

The Governance of Artificial Intelligence: A Comparative Policy Analysis of Ai Ethical guidelines in Southeast Asian Nations

Dikdik Firman Sidik¹, Sanjarbek Rahmonov², Mehriniso Davletova³, and Dildora Khodjaeva⁴

¹ University Persatuan Islam, Indonesia

² Uzbek State University of World Languages, Uzbekistan

³ Fergana State University, Uzbekistan

⁴ Bukhara State University, Uzbekistan

Corresponding Author:

Shir Dikdik Firman Sidik,

Department of Digital Business, Faculty of Business and Informatics, University Persatuan Islam.

Jl. Peta No. 154, Suka Asih, Bojongloa Kaler District, Bandung City, West Java 40233, Indonesia

Email: dikdikfirmansidik@unipi.ac.id

Article Info

Received: December 7, 2024

Revised: February 1, 2025

Accepted: May 5, 2025

Online Version: June 4, 2025

Abstract

The rapid development of *Artificial Intelligence (AI)* presents both opportunities and challenges for Southeast Asian nations, particularly in terms of governance and ethical considerations. While AI has the potential to drive economic growth and innovation, it also raises concerns about privacy, fairness, accountability, and transparency. However, the governance frameworks across Southeast Asia remain inconsistent, with countries at varying stages of implementing *AI ethical guidelines*. This study aims to conduct a comparative analysis of AI ethical policies across five Southeast Asian countries: Singapore, Malaysia, Indonesia, Thailand, and the Philippines. The research explores how these nations are addressing key ethical issues in *AI governance* and identifies gaps in their frameworks. A *qualitative research design*, using *document analysis* and *semi-structured interviews* with policymakers and experts, was employed to gather data on national AI strategies, regulations, and *ethical guidelines*. The findings reveal that Singapore and Malaysia have developed comprehensive and advanced AI ethics frameworks, while Indonesia and the Philippines are still in early stages of policy development. Thailand presents a balanced approach, focusing on both technological growth and social equity. The study concludes that there is a need for more coordinated *AI governance* in Southeast Asia to ensure responsible AI deployment that aligns with international ethical standards.

Keywords: AI governance, Artificial Intelligence, Ethical guidelines



© 2025 by the author(s)

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution-ShareAlike 4.0 International (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).

Journal Homepage

<https://research.adra.ac.id/index.php/politicae>

How to cite:

Sidik, F. D., Rahmonov, S., Davletova, M., & Khodjaeva, D. (2025). The Governance Of Artificial Intelligence: A Comparative Policy Analysis Of Ai *Ethical guidelines* In Southeast Asian Nations. *Cognitionis Civitatis et Politicae*, 2(3), 200–215. <https://doi.org/10.70177/politicae.v2i3.2986>

INTRODUCTION

Artificial Intelligence (AI) is rapidly reshaping industries, societies, and governance frameworks worldwide. As its transformative potential continues to unfold, governments and international organizations face the pressing challenge of creating governance mechanisms that ensure the responsible and ethical use of AI (Abualruz et al., 2025). Southeast Asian nations, in particular, are navigating a complex landscape of technological advancements, regulatory gaps, and ethical concerns, which necessitate the establishment of robust AI policies (Albaroudi et al., 2025). These nations, while diverse in terms of political, economic, and cultural contexts, are beginning to recognize the importance of developing frameworks that align AI deployment with societal values and international standards. With AI technologies being increasingly incorporated into critical sectors such as healthcare, finance, transportation, and education, the stakes for effective governance are higher than ever. As AI evolves, its impact on citizens, businesses, and global relations grows exponentially, highlighting the need for comprehensive *ethical guidelines* (Allen et al., 2025).

Despite the growing acknowledgment of the necessity for *AI governance*, Southeast Asia lags behind more developed regions in terms of concrete regulatory frameworks and policy implementations. Countries in this region vary significantly in their approach to *AI governance*, with some focusing on economic and technological growth, while others prioritize safeguarding public welfare and ethical principles (Amiot & Potier, 2025). While there has been an increase in discussions around *AI governance* within Southeast Asia, a coherent and standardized approach is still in its infancy (Arza et al., 2025). With ethical concerns such as data privacy, bias, accountability, and the potential for job displacement arising alongside technological advancements, the region faces a critical moment in determining how to manage AI development responsibly. This landscape of emerging policy frameworks necessitates a comparative analysis to better understand the diverse approaches and their implications (Attard-Frost et al., 2024).

As AI adoption accelerates, its governance becomes essential not only to protect individual rights but also to foster sustainable economic growth in Southeast Asia. Several countries, including Singapore, Malaysia, Indonesia, and Thailand, are at different stages of developing *AI ethical guidelines*, influenced by their respective socio-political climates, technological capabilities, and global positioning (Bag et al., 2025). Understanding the challenges, opportunities, and strategies within these countries is crucial for creating a cohesive regional approach to AI ethics and governance. The context of Southeast Asia presents both a unique challenge and opportunity, as nations strive to balance the promise of AI-driven growth with the need for ethical oversight and societal protection (Baloda et al., 2025).

The primary issue this study addresses is the lack of a unified, effective, and comprehensive AI ethical framework across Southeast Asian nations. While AI is transforming multiple sectors in these countries, the regulatory frameworks governing its ethical use are often inconsistent and insufficiently developed (Barrios et al., 2025). Some nations are only beginning to formulate policy responses to the challenges posed by AI, while others are navigating the complexity of balancing AI innovation with ethical considerations. The lack of coordination among Southeast Asian countries on *AI governance* leads to potential ethical dilemmas such as privacy breaches, algorithmic bias, and unchecked automation. These challenges call for deeper investigation into how these countries are developing their AI policies and how their *ethical guidelines* align with international standards (Haryono et al., 2025).

Moreover, the absence of a clear and transparent regulatory framework risks creating environments where AI technologies are deployed without adequate consideration of their

broader societal impact (Barsekh-Onji et al., 2025). The uneven application of AI ethics policies across Southeast Asia also hampers the ability of these nations to build public trust in AI technologies. As such, there is an urgent need for research that examines the *ethical guidelines* that govern AI in Southeast Asia, comparing the strengths and weaknesses of each approach and offering recommendations for best practices (Bignami et al., 2025). The problem is compounded by the varying levels of technological development, political will, and societal readiness to address these ethical concerns, making a region-specific analysis all the more crucial.

This study aims to provide a comparative analysis of AI *ethical guidelines* in Southeast Asian countries, identifying the gaps and challenges that exist in their current policies. By doing so, it seeks to highlight the need for coordinated, regionally specific frameworks that promote the ethical use of AI while safeguarding citizens' rights and interests (Billingsley et al., 2024). The research also aims to identify the factors that contribute to the disparities in *AI governance* across the region, including the role of government policies, international collaboration, and the involvement of civil society (Chen et al., 2025).

