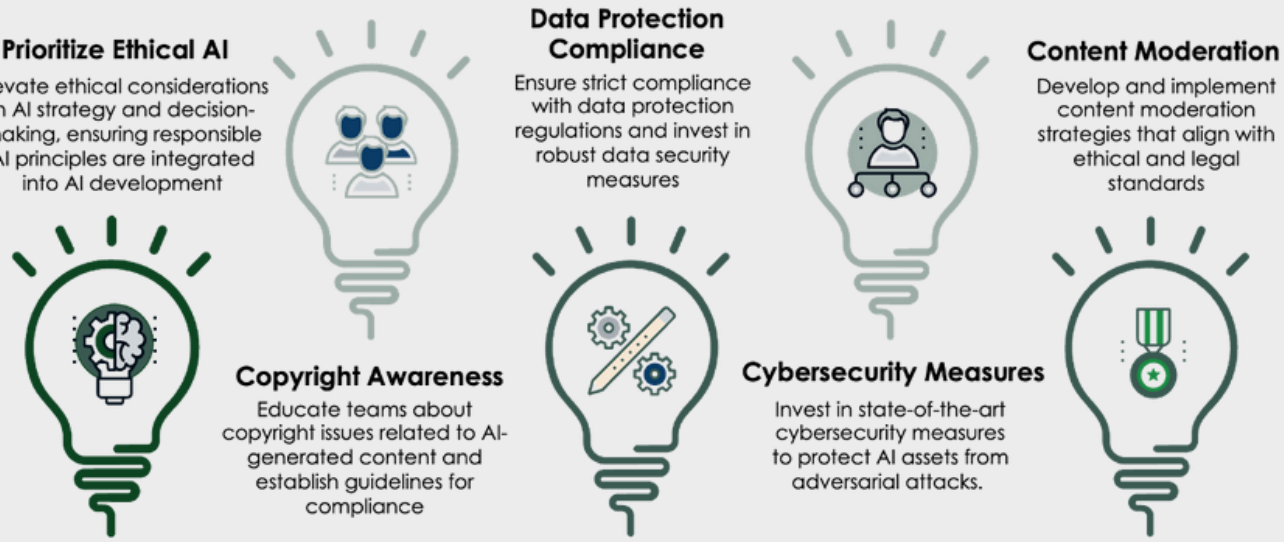
It has argued that "a disjointed and disproportionate" regulatory intervention can "impede the growth of the evolving AI ecosystem in India" and cause avoidable uncertainty.

NASSCOM, the industry body representing IT services firms observes that the development and deployment of AI need oversight to ensure responsible use and scale-up of adoption, but strongly recommend against creating more laws or statutory authority to regulate AI at the current juncture. NASSCOM believes a disjointed and disproportionate regulatory intervention can impede the growth of the evolving AI ecosystem in India and cause avoidable uncertainty.

However, India is also home to one of the largest user bases for ChatGPT globally. OpenAI's chatbot has faced legal issues in various countries due to issues like spreading false information and handling personal data without consent. As the government increasingly relies on this technology for governance and public services, it becomes crucial to establish frameworks to reduce the risks associated with it and regulate AI. Nevertheless, it's important to strike a balance and ensure that the regulations are not overly strict, as this could hinder innovation and delay the adoption of the technology.

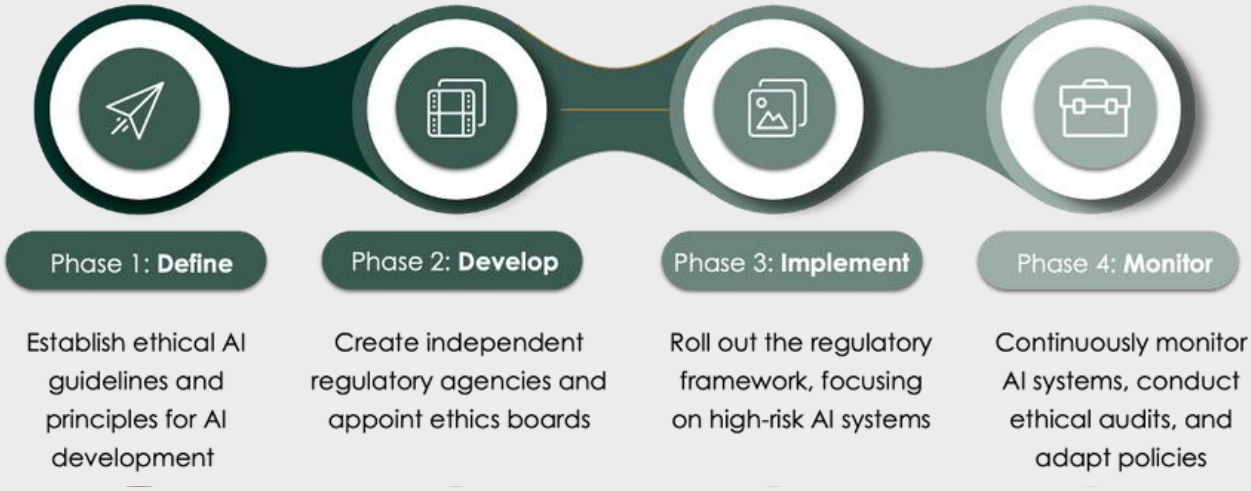
It is recommended that one takes calibrated steps through proper regulation, policies and education for the responsible use of AI:

(o) Recommendations on Commitment to Ethical AI



Following the above recommendations and maintaining a commitment to ethical AI, we can harness the power of Generative AI while safeguarding our organisation's reputation and values.

(p) A Four-phase Roadmap can be adopted for rolling out a Regulatory Framework at an opportune point



The Prime Minister of India, at the G20 Summit 2023, has pressed on the need for a global framework on 'human-centric AI governance'. He also stressed that all countries should align with the global framework and work towards leveraging AI for socio-economic development, global workforce, and research and development.

India has focused on leveraging Generative AI for the underserved domain like agriculture to launch an AI chatbot KissanGPT that guides farmers in irrigation, pest control and crop cultivation. The conversational AI platform CoRover, which released BharatGPT processes rich data types, including photos, audio, video, and maps, with the accuracy of 90%.

Given the varied use cases across multiple sectors in India, Generative AI has the potential to bridge digital divide in India. This necessitates the need to involve stakeholders, and activists from various social strata to design a framework that aptly covers the need of bottom of the pyramid and protects them from ethical AI issues.

Wrapping up

Generative AI presents immense potential but also ethical challenges that require responsible regulation. By understanding these challenges, assessing global regulatory frameworks, and adopting best practices, India can pave the way for ethical and responsible Generative AI deployment. Collaboration among stakeholders is paramount to ensure AI serves society ethically while driving innovation.

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Tauran Advisors

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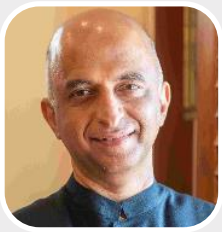
IMC Chamber of Commerce and Industry



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IMC Chamber of Commerce and Industry has a rich legacy of over a century of existence. It was founded on September 07, 1907 by few Indian Merchants, who came together to establish a Swadeshi institution to fight for the rights of the swadeshi businesses. The Chamber exclusively served the interests of Indian business community and also took part in several key political movement pre-independence. In recognition of the Chamber's contribution to nation building, Mahatma Gandhi accepted honorary membership in 1931, the only Chamber which has this distinction. After independence, IMC has played a significant role in consolidating Indian business interests and making the Indian economy self-reliant. At its 100th year, a postal stamp was issued by the government of India recognising the services of the Chamber.

Over the years, a galaxy of leaders, both Indian and International, including Presidents and Prime Ministers, have adorned the Chambers by their visits. The foundation stone of the Chambers' building in Churchgate at Mumbai was laid by first Home Minister of India Sardar Vallabhbhai Patel.

Headquartered in Mumbai, the Chamber represents the voice of over 400,000 businesses and industry establishments across India from diverse sectors of industry with its membership base of over 5000 members and over 150 trade associations affiliated to it. The Chamber's core function is to provide policy inputs and to promote interests of industry and economic growth of the country.

Since its inception in 1907, the Chamber has evolved into an institution keeping pace with the time by adapting itself to contemporary trends, while at the same time continuing on the path of its proud legacy of over a century in the service of nation building and simultaneously fulfilling its responsibility towards the welfare and well being of society. The Chamber is now a cradle for nurturing young talents and promoting emancipation of women through Young Leaders' Forum and Ladies' Wing which have become embodiment of youth enterprise, positivism, proactive thought leadership, and movement for women empowerment and entrepreneurship.

The Chamber's expansive global network with formal understanding with over 150 chambers and government agencies, the IMC platform offers its members benefit of this network opportunities to explore and expand their operations. The year round activities of dialogues and discussions with eminent business, political, societal and government leaders on a wide range of issues to create environment for sustainable economic and social development is uniquely enriching, knowledge sharing and relationship building experience.

The Chamber's state-of-the-art International ADR Centre offers institutional arbitration of disputes in international standard facilities and established rules and panel of arbitrators.
IMC's Library is equipped with rarest books and manuscripts, latest books on economics, politics, management, laws, banking, taxations, and other to enjoy in modern lounge seating atmosphere, a rarity today.