

Southeast Asia's AI Boom: A Human Right's Perspective

A review on current landscape in AI governance and the impacts of AI on the protection of human rights.



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The Overview

The widespread adoption of artificial intelligence (AI) is driving a significant societal, technological, and economic shift throughout Southeast Asia. As interest and investment towards the technology gather pace, the region is cementing its role as a key player in the global digital economy. This is further compounded in the rapid integration of AI systems, with reports indicating that over 80% of the region are in the preliminary stages of AI adoption.[1] Since January 2023, it has been reported that over US\$50 billion have been invested into AI infrastructure in Southeast Asia.[2] Similarly, ASEAN has projected that the continued adoption of AI could increase the region's collective gross domestic product by a margin of 10% to 18% by the year 2030, equating to an approximate value of US\$1 trillion. [3]

However, the pursuit of AI-driven economic growth must be reconciled with the need to uphold and protect fundamental human rights. AI's potential to affect nearly every recognized human right, from amplifying systemic biases and deepening socio-economic inequalities to eroding freedom of expression and privacy, makes it a significant human rights risk.[4] Consequently, there needs to be critical analysis of whether current and future regulations are sufficient to safeguard against the human rights risks AI poses. To this end, this report undertakes a detailed analysis into the prevailing regulatory environment for AI within Southeast Asia. The primary objective of this analysis is to critically assess the degree to which human rights are considered in the formulation of AI governance in the region. This involves a granular assessment of whether human rights considerations are being explicitly and meaningfully integrated into the substantive context of AI governance.

[1] <https://www.middle-east.kenney.com/service/digital-analytics/article/-/insights/racing-toward-the-future-artificial-intelligence-in-southeast-asia>

[2] ERIA One Asean Start-up White Paper 2024 <https://www.eria.org/uploads/media/E-DISC-White-Paper/ERIA-One-ASEAN-Start-up-White-Paper-2024.pdf>

[3] ASEAN Ministerial Meeting on Science, Technology and Innovation (AMMSTI) Statement on Artificial Intelligence (AI) https://asean.org/wp-content/uploads/2024/06/ADOPTED-AMMSTI-Statement-on-AI_7June2024.pdf

[4] Access Now, 'Human Rights in the Age of Artificial Intelligence' <https://www.accessnow.org/wp-content/uploads/2018/11/AI-and-Human-Rights.pdf>

The relationship between AI and Human Rights

The rapid infusion of AI into daily life, evident in everything from personalized newsfeeds to widespread surveillance, demonstrates its evolution far beyond a mere technological tool. Rather, it functions as a complex socio-technical system that deeply intertwines social, analytical and personal functions.[5] Generally, AI systems are not isolated in their technical construct; rather, they are designed to fulfill human-defined goals.[6] Much like foundational systems such as energy, transportation, and healthcare, AI fundamentally alters how individuals participate in political, economic and social relations.[7] As a matter of discussion, it is therefore necessary to adopt a socio-technical perspective in order for a more humanistic approach in understanding AI.[8]

In doing so, the Office of the High Commissioner for Human Rights (OHCHR) has identified ten key human rights risks associated with AI:[9]

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| 1. Freedom from Physical and Psychological Harm | 6. Right to take part in public affairs |
| 2. Right to Equality | 7. Rights of the Child |
| 3. Right to Privacy | 8. Right to Work |
| 4. Right to Own Property | 9. Right to Culture, Art and Science |
| 5. Freedom of Expression and Access to Information | 10. Freedom of Thought, Religion, Conscience and Opinion |

Building upon these socio-technological perspective, the taxonomy therefore offers a general view of the intersection between human rights and AI.

The risks AI poses towards human rights can be attributed to the two key functions AI serve. One as an algorithmic tool training on millions of data sets and the other as a generative model, producing artificial content built on machine learning.

[5] Rabai Boudherhem, Shaping the Future of AI in Healthcare Through Ethics and Governance, Humanities & Social Sciences Communications, 11, Article Number: 416, 2024

[6] Ibid.