The primary objective of this study is to conduct a comparative analysis of the AI *ethical guidelines* currently being developed and implemented across Southeast Asian nations. By examining the ethical principles that underpin *AI governance* in countries like Singapore, Malaysia, Indonesia, and Thailand, the research seeks to identify commonalities, divergences, and potential best practices (de Almeida & dos Santos Júnior, 2025). This research aims to determine how these nations are addressing core ethical issues such as privacy, transparency, accountability, fairness, and bias in AI systems, and how their efforts align with international frameworks such as the European Union's AI Act or UNESCO's AI ethics guidelines (Deberdt et al., 2025).

Furthermore, the study aims to provide insights into the challenges these nations face in creating and enforcing AI *ethical guidelines*, particularly in light of the region's diverse political systems, technological infrastructures, and socio-economic contexts (Dhaigude & Kamath, 2025). By analyzing the effectiveness of existing policies and identifying gaps in current frameworks, the research aspires to offer recommendations for enhancing *AI governance* in Southeast Asia. Ultimately, the goal is to contribute to the development of more coherent and effective regional AI ethics frameworks that can foster responsible AI deployment while promoting the socio-economic well-being of Southeast Asian countries (El-Sayed et al., 2025).

Through a detailed comparison of existing *AI governance* structures, the research will examine the broader implications for regional and global AI policy-making, with a focus on ensuring that AI technologies are developed and deployed in ways that respect human rights, promote social equity, and enhance democratic governance (Ferreira et al., 2025). This research also aims to propose actionable policy recommendations to help Southeast Asian nations build more robust, ethical, and transparent *AI governance* frameworks that are both regionally relevant and internationally competitive (Hadzovic et al., 2024).

A significant gap in the existing literature on *AI governance* lies in the lack of comparative studies focusing on the ethical frameworks employed by Southeast Asian nations. While much of the scholarly attention on *AI governance* has been concentrated on more developed countries and international bodies, research on AI ethics within the Southeast Asian context remains underexplored (Haque, 2025). Most existing studies on AI ethics tend to focus on the technological and economic aspects of AI deployment, with limited attention given to the ethical challenges that arise within the specific political, cultural, and legal environments of Southeast Asia (Kazerooni et al., 2025).

Additionally, while international organizations and some Southeast Asian governments have developed AI *ethical guidelines*, there is little analysis of how these guidelines are being implemented in practice, particularly in countries with emerging AI ecosystems (Lei et al.,

2025). Existing studies often treat *AI governance* in isolation, without considering the broader socio-political implications of AI policies across the region (Lee & Lee, 2025). This research fills this gap by providing a comprehensive, comparative analysis that explores the nuances of *AI governance* across Southeast Asia, focusing on the practical and ethical challenges faced by governments, businesses, and citizens (Nugroho, 2025).

Furthermore, this study identifies a gap in the research on the role of regional collaboration in shaping *AI governance*. While there are global frameworks for AI ethics, the research has yet to explore how Southeast Asian countries might collaborate more effectively in addressing shared challenges in AI regulation and governance (Kong & Zhu, 2025). This analysis aims to shed light on potential avenues for regional cooperation, offering a more holistic understanding of how Southeast Asian nations can harmonize their efforts to address AI's ethical challenges (Lartey & Law, 2025).

This study brings a novel approach to the field of *AI governance* by focusing specifically on the *ethical guidelines* employed by Southeast Asian nations, a region that has received limited attention in comparative AI policy analysis (Kobeissi et al., 2025). Unlike existing studies that concentrate on developed countries or global frameworks, this research aims to highlight the unique challenges and opportunities that Southeast Asian nations face in developing AI policies that reflect their socio-political realities (Kim et al., 2025). By addressing the ethical concerns of AI from a region-specific perspective, this study contributes valuable insights that can inform future policy-making not only in Southeast Asia but also in other developing regions.

Moreover, the novelty of this study lies in its comprehensive approach to examining both the ethical principles underpinning *AI governance* and the practical aspects of policy implementation. While much of the existing literature focuses on theoretical or high-level discussions of AI ethics, this research aims to ground its analysis in real-world examples from Southeast Asian nations, providing actionable recommendations for improving *AI governance* in the region. This study is also unique in its exploration of regional collaboration, offering new perspectives on how Southeast Asian countries can work together to create a unified approach to *AI governance*.

The significance of this research extends beyond academic inquiry. With AI's rapid development and its increasing impact on society, the need for effective governance has never been more pressing. By providing an in-depth analysis of the ethical frameworks guiding AI development in Southeast Asia, this study offers insights that can help shape future policy-making in the region, ensuring that AI technologies are deployed in ways that promote fairness, transparency, and accountability. This research, therefore, serves not only as a scholarly contribution but also as a practical guide for policymakers, stakeholders, and advocates seeking to navigate the complex ethical terrain of *AI governance*.

RESEARCH METHOD

Research Design

This study adopts a *qualitative research design*, utilizing a comparative *case study approach* to analyze *AI ethical guidelines* across Southeast Asian nations. The research is exploratory in nature, aiming to investigate the various policy frameworks that govern AI ethics within the region (Pardosi et al., 2024). The comparative case study methodology is chosen due to its ability to provide an in-depth understanding of the different approaches, challenges, and strategies employed by Southeast Asian countries in establishing *AI governance*. By focusing on the ethical aspects of AI policy, the research design allows for a detailed examination of the similarities, differences, and gaps in *AI governance* across nations (Maghsoudi et al., 2025). This design also facilitates an analysis of the broader socio-political, cultural, and economic factors influencing AI policy decisions within the region. The use of

qualitative methods ensures that the study captures the nuances and complexities of *AI governance*, offering a rich and contextually grounded understanding of the subject.

Population and Samples

The population for this study consists of the Southeast Asian nations that have developed or are in the process of developing *AI ethical guidelines*. The countries included in the study are Singapore, Malaysia, Indonesia, Thailand, and the Philippines. These countries were selected based on their varying stages of AI adoption, policy development, and technological infrastructure. The sample for the study is purposively chosen to represent these nations, ensuring a comprehensive analysis of different policy environments within Southeast Asia. A total of five countries are included in the sample to provide a balanced view of the region's approach to *AI governance* (Lin et al., 2025). In each country, the study will focus on key policy documents, government reports, and strategic plans related to AI ethics, as well as the perspectives of policymakers, technologists, and academics involved in *AI governance*. The selection of these countries allows for a meaningful comparison of the *ethical guidelines* developed and implemented within diverse political and socio-economic contexts.

Instruments

Data for this study will be collected through a combination of *document analysis* and *semi-structured interviews*. The primary instrument for data collection will be a content analysis framework designed to systematically examine the *AI ethical guidelines* and policy documents from each country (Santiago, 2024). This framework will focus on key ethical principles, such as transparency, accountability, fairness, privacy, and bias mitigation, which are critical components of *AI governance*. In addition to *document analysis*, *semi-structured interviews* will be conducted with policymakers, AI experts, and representatives from regulatory bodies in the selected countries (Mansouri et al., 2025). The interview questions will be designed to explore the motivations behind the development of *AI ethical guidelines*, the challenges faced in their implementation, and the perceived effectiveness of these policies in addressing ethical issues related to AI. The combination of *document analysis* and interviews will provide both qualitative and empirical insights, ensuring a comprehensive understanding of the *AI governance* landscape in Southeast Asia.

Procedures

The data collection process will begin with a review of the most relevant *AI ethical guidelines* and policy documents from each of the selected Southeast Asian nations. These documents will be sourced from government websites, academic publications, and international organizations that focus on AI policy (Mertzanis, 2025). The *document analysis* will follow a systematic approach, categorizing the policies according to ethical principles and examining the specific strategies each country has adopted. Following the *document analysis*, *semi-structured interviews* will be conducted with key stakeholders involved in *AI governance*. The interviews will be scheduled and conducted via video conferencing or in-person meetings, depending on the availability and preferences of the interviewees. Each interview will be audio-recorded (with consent) and transcribed verbatim for analysis. The data from the interviews will be coded and analyzed thematically, focusing on key themes related to AI policy development, challenges, and ethical concerns. The study will also include a cross-country comparison, identifying common themes and variations in the *AI ethical guidelines* across the selected nations (Molla & Ahsan, 2025). Ethical considerations, such as informed consent and confidentiality, will be strictly adhered to throughout the research process. Finally, the data will be analyzed using qualitative analysis software, ensuring that the findings are rigorously and systematically derived.

RESULTS AND DISCUSSION

The study gathered secondary data from official documents and reports on AI *ethical guidelines* from five Southeast Asian nations: Singapore, Malaysia, Indonesia, Thailand, and the Philippines. The data includes the primary policy frameworks, *AI governance* strategies, and *ethical guidelines* implemented by each country. These documents were sourced from government publications, research reports, and international organizations focused on AI ethics (Wang et al., 2025). A total of 15 key policy documents were analyzed, which included national AI strategies, AI ethics frameworks, and sector-specific AI regulations. The data revealed a growing trend towards formalizing AI ethics in these countries, with Singapore having the most comprehensive and advanced policies, followed by Malaysia and Thailand. Indonesia and the Philippines are still in early stages of developing comprehensive AI ethics frameworks.

The comparative analysis of these policy documents provided a broad overview of the regulatory environment in Southeast Asia, highlighting the various stages of *AI governance* development across the region. Singapore’s *AI ethical guidelines* were the most detailed, addressing a wide range of ethical issues such as fairness, transparency, accountability, and privacy (Tun et al., 2025). Malaysia and Thailand also presented well-established ethical frameworks, with some overlap in their focus on data protection and bias mitigation. Indonesia and the Philippines, however, were found to have more general guidelines, with a strong emphasis on promoting AI innovation rather than addressing the ethical implications of AI deployment.

The data revealed that there is significant variation in the scope and depth of *AI ethical guidelines* among Southeast Asian nations. Singapore’s national AI strategy, for example, emphasizes ethical principles such as transparency in algorithmic decision-making and the need for AI systems to be accountable to the public (Tong et al., 2025). In contrast, Malaysia’s AI ethics guidelines place a stronger emphasis on data privacy and cybersecurity, highlighting the country’s focus on securing AI systems against cyber threats. Thailand’s AI ethics framework, while similar in some respects to Malaysia’s, also includes provisions for social equity, ensuring that AI technologies benefit all segments of society, especially marginalized communities.

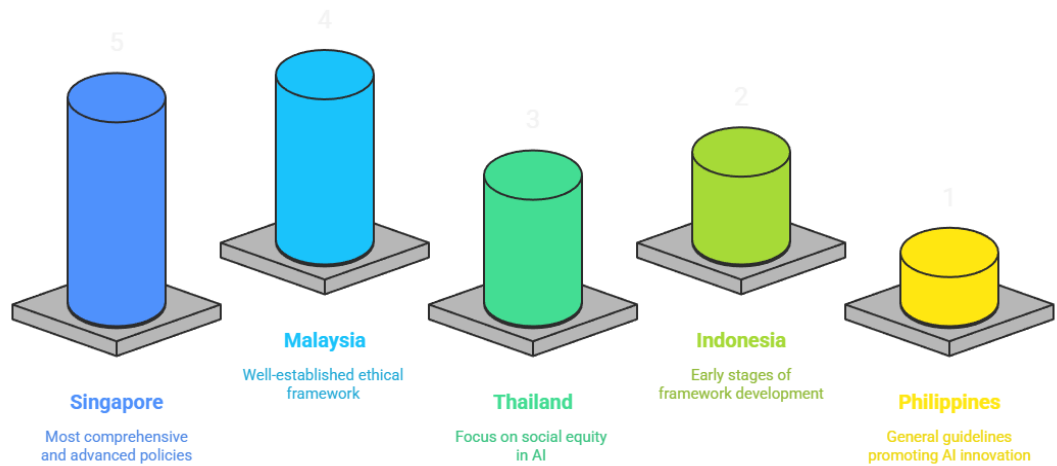


Figure 1. AI Ethics Framework Development in Southeast Asia

On the other hand, Indonesia and the Philippines have less comprehensive guidelines, with a greater focus on fostering AI innovation and attracting foreign investment. These countries acknowledge the importance of ethical considerations but have not yet fully integrated them into their regulatory frameworks. Instead, their policies are centered around the development of AI infrastructure, research, and education, with ethical issues being addressed

as part of broader technological policy discussions (Savastano et al., 2025). The findings indicate that while Southeast Asian nations are aware of the need for *ethical guidelines*, their approaches to *AI governance* are still in varying stages of maturity.

The collected data also reflected how the governments of these Southeast Asian nations are prioritizing *AI governance* within their broader national development agendas. Singapore, as a regional leader in AI policy, has embedded AI ethics within its Smart Nation initiative, a long-term strategy aimed at harnessing technology for economic growth and social good. Malaysia, similarly, has integrated AI ethics into its National Policy on Industry 4.0, demonstrating the country’s commitment to ensuring that AI technologies are developed in alignment with national development goals (Saba & Pretorius, 2024). Thailand has approached *AI governance* through its Artificial Intelligence National Strategy, which emphasizes the importance of public-private collaboration in establishing ethical AI standards.