[7] https://www.turing.ac.uk/sites/default/files/2021-03/cahai_feasibility_study_primer_final.pdf

[8] Kudina, Olya & van de Poel, Ibo (2024). A sociotechnical system perspective on AI. Minds and Machines 34 (3):1-

9. <https://link.springer.com/article/10.1007/s11023-024-09680-2>

[9] <https://www.ohchr.org/sites/default/files/documents/issues/business/b-tech/taxonomy-GenAI-Human-Rights-Harms.pdf>

AI and Algorithms

Within the field of computer science, an algorithm is understood as a sequence of instructions that describe how tasks are performed.[10] As such, AI relies on these algorithms in order to deliver tasks such as decision-making, surveillance, content personalisation and much more. [11]

However, AI is highly susceptible to bias. This bias can be a result of the code within the algorithm. For example, an AI may fail to distinguish correlation from causation, leading it to incorrectly associate identifiers like race, income, or gender with attributes like criminality.[12] More often than not, the bias may also stem from the data it's trained on. When the input data itself is flawed or unrepresentative, the AI learns and perpetuates historical biases, which can disproportionately harm marginalized groups. [13]

In Southeast Asia, these risks are exacerbated not only by possible flaws in the input data but also that a majority of AI models were trained and developed in Western countries by Western companies which lacks proper understanding of the ethnic and linguistical diversity of Southeast Asia.[14] For instance in a 2018 study, it found that commercial facial recognition algorithms have significantly higher error rates for darker-skinned individuals, affecting women the most. [15] Ultimately, in a diverse region like Southeast Asia, it may lead to an increase risk of misidentification and racial profiling.



[10] "What Is an Algorithm? An Explainer.," accessed May 12, 2018, http://www.slate.com/articles/technology/future_tense/2016/02/what_is_an_algorithm_an_explainer.html.

[11] Ibid.

[12] "Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy: Cathy O'Neil: 9780553418811: Amazon.Com: Books," 155–60, accessed May 13, 2018, <https://www.amazon.com/Weapons-Math-Destruction-Increases-Inequal>

[13] Ibid.

[14] Nuurianti Jalli, 'Confronting AI bias in southeast Asia: safeguarding democracy in the age of automation' (Media Diversity Institute, 16 May 2024) <https://www.media-diversity.org/confronting-ai-bias-in-southeast-asia-safeguarding-democracy-in-the-age-of-automation/> accessed 11 August 2025.

[15] Buolamwini & Gebru, 'Gender Shades Intersectional Accuracy Disparities in Commercial Gender Classification', <http://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf>

Generative Models

In recent years, the prominence and popularity of generative models like Google's Gemini and OpenAI's ChatGPT has increased substantially. These multi-modal systems can produce a wide spectrum of content, including text, imagery, video, and audio, based on user-provided prompts. In consequence, it exposes a new avenue for disinformation where applications such as image generation and deepfakes are now being used to create convincing visuals of real people saying or doing things that they did not do.[16] Similarly, these applications may be used to create Child Sexual Abuse Material (CSAM) and other sexualized content of individuals without their consent.[17] At the given moment, there's no extent as to what generative models can do, and it remains an increasingly novel form of human rights risk that unfairly affects women and children.[18]

In Southeast Asia, the intersection between human rights and AI becomes increasingly relevant as AI continues to weave itself into daily life. From AI generated videos in Indonesia which have fueled misinformation during election season,[19] to Malaysia where deepfakes have been used as a method of revenge porn against young women.[20] More worryingly, in Myanmar where its military junta (Tatmadaw) has reportedly employed AI as part of its facial recognition surveillance systems, a gross violation of the right to privacy and a threat towards freedom of expression.[21] The rapid proliferation of AI has resulted in an immense regulatory gap and illustrates how when left unchecked, can exacerbate existing vulnerabilities and create new avenues for human rights abuses.[22] In a region with limited digital literacy or weak institutional safeguards, the risks are more pronounced.[23]