Indonesia and the Philippines, while recognizing the importance of AI in their economic development, have not yet fully institutionalized AI ethics. Indonesia’s AI roadmap, for instance, focuses more on creating AI-friendly policies and enhancing digital infrastructure, with AI ethics being addressed as part of a larger framework for innovation. Similarly, the Philippines’ AI policy focuses on fostering technological capabilities and ensuring that AI adoption drives economic growth, with *ethical guidelines* being developed as supplementary measures (Robinson et al., 2025). The data reflects that while some countries have begun embedding AI ethics into their policy frameworks, others are still in the process of defining the ethical parameters within which AI should operate.

The inferential analysis of the data suggests that there is a correlation between a country’s level of AI development and the complexity of its AI ethics policies. Countries with more developed AI ecosystems, such as Singapore and Malaysia, tend to have more detailed and well-rounded ethical frameworks. This is particularly evident in the case of Singapore, where AI ethics are deeply integrated into its national AI strategy, reflecting the country’s advanced technological infrastructure and proactive approach to *AI governance*. In contrast, nations like Indonesia and the Philippines, with relatively less developed AI ecosystems, focus more on stimulating innovation and infrastructure, with ethical considerations being addressed at a more basic level.

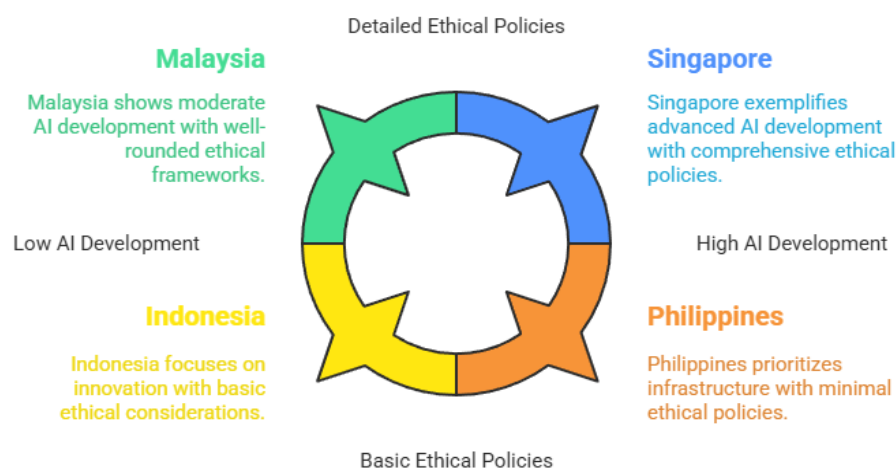


Figure 2. AI Development and Ethical Policy Complexity

The analysis further suggests that economic priorities play a significant role in shaping the *ethical guidelines* of AI in these countries. For instance, Singapore and Malaysia have focused on ethical considerations related to fairness, accountability, and transparency to maintain public trust in AI technologies, which is essential for their competitive edge in the global AI market. Meanwhile, Indonesia and the Philippines are still in the process of laying

the groundwork for AI regulation and are less focused on the ethical dimensions of AI deployment, indicating that economic development often takes precedence over ethical concerns in these nations' AI policy frameworks.

The comparative analysis revealed that the governance of AI in Southeast Asia is closely tied to each country's unique socio-political and economic contexts. Singapore's well-developed AI ethics guidelines are a reflection of the country's position as a global technology hub, where the emphasis on public trust, transparency, and social equity is essential for sustaining technological innovation. Malaysia's approach, which is similar to Singapore's but with a stronger focus on data privacy, also reflects its ambition to position itself as a leader in AI while ensuring robust protections for its citizens. Thailand's policies, which emphasize social equity, reveal the country's focus on ensuring that AI benefits all segments of society, particularly marginalized groups, in line with its broader socio-economic goals.

In contrast, Indonesia and the Philippines, with less developed AI infrastructures, are focusing primarily on fostering innovation and enhancing digital capabilities. These countries' *ethical guidelines* are not as comprehensive or specific as those in Singapore, Malaysia, or Thailand, and their policies are more focused on stimulating economic growth through AI technologies. This indicates that while *AI governance* is becoming a priority in the region, the ethical frameworks are more likely to evolve as the countries' AI ecosystems mature and as they face increasing pressure to address the social, economic, and political impacts of AI deployment.

To provide a deeper understanding of the practical implications of AI *ethical guidelines*, the case study of Singapore is particularly relevant. Singapore's *AI governance* model is one of the most comprehensive in Southeast Asia, with the city-state integrating AI ethics into its broader Smart Nation initiative. The country has established the Advisory Council on the Ethical Use of AI and Data, which oversees the implementation of AI policies and ensures that ethical considerations are embedded in AI technologies used in public services and the private sector. Singapore's ethical framework focuses on issues such as accountability, transparency, and data privacy, which are seen as essential to fostering public trust and ensuring that AI technologies are used responsibly.

In Malaysia, the case study of the National Policy on Industry 4.0 highlights the country's emphasis on ensuring that AI technologies are developed with a focus on societal benefits and sustainable economic growth. Malaysia's AI *ethical guidelines* prioritize data privacy, cybersecurity, and transparency, reflecting the country's goal of becoming a regional leader in AI while safeguarding the rights of its citizens. The implementation of these guidelines is guided by the principles set out in the policy, which aim to create an AI ecosystem that is ethical, inclusive, and aligned with international standards. These case studies demonstrate how the ethical frameworks in different Southeast Asian countries reflect their specific socio-economic goals and priorities.

The examination of the case studies from Singapore and Malaysia highlights the role of governmental leadership in shaping AI ethics frameworks. Singapore's proactive stance in integrating AI ethics into its national strategy reflects the country's recognition of the importance of public trust in the adoption of AI technologies. Malaysia's approach, while similar in many respects, emphasizes data privacy and cybersecurity as key components of its *AI governance* strategy. Both countries have made significant strides in creating *ethical guidelines* that aim to balance innovation with the protection of citizens' rights, setting them apart from other Southeast Asian nations where AI ethics are less formally developed.

In comparison, Indonesia and the Philippines have adopted a more cautious approach to *AI governance*, focusing on laying the groundwork for AI infrastructure and innovation before addressing ethical concerns in-depth (Tun et al., 2025). The *ethical guidelines* in these countries are not as detailed as those in Singapore and Malaysia, which indicates that the emphasis in these countries is still largely on technological advancement and economic

development. The findings from these case studies provide valuable insights into how *AI governance* is evolving in Southeast Asia and highlight the need for a more comprehensive and standardized approach to AI ethics across the region.