[16] NPR, 'A political consultant faces charges and fines for Biden deepfake robocalls' www.npr.org/2024/05/23/nx-s1-4977582/fcc-ai-deepfake-robocall
[17] Unicef, 'How can generative AI better serve children's rights?' <https://www.unicef.org/innocenti/how-can-generative-ai-better-serve-childrens-rights>
[18] UNDP, 'Understanding Generative Artificial Intelligence's Implications on Gender Using a Value Chain Approach and a UNGP Lens' https://www.undp.org/sites/g/files/zskgke326/files/2024-06/understanding_the_implications_of_genai_on_gender_undp_aapti.pdf
[19] <https://www.channelnewsasia.com/asia/ai-disinformation-deepfakes-indonesia-elections-4091296>
[20] <https://www.straitstimes.com/asia/se-asia/ai-deepfake-lewd-pics-johor-teen-pleads-guilty-to-possessing-porn-on-mobile-phone>
[21] AccessNow, 'Track and target: FAQ on Myanmar CCTV cameras and facial recognition' <https://www.accessnow.org/myanmar-cctv-cameras/>
[22] <https://www.rand.org/pubs/perspectives/PEA3703-1.html>
[23] Muawanah, U., Marini, A., & Sarifah, I. (2024). The interconnection between digital literacy, artificial intelligence, and the use of E-learning applications in enhancing the sustainability of Regional Languages: Evidence from Indonesia. *Social Sciences & Humanities Open*, 10, 101169. <https://doi.org/10.1016/j.ssaho.2024.101169>

Mapping out AI regulations in Southeast Asia

The State of Human Rights in AI Governance

In stark contrast to Europe's more unified approach, AI governance in Southeast Asia is a fragmented landscape. Each nation is independently charting its own course, creating a complex patchwork of national strategies, voluntary ethical guidelines, and legislative roadmaps. While the ASEAN Guide on AI Governance and Ethics provides a common regional touchstone, it remains a non-binding framework. This allows for significant divergence, with member states developing distinct and often inconsistent regulatory models across the region.



Mapping out AI regulations in Southeast Asia

To provide a structured analysis of these varied approaches, this report introduces a detailed scoresheet designed to measure the maturity of each country's AI governance. The scoresheet evaluates three critical dimensions: first, the existence of a foundational governance framework; second, the extent to which this framework addresses key human rights risks; and third, the availability of clear avenues for accountability and redress when harm occurs. The criteria and framework for this assessment are informed by the Council of Europe's Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law,[22] as well as existing data from the Global Index for Responsible AI. [23]

Methodology

Each question is rated on a 5-point scale. The total score provides a rating that indicates the maturity and robustness of the country's approach.

0 points: No evidence or not addressed. The issue is completely absent from government consideration

1 point: The government has formally announced intention to address the issue within a published national AI strategy, roadmap or official policy guideline.

2 points: Issue is partially addressed in government proposals but are vague or apply only to a very narrow sector.

3 points: Issue addressed in a draft law pending public consultation or parliamentary review, OR partial, limited regulations are already in place addressing the issue but have significant gaps.

4 points: The issue has already been addressed in a comprehensive legislation that is either passed or enforced. A clear framework for enforcement, penalties for non-compliance and effective remedies is present.

[24] CETS No. 225, 'Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law', <https://rm.coe.int/1680afae3c>

[25] <https://www.global-index.ai/country/MY>

Section 1: Foundational Framework & Governance (20 pts)

Q1: Is there a specific, legally binding legislation or regulation governing AI systems?

Q2: To what extent are human rights principles mentioned/embedded in the AI governance framework?

Q3: To what extent is there a system to identify, assess, prevent and mitigate the risks of AI systems on Human Rights?

Q4: Is there a measure to establish/designate an effective mechanism to oversee compliance or enforcement?

Q5: Are there adequate mechanisms for redress and liability for AI-related harm?

Section 2: Core Human Rights Protections (24 pts)

Q1: Is there adequate or specific protection for data privacy in the context of AI?