The findings from this study reveal that AI *ethical guidelines* in Southeast Asia are largely influenced by the developmental stage of AI technologies within each country. Nations with more established AI ecosystems, such as Singapore and Malaysia, tend to have more detailed and comprehensive ethical frameworks that focus on issues like fairness, transparency, and data privacy. In contrast, countries like Indonesia and the Philippines, which are still in the early stages of AI development, place less emphasis on ethical considerations, prioritizing innovation and economic growth instead (Wang et al., 2025). These findings suggest that as AI ecosystems mature in these countries, ethical frameworks will likely become more sophisticated and comprehensive, reflecting the growing recognition of the importance of responsible *AI governance*. The comparative analysis highlights the need for regional cooperation and the development of standardized *ethical guidelines* that can address the diverse challenges posed by AI technologies across Southeast Asia.

The research revealed significant variations in the development and implementation of AI *ethical guidelines* across Southeast Asian nations. Countries like Singapore and Malaysia have established comprehensive AI ethics frameworks that address key issues such as transparency, accountability, fairness, and data privacy (Zhou et al., 2025). These frameworks are deeply integrated into national strategies, such as Singapore's Smart Nation initiative and Malaysia's National Policy on Industry 4.0. Thailand also developed robust guidelines with an emphasis on social equity in AI applications. In contrast, Indonesia and the Philippines are still in the early stages of *AI governance*, focusing more on promoting innovation and technological development rather than fully embedding ethical considerations into their regulatory frameworks. The research also indicated that while AI ethical policies are becoming more recognized, their depth and comprehensiveness vary significantly, with some countries lagging behind in terms of policy maturity.

The comparative analysis highlighted that Southeast Asian nations are at different stages in their journey towards *AI governance*. While some countries like Singapore have made AI ethics a priority within their technological policies, others like Indonesia and the Philippines have focused primarily on fostering AI innovation without fully addressing its ethical implications (Robinson et al., 2025). The findings suggest that the region is divided into those who are actively developing ethical frameworks and those who are just beginning to consider their importance. This gap in policy development points to a need for more cohesive and regionally coordinated approaches to *AI governance* in Southeast Asia.

When comparing these findings with existing literature on AI ethics, the study confirms some global trends while highlighting specific regional challenges. Many scholars have noted that developed countries, such as those in Europe and North America, have been at the forefront of developing comprehensive AI ethical frameworks (Qiu et al., 2025) ; (Raheja & Belani, 2025). However, research on Southeast Asia has often focused on technological development and innovation, with less attention given to the ethical and governance aspects (Qian et al., 2024). This study expands on these insights by providing a focused comparative analysis of AI ethics in Southeast Asia, filling a gap in the literature on the region's approach to *AI governance*. It also aligns with the broader trend that while some countries have a head start in AI ethics (such as Singapore), others are still grappling with the complexities of integrating ethical considerations into their AI policies.

Unlike the developed world, where AI policies are often shaped by established frameworks and regulations, Southeast Asia's diversity in political, economic, and social contexts presents a more fragmented landscape for *AI governance*. This research underscores the region's need for tailored AI ethics policies that respect local contexts while aligning with international standards (Poti et al., 2025). While global frameworks like the European Union's

AI Act provide a model, Southeast Asian nations are still in the process of determining what works best within their unique environments. This research thus complements the global discussion by focusing on a region that is still developing its policies and governance structures for AI.

The findings from this study indicate that the varying stages of *AI governance* across Southeast Asia reflect broader socio-economic and political realities within the region. Countries like Singapore and Malaysia, with their advanced technological infrastructures and economic strategies, have been able to prioritize AI ethics as a key component of their national development agendas (Papagiannidis et al., 2025). These countries view ethical AI as essential for maintaining public trust and ensuring that AI technologies are deployed in ways that benefit society as a whole. Conversely, nations like Indonesia and the Philippines, which are still building their AI ecosystems, have yet to prioritize the ethical dimensions of AI development. The research reveals that these countries are more focused on fostering innovation and infrastructure, which has led to slower integration of AI ethics into their policy frameworks.

The results also reflect a tension between promoting AI as a driver of economic growth and addressing the societal risks associated with its deployment. While the ethical implications of AI are recognized in some countries, they are often sidelined in favor of economic goals such as attracting foreign investment or enhancing technological capabilities (Olawade & Aienobe-Asekharen, 2025). This gap suggests that ethical concerns are still seen as secondary to economic development, especially in countries with less mature AI ecosystems. This divergence in policy priorities reflects the need for a more balanced approach to *AI governance*, one that considers both the benefits and risks of AI technologies.

The findings of this research have significant implications for policymakers in Southeast Asia. As AI technologies continue to evolve and permeate various sectors, it is critical for these countries to develop *ethical guidelines* that ensure AI is deployed responsibly. The study highlights the urgent need for a coordinated approach to *AI governance* that integrates ethical considerations into technological development (Nigar et al., 2025). Without such policies, the region risks exacerbating issues such as algorithmic bias, data privacy violations, and unequal access to AI benefits. This research calls attention to the fact that while some countries have made significant strides in *AI governance*, others are at risk of falling behind if they do not prioritize ethical frameworks in their policy development.

The implications of this study extend beyond Southeast Asia. It underscores the importance of developing *AI governance* frameworks that are adaptable to different regional contexts while ensuring that global ethical standards are met. For countries that are still in the early stages of developing AI policies, the research provides insights into the benefits of adopting comprehensive AI ethics frameworks from the outset (Nguyen et al., 2025). It also suggests that regional cooperation in *AI governance* could help address shared challenges and ensure that the benefits of AI are distributed equitably. Policymakers in Southeast Asia must consider these findings as they continue to shape their AI strategies, ensuring that ethics remain a central focus of their governance frameworks.

The findings can be attributed to a combination of factors, including economic priorities, technological capabilities, and socio-political contexts within each Southeast Asian nation. Countries like Singapore and Malaysia, with their advanced technological infrastructures, are better positioned to integrate AI ethics into their governance frameworks (Moulai et al., 2025). These countries have recognized that public trust in AI is crucial for its successful integration into society and have therefore placed a strong emphasis on ethical principles such as transparency and accountability. In contrast, Indonesia and the Philippines, with their less developed AI ecosystems, have focused more on economic growth and technological infrastructure, leading to a delayed emphasis on the ethical implications of AI.

The disparity between these countries can also be explained by their varying political will and institutional capacity to address ethical issues related to AI. Nations with strong political

will and robust governance structures, like Singapore, are able to implement comprehensive AI ethics policies more effectively (Monteiro & Singh, 2025). Meanwhile, countries with less institutional capacity may struggle to incorporate ethical considerations into their AI policies, particularly when these considerations are seen as secondary to economic and technological development. Additionally, the lack of international coordination and regional cooperation has contributed to the uneven development of *AI governance* in Southeast Asia, with some countries lagging behind due to limited access to resources or expertise (Sianipar et al., 2025).