Q2: Is there an adequate framework to mandate algorithmic bias and prohibit AI-based discrimination?

Q3: How advanced are regulations governing AI-driven content moderation and disinformation?

Q4: Is there an adequate framework to ensure that AI systems are not used to undermine the integrity, independence and effectiveness of democratic institutions and processes?

Q5: Are there sufficient regulations governing AI in workplaces (hiring, surveillance, management, automation etc.)

Q6: Are there sufficient remedies and punishments in criminalizing non-consensual deepfakes and AI-driven harassments?

Section 3: Transparency and Procedural Safeguards (16pts)

Q1: Are there any legal requirements for companies and systems to inform consumers when AI is involved? (whether consumers are notified that they are interacting with such systems rather than with a human.)

Q2: Are there any frameworks or designation present to oversee and monitor AI in relation to human rights?

Q3: Are there sufficient requirements related to maintaining adequate quality and security throughout the lifecycle of an AI system?

Q4: Are there any requirements that seeks to foster safe innovation in AI?

Overall Scoring

Country	Foundational Framework & Governance (20 pts)	Core Human Rights Protections (24 pts)	Transparency, Accountability & Safeguards (16 pts)	Total Score (60 pts)	Rating
Vietnam	15	15	12	42	Robust
Philippines	15	14	12	41	Robust
Singapore	10	15	11	36	Robust
Thailand	14	11	10	35	Robust
Indonesia	10	7	10	27	Foundational/Developing
Malaysia	7	8	7	22	Foundational/Developing
Cambodia	7	9	5	21	Foundational/Developing
Brunei	7	6	4	17	Foundational/Developing
Myanmar	N/A	N/A	N/A	N/A	Nascent/Lacking
Laos	N/A	N/A	N/A	N/A	Nascent/Lacking
Timor Leste	N/A	N/A	N/A	N/A	Nascent/Lacking

Sources
:
Vietnam: Draft Law on Digital Technology Industry
Philippines: National AI Strategy Roadmap, House Bill No. 7913
Singapore: Model AI Governance Framework for Generative AI, national AI Strategy 2.0
Thailand: Draft Law on the Promotion and Support of AI Business Operations
Indonesia: National AI strategy 2020-2045
Malaysia: National Guidelines on AI Governance & Ethics
Cambodia: National Artificial Intelligence Strategy 2025-2030 (draft)
Brunei Darussalam: AI Governance and Ethics for Brunei Darussalam
Myanmar: N/A
Laos: N/A
Timor Leste: N/A

Key Findings

Based on the scoring, Southeast Asian nations are at vastly different stages of AI governance, with countries like **Vietnam** and the **Philippines** proposing robust, rights-focused draft laws, while others like **Singapore, Malaysia, and Indonesia** are pursuing more foundational, non-binding strategies to balance regulation with innovation. Common gaps across the region include **translating ethical principles into enforceable regulations**, establishing operational oversight bodies, and creating clear mechanisms for **liability and redress** for AI-related harm.



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States have a “robust” AI governance frameworks



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States have aims to adopt regulatory sandboxes for safer innovation



- Nascent/Lacking (0-12 pts)
- Foundational (13-28 pts)
- Robust(29-44 pts)
- Human Rights-Focused (45 -60 pts)



Breakdown

From the scoring and evaluation of various AI governance frameworks, draft laws and guidances, this report find that regional governance models in Southeast Asia can be separated into three distinct archetypes:

Comprehensive Legislators:

Nations such as **Vietnam, the Philippines, and Thailand** are moving towards establishing legally binding, horizontal AI laws. Vietnam's **Law on Digital Technology Industry** sets a new benchmark for AI regulation in the region with key considerations towards human rights risks.

Innovation Facilitators:

Singapore stands as an outlier in the “robust” category, not having a proposed set of legally binding regulations but rather voluntary guidelines and practical toolkits. Pro-innovation and active oversight such as through the AI Verify Toolkit places Singapore ahead of other regional frameworks but nevertheless lack enforceability.