Moving forward, it is crucial for Southeast Asian nations to prioritize the development of comprehensive AI ethical frameworks that address both the potential benefits and risks of AI technologies. Policymakers should consider adopting best practices from countries with advanced *AI governance* frameworks while also ensuring that their policies are tailored to local contexts (Montalbano, 2025). There is a need for greater regional collaboration in *AI governance*, with countries working together to develop shared ethical standards and regulatory frameworks. This could include the establishment of regional bodies or initiatives focused on AI ethics, which would facilitate the exchange of knowledge, resources, and best practices.

In addition, Southeast Asian countries must invest in capacity-building efforts to ensure that their institutions are capable of developing and implementing effective *AI governance* policies. This includes training policymakers, regulators, and technologists in AI ethics, as well as fostering public awareness and engagement with the ethical dimensions of AI. As AI technologies continue to evolve, it will be essential for these countries to remain proactive in updating and refining their *ethical guidelines* to keep pace with emerging challenges. The research suggests that a holistic and adaptive approach to *AI governance* is necessary for ensuring that AI is deployed in a way that benefits society while safeguarding individual rights and promoting social equity.

CONCLUSION

The study revealed significant differences in the development and implementation of AI *ethical guidelines* across Southeast Asian nations. Singapore and Malaysia emerged as leaders in *AI governance*, with well-established, comprehensive AI ethics frameworks that prioritize transparency, accountability, fairness, and data privacy. These countries have embedded AI ethics within their national strategies, reflecting their advanced technological infrastructure and the importance they place on ensuring public trust in AI. In contrast, Indonesia and the Philippines are still in the early stages of *AI governance*, focusing more on fostering innovation and infrastructure development, with ethical concerns being addressed only at a basic level. Thailand, while closer to Malaysia in its approach, emphasizes social equity alongside the typical AI ethics concerns. These findings underscore the region's fragmented approach to *AI governance*, with some countries progressing faster than others in integrating ethics into their AI policies.

This research offers valuable contributions to the understanding of *AI governance* in Southeast Asia by providing a comparative analysis of AI *ethical guidelines* across multiple nations in the region. Unlike most studies that focus on the global or Western-centric perspectives of AI ethics, this study specifically examines Southeast Asia's unique challenges and opportunities. It highlights the importance of tailoring *AI governance* frameworks to regional socio-economic, political, and cultural contexts while aligning with international ethical standards. The methodological approach, combining *document analysis* with *semi-structured interviews*, allowed for a detailed exploration of both the theoretical foundations and practical implementation of AI ethics. This research enriches the existing literature by emphasizing the need for region-specific *AI governance* frameworks, providing a roadmap for countries still in the early stages of policy development.

While this study offers significant insights, it is not without its limitations. The research focused on five Southeast Asian countries, which, although representative of the region, may not fully capture the diversity of approaches to AI ethics in other Southeast Asian nations. Additionally, the study relied on available policy documents and interviews with policymakers and experts, which may not always reflect the broader public perception or the experiences of AI practitioners on the ground. Future research could expand the scope by including more countries from the region and incorporating perspectives from a wider range of stakeholders, including industry leaders and civil society organizations. Moreover, the dynamic nature of AI technologies and their rapid evolution calls for ongoing research to track how *AI ethical guidelines* are adapting to new challenges, such as AI's impact on labor markets and its role in surveillance. Longitudinal studies could further explore the effectiveness of *AI governance* frameworks over time and provide insights into their long-term social and economic impacts.

AUTHOR CONTRIBUTIONS

Look this example below:

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

Author 4: Formal analysis; Methodology; Writing - original draft.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

REFERENCES

- Abualruz, H., Yasin, I., Abu Sabra, M. A., Abunab, H. Y., Azayzeh, R., Zubidi, Y., Emad, S., & alriyati, B. (2025). The role of artificial intelligence in enhancing triage decisions in healthcare settings: A systematic review. *Applied Nursing Research*, 86, 152024. <https://doi.org/10.1016/j.apnr.2025.152024>
- Albaroudi, E., Mansouri, T., Hatamleh, M., & Alameer, A. (2025). HitHire: The future of ethical, fair, and sustainable AI recruitment – A governance framework. *Array*, 100592. <https://doi.org/10.1016/j.array.2025.100592>
- Allen, L. N., Lin, J., Segal, B. M., Ndlovu, K., Bilardi, D., & Pettigrew, L. M. (2025). Artificial intelligence in primary care: Frameworks, challenges, and guardrails. *The Lancet Primary Care*, 100079. <https://doi.org/10.1016/j.lanprc.2025.100079>
- Amiot, F., & Potier, B. (2025). *Artificial Intelligence (AI) and Emergency Medicine: Balancing Opportunities and Challenges*. *JMIR Medical Informatics*, 13. <https://doi.org/10.2196/70903>
- Arza, A., Lebhar, J., & Lipoff, J. B. (2025). Applications of Artificial Intelligence in Dermatology: Ethical Considerations. *Artificial Intelligence in Dermatology*, 43(4), 529–540. <https://doi.org/10.1016/j.det.2025.05.003>
- Attard-Frost, B., Brandusescu, A., & Lyons, K. (2024). The governance of artificial intelligence in Canada: Findings and opportunities from a review of 84 *AI governance* initiatives. *Government Information Quarterly*, 41(2), 101929. <https://doi.org/10.1016/j.giq.2024.101929>
- Bag, S., Rahman, M. S., Gupta, S., & Lopes de Sousa Jabbour, A. B. (2025). Artificial intelligence driven ethical procurement systems, circular economy and governance: A supplier performance analysis. *Journal of Purchasing and Supply Management*, 101075. <https://doi.org/10.1016/j.pursup.2025.101075>

- Baloda, S., Sharma, M., & Kumar, M. (2025). Future of humanity in an artificial intelligence centric world. *Engineering Applications of Artificial Intelligence*, 162, 112405. <https://doi.org/10.1016/j.engappai.2025.112405>
- Barrios, P. A., Meredyth, N., Morris, R., Haines, K., Kim, G. J., & Peterson, C. Y. (2025). Ethical Considerations in the Deployment of Artificial Intelligence in Surgery. *Journal of Surgical Research*, 315, 268–274. <https://doi.org/10.1016/j.jss.2025.08.019>
- Barsekh-Onji, A., Torres Hernandez, Z., & Cardoso Espinosa, E. O. (2025). Advancing smart public administration: Challenges and benefits of artificial intelligence. *Urban Governance*, 5(3), 279–292. <https://doi.org/10.1016/j.ugj.2025.06.003>
- Bignami, E., Darhour, L. J., Buhre, W., Cecconi, M., & Bellini, V. (2025). Artificial intelligence in healthcare: Tailoring education to meet EU AI-Act standards. *Health Policy and Technology*, 14(6), 101078. <https://doi.org/10.1016/j.hlpt.2025.101078>
- Billingsley, L., Calderon, A., & Agosta, L. (2024). Transforming Health Care: Exploring Artificial Intelligence Integration, Data Governance, and Ethical Considerations in Nursing. *Journal of Radiology Nursing*, 43(2), 107–111. <https://doi.org/10.1016/j.jradnu.2024.04.002>
- Chen, Q., Wang, H., Ma, C., & Ru, P. (2025). How professionals respond to disruptive effects of artificial intelligence on their jurisdiction: The role of interactive governance. *Social Science & Medicine*, 386, 118626. <https://doi.org/10.1016/j.socscimed.2025.118626>
- de Almeida, P. G. R., & dos Santos Júnior, C. D. (2025). Artificial intelligence governance: Understanding how public organizations implement it. *Government Information Quarterly*, 42(1), 102003. <https://doi.org/10.1016/j.giq.2024.102003>
- Deberdt, R., Le Billon, P., Makinde, O., Dauvergne, P., Solwati, T., Razmi, S., Kumar, G., & Belhabib, D. (2025). Artificial intelligence and ESG in resources-intensive industries: Reviewing the use of AI in fisheries, mining, plastics, and forestry. *The Extractive Industries and Society*, 23, 101690. <https://doi.org/10.1016/j.exis.2025.101690>
- Dhaigude, A. S., & Kamath, G. B. (2025). Mapping responsible artificial intelligence in business and management: Trends, influence, and emerging research directions. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(4), 100640. <https://doi.org/10.1016/j.joitmc.2025.100640>
- El-Sayed, A., Lovat, L. B., & Ahmad, O. F. (2025). Clinical Implementation of Artificial Intelligence in Gastroenterology: Current Landscape, Regulatory Challenges, and Ethical Issues. *Shaping the Future of Gastroenterology and Hepatology With Artificial Intelligence*, 169(3), 518–530. <https://doi.org/10.1053/j.gastro.2025.01.254>
- Ferreira, R. M. F. D., GRILO, A., & MAIA, M. (2025). Piloting a maturity model for responsible artificial intelligence: A portuguese case study. *Journal of Responsible Technology*, 22, 100117. <https://doi.org/10.1016/j.jrt.2025.100117>
- Hadzovic, S., Becirspahic, L., & Mrdovic, S. (2024). It's time for artificial intelligence governance. *Internet of Things*, 27, 101292. <https://doi.org/10.1016/j.iot.2024.101292>
- Haque, A. (2025). Responsible Artificial Intelligence (AI) in healthcare: A paradigm shift in leadership and strategic management. *Leadership in Health Services*, 38(4), 644–656. <https://doi.org/10.1108/LHS-01-2025-0018>
- Haryono, B. S., Saleh, C., & Trilaksono, H. (2025). *The Impact of Road Infrastructure Development Policies on Community Quality of Life in Batam City. Vol. 2 No. 1* (2025). <https://doi.org/10.70177/politicae.v2i1.1839>
- Kazerooni, A. F., Familiar, A. M., Aboian, M., Brüningk, S. C., Vossough, A., Linguraru, M. G., Huang, R. Y., Hargrave, D., Peet, A. C., Resnick, A. C., Storm, P. B., Mirsky, D., Yeom, K. W., Weller, M., Prados, M., Chang, S. M., Mueller, S., Villanueva-Meyer, J. E., Bakas, S., ... Nabavizadeh, A. (2025). Artificial Intelligence for Response Assessment in Pediatric Neuro-Oncology (AI-RAPNO), part 2: Challenges,

- opportunities, and recommendations for clinical translation. *The Lancet Oncology*, 26(11), e607–e618. [https://doi.org/10.1016/S1470-2045\(25\)00489-9](https://doi.org/10.1016/S1470-2045(25)00489-9)
- Kim, J.-H., Kim, J., Kang, H., & Youn, B.-Y. (2025). Ethical implications of artificial intelligence in sport: A systematic scoping review. *Journal of Sport and Health Science*, 14, 101047. <https://doi.org/10.1016/j.jshs.2025.101047>
- Kobeissi, M. M., Santa Maria, D. M., & Park, J. I. (2025). Artificial intelligence 101: Building literacy with the AI-ABCs framework. *Nursing Outlook*, 73(4), 102445. <https://doi.org/10.1016/j.outlook.2025.102445>
- Kong, S. C., & Zhu, J. (2025). Developing and validating an artificial intelligence ethical awareness scale for secondary and university students: Cultivating ethical awareness through problem-solving with artificial intelligence tools. *Computers and Education: Artificial Intelligence*, 9, 100447. <https://doi.org/10.1016/j.caeai.2025.100447>
- Lartey, D., & Law, K. M. Y. (2025). Artificial intelligence adoption in urban planning governance: A systematic review of advancements in decision-making, and policy making. *Landscape and Urban Planning*, 258, 105337. <https://doi.org/10.1016/j.landurbplan.2025.105337>
- Lee, J. W., & Lee, K. (2025). Building a consensus: Harmonizing AI ethical guidelines and legal frameworks in Korea for enhanced governance. *Government Information Quarterly*, 42(3), 102060. <https://doi.org/10.1016/j.giq.2025.102060>
- Lei, I. I., Marlicz, W., Arasaradnam, R. P., & Koulouzidis, A. (2025). Clinical Reformation in the Age of Artificial Intelligence: Safeguarding the Ethical Centre of Medicine. *Mayo Clinic Proceedings: Digital Health*, 100310. <https://doi.org/10.1016/j.mcpdig.2025.100310>
- Lin, Z., Dou, H., & Lin, S. (2025). Community-powered AI: Enhancing regional development through dataset diversity and ethical governance. *Technovation*, 147, 103315. <https://doi.org/10.1016/j.technovation.2025.103315>
- Maghsoudi, M., Mohammadi, N., & Bakhtiari, M. (2025). Artificial intelligence and sustainable development: Public concerns and governance in developed and developing nations. *Cleaner Environmental Systems*, 19, 100340. <https://doi.org/10.1016/j.cesys.2025.100340>
- Mansouri, O., Yusuf, N., & Kooli, C. (2025). Ethical frontiers and legal boundaries: Proposing a unified framework for AI regulation and accountability. *Next Research*, 2(4), 101087. <https://doi.org/10.1016/j.nexres.2025.101087>
- Mertzanis, C. (2025). Artificial intelligence and investment management: Structure, strategy, and governance. *International Review of Financial Analysis*, 107, 104599. <https://doi.org/10.1016/j.irfa.2025.104599>
- Molla, M. A. M., & Ahsan, M. M. (2025). Artificial intelligence and journalism: A systematic bibliometric and thematic analysis of global research. *Computers in Human Behavior Reports*, 20, 100830. <https://doi.org/10.1016/j.chbr.2025.100830>
- Montalbano, P. (2025). Ethical and Legal Considerations of Medical Artificial Intelligence. *AI in Primary Care*, 52(4), 769–779. <https://doi.org/10.1016/j.pop.2025.07.009>
- Monteiro, N., & Singh, V. (2025). The wheel of artificial intelligence governance. *Sustainable Futures*, 10, 101279. <https://doi.org/10.1016/j.sftr.2025.101279>
- Moulaei, K., Akhlaghpour, S., & Fatehi, F. (2025). Patient consent for the secondary use of health data in Artificial Intelligence (AI) models: A scoping review. *International Journal of Medical Informatics*, 198, 105872. <https://doi.org/10.1016/j.ijmedinf.2025.105872>
- Nguyen, A., Duong, A. T., Nguyen, D. T. B., Lai, V. T. T., & Dang, B. (2025). Guidelines for learning design and assessment for generative artificial intelligence-integrated education: A unified view. *Information and Learning Sciences*, 126(78), 491–512. <https://doi.org/10.1108/ILS-11-2024-0148>