Foundational Planners:

Countries such as Malaysia, Indonesia, Brunei and Cambodia are in the earlier stages of AI governance, focusing on establishing the essential groundwork through national strategies, guidelines and preliminary institutional structures. As a result, these countries score relatively lower.

Nevertheless, it trails behind its regional peers in forging appropriate roadmaps towards legislating a human rights-driven AI governance framework. Cambodia and Indonesia for instance, within their draft strategies have emphasised commitment towards upholding rights-respecting principles and address emerging human rights-risks posed by AI.



Common themes

A clear trend across the region is the formal establishment of institutional authority for AI governance. The more advanced frameworks establishes specific government bodies to lead policy and oversight. For instance, Vietnam has tasked the Ministry of Information and Communications, Singapore relies on Infocomm Media Development Authority (IMDA) and the Philippines' draft law proposes a new Artificial Intelligence Board.

In terms of regulatory architecture, few countries have proposed or aims to adopt a risk-based approach. Thailand's draft law for instance, heavily influenced by the European Union's AI law, has reportedly aim to establish a risk-based framework for AI. What this means is that AI systems with a higher-risk have greater and stricter obligations and those with "unacceptable risks" might be completely banned from use. In turn, it allows for a flexible regulatory models which scales according to the level of harm.

Moreover, in terms of regulatory language used most countries have adopted a pro-innovation language in its frameworks, guidance, strategies and draft laws. This is also reflected in the commitment towards fostering safe innovation where there's a regional consensus in employing regulatory sandboxes as the primary tool. For instance, in Chapter IV of the Philippines' draft law, there is a great emphasis towards promoting innovation and reducing costs and barriers to entry. For companies and future policy makers, regulatory sandboxes are soon to become the primary point of entry for navigating regulatory pathways. This has been similarly echoed by the ASEAN Guide on AI governance and ethics

On transparency and consumer notification, Vietnam, the Philippines and Thailand all include requirements for companies to clearly inform users when they are interacting with an AI system. On system quality and security, Singapore and Malaysia offers comprehensive set of best practices for maintaining security and compliance throughout the AI lifecycle. .



Challenges

In a region as diverse as Southeast Asia, embedding human rights into AI governance proves challenging due to wide-ranging cultural norms, ethical perspectives and political systems. Thus, for many regulators in the region, key challenges stand out.

1. Western leaning AI systems

As much of the AI models, platforms and systems currently being employed in Southeast Asia were developed or trained on data in the west, it leads to questions on biased outcomes and a poorer understanding of local context. This in turn has led to raising concerns on data colonialism and the impacts on data sovereignty.[26]

2. Lack of Comprehensive Data Privacy Laws

While countries like Singapore, Malaysia, Thailand, and the Philippines have relatively robust data privacy laws, others, like Vietnam, Indonesia and Cambodia, are still developing comprehensive frameworks. This poses a significant challenge as AI systems are often data sensitive. The absence of strong data protection laws can lead to greater human rights risks towards the right to privacy.

3. Limited Capacity and Expertise

Developing and enforcing effective AI governance requires significant technical, legal, and institutional capacity. Many countries in the region lack the necessary expertise and resources to do so, which can hinder their ability to keep pace with technological advancements.[27] This in turn has resulted in significant regulatory blindspots such as with the failure of most regulators in addressing AI in the workplace and the right to work.

[26] <https://thediplomat.com/2025/03/southeast-asias-quest-for-digital-sovereignty/>

[27] United Nations Industrial Development Organization, 'Bridging the AI Divide: Empowering Developing Countries through Manufacturing', https://www.unido.org/sites/default/files/unido-publications/2024-10/IID%20Policy%20Brief%2012_0.pdf



Concluding Remarks

Ultimately, what can be observed is that more needs to be done in discussing AI governance and bolstering human rights considerations. Whilst there are significant developments particularly in “robust” countries, a majority of the region remains lacking in procuring a human rights-driven AI governance framework.