- Nigar, M., Juli, J. F., Golder, U., Alam, M. J., & Hossain, M. K. (2025). Artificial intelligence and technological unemployment: Understanding trends, technology's adverse roles, and current mitigation guidelines. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(3), 100607. <https://doi.org/10.1016/j.joitmc.2025.100607>
- Nugroho, F. A. (2025). *ADAPTIVE LEADERSHIP IN TIMES OF GLOBAL CRISIS: CASE STUDIES FROM THE COVID-19 PANDEMIC*. Vol. 2 No. 1. <https://doi.org/10.70177/politicae.v2i1.1914>
- Olawade, D. B., & Aienobe-Asekharen, C. A. (2025). Artificial intelligence in tobacco control: A systematic scoping review of applications, challenges, and ethical implications. *International Journal of Medical Informatics*, 202, 105987. <https://doi.org/10.1016/j.ijmedinf.2025.105987>
- Papagiannidis, E., Mikalef, P., & Conboy, K. (2025). Responsible artificial intelligence governance: A review and research framework. *The Journal of Strategic Information Systems*, 34(2), 101885. <https://doi.org/10.1016/j.jsis.2024.101885>
- Pardosi, P., Muttaqim, H., & Sugeng, I. S. (2024). *Social Media Activism: The Rise of Digital Movements in the Global South*. Vol. 1 No. 6, 411–421. <https://doi.org/10.70177/politicae.v1i6.1542>
- Poti, S. P., Stanton, C. J., & Stevens, C. J. (2025). Enabling Ethics Mechanisms in the Governance of Algorithmic Artificial Persons (ALAP). *Journal of Responsible Technology*, 100143. <https://doi.org/10.1016/j.jrt.2025.100143>
- Qian, Y., Siau, K. L., & Nah, F. F. (2024). Societal impacts of artificial intelligence: Ethical, legal, and governance issues. *Societal Impacts*, 3, 100040. <https://doi.org/10.1016/j.socimp.2024.100040>
- Qiu, P., Zhang, H., Han, Y., Lei, J., & Zhang, X. (2025). Ethical issues and coping strategies for artificial intelligence in medical research. *Translational Dental Research*, 1(4), 100051. <https://doi.org/10.1016/j.tdr.2025.100051>
- Raheja, A., & Belani, K. G. (2025). The Practical and Ethical Implications of Artificial Intelligence in Anesthesiology, Pain Medicine, and Intensive Care: Safeguards. *Artificial Intelligence in Anesthesiology*, 43(3), 613–623. <https://doi.org/10.1016/j.ancin.2025.05.011>
- Robinson, J. R., Stey, A., Schneider, D. F., Kothari, A. N., Lindeman, B., Kaafarani, H. M., & Haines, K. L. (2025). Generative Artificial Intelligence in Academic Surgery: Ethical Implications and Transformative Potential. *Journal of Surgical Research*, 307, 212–220. <https://doi.org/10.1016/j.jss.2024.12.059>
- Saba, C. S., & Pretorius, M. (2024). The impact of Artificial Intelligence (AI) investment on human well-being in G-7 countries: Does the moderating role of governance matter? *Sustainable Futures*, 7, 100156. <https://doi.org/10.1016/j.sftr.2024.100156>
- Santiago, F. (2024). *Legal Reform of Term Limitations for Legislative Members as a Form of Institutional Reform*. <https://doi.org/10.70177/politicae.v1i6.1782>
- Savastano, M. C., Rizzo, C., Fossataro, C., Bacherini, D., Giansanti, F., Savastano, A., Arcuri, G., Rizzo, S., & Faraldi, F. (2025). Artificial intelligence in ophthalmology: Progress, challenges, and ethical implications. *Progress in Retinal and Eye Research*, 107, 101374. <https://doi.org/10.1016/j.preteyeres.2025.101374>
- Sianipar, G., Yuna, J., & Parera, D. (2025). *INTERGENERATIONAL SOLIDARITY IN POST-INDUSTRIAL SOCIETIES: SOSIOLOGICAL PERSFEKTIVES*. Vol. 2No. 1., 22–34. <https://doi.org/10.70177/politicae.v2i1.1899>
- Tong, A., Zainol, Z., Chong, T. S., & Renganathan, K. (2025). AI governance on young consumers in higher education: A content analysis of policies for generative AI. *Young Consumers: Insight and Ideas for Responsible Marketers*, 26(5), 865–885. <https://doi.org/10.1108/YC-10-2024-2303>

- Tun, H. M., Naing, L., Malik, O. A., & Rahman, H. A. (2025). Navigating ASEAN region *Artificial Intelligence (AI)* governance readiness in healthcare. *Health Policy and Technology*, 14(2), 100981. <https://doi.org/10.1016/j.hlpt.2025.100981>
- Wang, X., Wang, Q., Ding, G., Wang, J., Tang, Y., & Feng, Y. (2025). Artificial intelligence in multidisciplinary tumor boards enhancing decision making and clinical outcomes in oncology. *iScience*, 28(12), 114082. <https://doi.org/10.1016/j.isci.2025.114082>
- Zhou, X., Li, G., Wang, Q., Li, Y., & Zhou, D. (2025). Artificial intelligence, corporate information governance and ESG performance: Quasi-experimental evidence from China. *International Review of Financial Analysis*, 102, 104087. <https://doi.org/10.1016/j.irfa.2025.104087>
-

Copyright Holder :

© Dikdik Firman Sidik et.al (2025).

First Publication Right :

© Cognitionis Civitatis et Politicae

This article is under:

