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# Regulating Artificial Intelligence: A Study in the Comparison between South Asia and Other Countries

## MD. Mahmud Hasan

Department of Criminology, Faculty of Social Sciences, Nilkhet Road, University of Dhaka, Dhaka-1000, Bangladesh, mdmahmud-2019613882@crim.du.ac.bd

## Abstract

Any regulation, law, or legal order enforced by the lawful authority of a territory to maintain, control, and regulate the characteristics, development, and public interaction of an artificial entity developed in a digital manner can be called Al legislation. The paper presents a comparative analysis of the regulatory landscape for artificial intelligence in the South Asian countries in relation to other selective countries and organizations globally, in light of the challenges encountered in regulating Al in the region. Furthermore, the study demonstrates that South Asian nations have experienced a significant and persistent legal disparity in comparison to other global regions, which has been both involuntary and inequitable. The paper presents an argument for the regulation of artificial intelligence and offers suggestions for South Asian countries to effectively regulate Al despite challenges related to its design and economic limitations.

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Artificial Intelligence, Al Legislation, Global Al Regulation, Al Regulatory Challenges, Al Regulation in South Asia, Effective Al Regulatory Strategies, Legal Disparity in Al Regulation.

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## Introduction

The field of artificial intelligence pertains to the domain of computer science and engineering, with the objective of developing intelligent agents or systems that can evaluate their surroundings, engage in logical thinking. and execute actions to accomplish their objectives. The definition of artificial intelligence, commonly referred to as AI, is a theme of debate within academic circles. The majority of scholars and experts perceive AI as a comprehensive concept that encompasses various subfields, including machine learning (ML). ML, in turn, synergizes with another subfield called deep learning to emulate human-like decision-making and other cognitive processes [Janiesch C., 2021: 685]. A minority of scholars hold the perspective that modern forms of digital algorithms, programs, and techniques for data analysis and decision-making possess the capacity to operate intentionally as "intelligent software" rather than "artificial intelligence" [Shchitova A.A., 2020: 616]. Whatever the definition may be, the field of AI is experiencing significant growth and integration into various aspects of our daily lives. However, the current laws and regulations designed to govern and manage this technology are inadequate and lagging behind. This is due to the absence of a stable and widely accepted definition or implementation of AI, which poses challenges in developing an effective policy framework [Calo R., 2017: 407].

Governments worldwide are endeavoring to formulate AI-related laws that consider their distinctive perspectives, technological expertise, technological domains, and socioeconomic milieu. With an attempt to answer the question: Is AI creating a legal vacuum in South Asia as opposed to other regions? This paper seeks to compare the laws and regulations pertaining to artificial intelligence in the most populous countries and regions of the world, including those that are currently enacted, under development or in draft form, with the regulations, laws, and any type of legal initiative from the South Asian countries regarding AI. Additionally, it aims to identify the challenges associated with regulating AI in South Asian countries: India, Pakistan, Bangladesh, Afghanistan, Nepal, Sri Lanka, Bhutan, and the Maldives.

In the article's Part II, the author explains why artificial intelligence has to be regulated on a worldwide scale. The significance of this issue spans from the protection of fundamental human rights to the mitigation of monopolistic practices exhibited by large technology corporations on a global scale. The third section of the paper will provide an overview of the rules and regulations pertaining to artificial intelligence that have been implemented, formulated, or suggested by various countries and organizations, including China, the African Union, the European Union, the United States, Brazil, and Australia. This section will additionally showcase the existent legislation and forthcoming endeavors of South Asian nations, with the aim of regulating artificial intelligence within their respective jurisdictions. Furthermore, this section explores the regulatory frameworks and initiatives pertaining to artificial intelligence established by the Organization for Economic Cooperation and Development (OECD). Building upon Part III, Part IV undertakes a critical analysis to demonstrate the emergence of legal disparities in the South Asian region pertaining to the formulation of adequate regulations for artificial intelligence. This section will also elucidate the key challenges faced by South Asian nations in keeping abreast of the latest advancements in this technology. Based on the issues highlighted in Part IV, Part V proposes measures that these countries can adopt to enable the democratic regulation of artificial intelligence.

## 1. Why AI Should be Regulated?

Academic discourse has highlighted the remarkable proliferation of artificial intelligence in our quotidian affairs, which has prompted the emergence of regulatory frameworks for AI. This development has arisen from a broad apprehension regarding the potential existential peril that AI poses to humanity, such as the displacement of jobs and the subjugation of humans to machines [Bathaee Y., 2018: 897]. In the event that highly sophisticated and intricate artificial intelligence systems are not subject to regulation and oversight, there exists the possibility that they may veer from desirable conduct and execute tasks in an unethical manner. The regulation of AI has been a significant matter due to the subsequent rationales:

#### A) Safety and Security

Malfunctioning or inappropriate use of AI systems can result in harmful consequences. Improper design of AI software and testing of autonomous vehicles can result in accidents [Hong J.W., 2020: 36]. AI systems have the potential to be utilized for military applications, including the development of self-governing armaments. Research findings demonstrate that the development of military-grade AI applications presents a range of risks such as ethical risks from humanitarian standpoints due to the reason that machines lack human understandings and operational risks regarding reliability, fragility and security of AI systems themselves [Morgan F., 2020: 118].

#### B) Public Opinion

In recent times there has been a growing concern among individuals regarding the regulation of AI as it continues to rapidly advance and strengthen its capabilities. As per reports and surveys, approximately 66% of individuals from Australia and 62% of the British people opine that the AI industry should be subjected to regulation and accountability<sup>1</sup> [Lockey S., 2020: 8]. According to a study conducted by IBM in 2020, a majority of Americans (62%) and Europeans (70%) express a preference for precise regulations on specific technologies, with a similar proportion of Americans (60%) and Europeans (70%) indicating a desire for regulation of artificial intelligence.<sup>2</sup>

## C) Public Assurance

The implementation of AI regulation is essential in order to ensure that the government can offer citizens the necessary guarantees of transparency, accountability, and security, thereby ensuring equitable and fair treatment during the utilization of AI.<sup>3</sup> By implementing precise rules and regulations, citizens may have confidence that law enforcement authorities will not be limited to relying only on reinterpreting outdated laws that were not intended to govern contemporary society and advanced technology.

## D) Monopolistic Corporations

Regulating AI is deemed necessary due to the existing monopolies on AI technology by major tech companies, including Intel, IBM, Google, Microsoft, Amazon, and Baidu, which collectively account for over 40% of the market share as of 2017.<sup>4</sup>

## E) Human Rights and Privacy

Artificial intelligence systems possess the capacity to infringe upon human rights by means of partiality and discrimination, invasion of privacy and surveillance, absence of lucidity and responsibility, employment and job displacement as well as weaponization [Rodrigues R., 2020: 100005]. Algorithmic systems have the potential to compromise not only the fundamental rights of privacy and non-discrimination, but also other essential rights<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> Available at: https://www.adalovelaceinstitute.org/wp-content/up-loads/2023/06/Ada-Lovelace-Institute-The-Alan-Turing-Institute-How-do-people-feel-about-AI.pdf (accessed: 29.12. 2023)

<sup>&</sup>lt;sup>2</sup> Available at: https://www.ibm.com/policy/ai-precision-regulation/ (accessed: 29.03.2023)

<sup>&</sup>lt;sup>3</sup> Available at: https://assets.publishing.service.gov.uk/media/65ccf508 c96cf-3000c6a37a1/Introduction\_to\_AI\_Assurance.pdf (accessed: 05.03.2024)

<sup>&</sup>lt;sup>4</sup> Available at: https://www.wired.com/2017/03/intel-just-jumped-fierce-competition-ai-talent/ (accessed: 29.03.2023)

<sup>&</sup>lt;sup>5</sup> Bias in algorithms — artificial intelligence and discrimination. European Union Agency for Fundamental Rights. Available at: https://fra.europa.eu/sites/default/files/ fra\_uploads/fra-2022-bias-in-algorithms\_en.pdf (accessed: 28.12.2023)

[Chen Z., 2023: 10]. The issue of freedom of expression and association is also raised by AI systems.<sup>6</sup> For instance, it has been reported that China is implementing AI technology to censor speech regarding anti-lockdown protests, crowd counting and control<sup>7</sup>, mass surveillance and ethnic sorting, coercion and inducement of Uyghur community in Xinjiang [Leibold J., 2019: 11–13]; [Qiang X., 2019: 53–67].

Consequently, the institutionalization of AI ethics into legal frameworks is imperative. This measure would facilitate the regulation of AI and its effects for governmental and international entities. It would ensure that all new AI technologies, regardless of their level of complexity, undergo a development process that prioritizes the minimization of non-compliance and failure risks.

## 2. Findings

#### 2.1. AI Laws and Regulations in China, Africa, Europe, United States, Brazil, and Australia

#### 2.1.1. China

As corporations implement their artificial intelligence technologies and customers utilize them, establishing trust is of utmost significance given the precarious line that separates the appropriate application of AI from its misuse. This is the point at which the Chinese government placed greater emphasis on fostering trust between individuals and corporations within China. The Provisions on the Management of Algorithmic Recommendations for Internet Information Services, a Chinese AI regulation enacted on March 1, 2022, seeks to prevent the abuse and misuse of algorithmic technologies<sup>8</sup>. Its primary objective is to ensure transparency between companies and their consumers by enabling government oversight of the data collected by companies from their customers<sup>9</sup>. Despite the limited impact of the Algorithm Provisions on the Chinese government's internal mass surveillance practices, the enactment of the Chinese AI law has garnered a

<sup>&</sup>lt;sup>6</sup> Available at: https://www.lawfaremedia.org/article/assessing-impacts-of-aion-human-rights-it-s-not-solely-about-privacy-and-nondiscrimination (accessed: 31.03.2023)

<sup>&</sup>lt;sup>7</sup> Available at: https://www.ispionline.it/en/publication/how-china-uses-artificial-intelligence-control-society-23244 (accessed: 19.09.2023)

<sup>&</sup>lt;sup>8</sup> Available at: https://www.chinalawtranslate.com/en/algorithms/ (accessed: 10.10.2023)

<sup>&</sup>lt;sup>9</sup> Available at: https://www.insideprivacy.com/artificial-intelligence/chinatakes-the-lead-on-regulating-novel-technologies-new-regulations-on-algorithmicrecommendations-and-deep-synthesis-technologies/ (accessed: 31.03.2023)

diverse range of global responses. The legislation in question is praiseworthy for being the first instance of its sort to be effectively enforced. However, researchers note that the law lacks guidance on the proper procedure for individual users to report suspected instances of abuse to the relevant authorities, beyond the existing channels offered by technology corporations [Su Z., 2023: 3].

In January 2022 another law, Provisions on the Management of Deep Synthesis in Internet Information Service, was formulated in conjunction with the Algorithm Provisions. This law "includes but is not limited to" text, speech, non-speech, biometric, non-biometric and other virtual contents which aims to combat deep fakes and regulate activities related to the use of deep synthesis technologies, as well as activities that provide technical support to deep synthesis services within Chinese territory, came into force on January 10, 2023<sup>10</sup>. Moreover, the providers are legally obligated to implement precautions that do not hinder users' ability to use the service, while still maintaining appropriate records in compliance with applicable rules<sup>11</sup>.

The Interim Measures for the Management of Generative Artificial Intelligence Services (hereinafter Interim Measures) were jointly announced by the Cyberspace Administration of China (CAC) and six other Chinese authorities on 13 July 2023 and came into force on 15 August 2023<sup>12</sup>. The newly added Articles 4 and 5 of the Interim Measures aim to promote the establishment of platforms, independent innovation, international interchange, and development of generative AI technology across several domains<sup>13</sup>. These measures also emphasize the need of subjecting AI to acceptable oversight. To achieve a more harmonious alignment between technology advancements and regulatory requirements, Article 21 of the legislation eliminates the rigorous provisions included in the Draft Measures, such as the imposition of penalties and termination of services in cases of noncompliance or violation<sup>14</sup>. Article 20 of the Interim Measures grants the Chinese authorities the authority to regulate the use of foreign

<sup>&</sup>lt;sup>10</sup> Available at: https://www.loc.gov/item/global-legal-monitor/2023-04-25/ china-provisions-on-deep-synthesis-technology-enter-into-effect/#:~:text= The%20 deep%20synthesis%20provisions%20set,labeling%2C%20technical%20security%2C%20 etc (accessed: 21.09.2023)

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> Available at: https://www.pwccn.com/en/industries/telecommunicationsmedia-and-technology/publications/interim-measures-for-generative-ai-servicesimplemented-aug2023.html (accessed: 29.10.2023)

<sup>&</sup>lt;sup>13</sup> Available at: https://www.chinalawtranslate.com/en/generative-ai-interim/ (accessed: 29.10.2023)

<sup>&</sup>lt;sup>14</sup> Ibid.

generative AI platforms inside China same as domestic providers. Additionally, Article 23 establishes the structure for foreign investment in the Chinese generative AI industry.

#### 2.1.2. Europe

While China is leading the way on the implementation of artificial intelligence acts, the European Union (hereinafter EU) has been working on more comprehensive and effective laws with the backbone General Data Protection Regulation (hereinafter GDPR). While the GDPR does not explicitly include "artificial intelligence" or other related terminology such as autonomous systems, intelligent systems, automated reasoning and inference, machine learning, or big data, it does encompass certain regulations that pertain to the field of AI<sup>15</sup>:

Article 4(1) on Personal Data and Identifiability of the GDPR presents issues on the use of artificial intelligence in the process of re-personalizing anonymous data that entails the identification of people associated with this data. Artificial intelligence has the capacity to deduce further personal information from existing data, thereby enhancing the potential for identifying individuals within the dataset.

Although the GDPR does not directly refer to AI, it does embrace the processing of personal data that is conducted using AI technology (Article 4(2) on profiling). The practice of profiling, that involves using data to draw conclusions about different facets of an individual, falls within the purview of GDPR compliance.

The GDPR places significant importance on the characteristics of permission, which include being freely provided, precise, informed, and clear (Article 4(11). The idea of "informational self-determination" is integral to conventional data protection frameworks, since it emphasizes the significance of consent in granting people the authority to manage their personal information.

The GDPR in Article 5(1)(b) establishes Purpose Limitation. The idea of purpose restriction creates a correlation between the intended objective of data processing and its legal foundation. AI technologies have the potential to pose a challenge to the purpose restriction requirement by facilitating the use of personal data for novel purposes that deviate from the initial objectives of data acquisition. The evaluation of the validity of repurposing

<sup>&</sup>lt;sup>15</sup> Available at: https://www.europarl.europa.eu/thinktank/en/document/EPRS\_STU(2020)641530 (accessed: 01.11.2023)

data entails the examination of the compatibility between the new purpose and the original purpose.

The GDPR in Article 5(1)(d) stipulates that data must adhere to accuracy standards and be subject to frequent updates, accompanied by appropriate actions to address any mistakes. The notion of accuracy is also applicable in cases when AI systems use personal data to make conclusions about the individual, ensuring these inferences are derived from precise and reliable facts.

However, part of academics contends the GDPR may lack efficiency when applied to real AI technologies. They argue that achieving complete compliance from data controllers and processors utilizing such technologies is improbable, especially with regards to the right to information, the general principle of transparency, and the right to erasure [Kesa A., 2020: 68].

The Artificial Intelligence Act, initially proposed by the European Union in April 2021, represents a noteworthy advancement in the realm of AI legislation and governance within Europe<sup>16</sup>. The AI Act represents landmark legislation that establishes regulations for AI on a continental scale with the objective of guaranteeing ethical, transparent, and accountable deployment of AI technology, regarding which the EU Council and EU Parliament landed on a provisional agreement of implementation on December 9, 2023<sup>17</sup>. The act covers various AI applications, including facial recognition and deep learning algorithms. It establishes a thorough framework for assessing, certifying, and monitoring AI systems in the market. It also includes regulations on high-impact general-purpose AI models and requires a prior assessment of their impact on fundamental rights before their deployment. Due to the broad scope of AI implementation and its potential impact, the Act is expected to incur significant costs and apply to any entity that offers a product or service utilizing AI technology<sup>18</sup>. To guide AI and future development of them, EU's AI Act follows risk-based approach, categorizing types of AI systems into 4 risk categories<sup>19</sup>:

<sup>&</sup>lt;sup>16</sup> Proposal for a Regulation laying down harmonised rules on artificial intelligen ce. Available at: https://digital-strategy.ec.europa.eu/en/library/proposal-regulationlaying-down-harmonised-rules-artificial-intelligence (accessed: 01.04.2023)

<sup>&</sup>lt;sup>17</sup> Available at: https://www.consilium.europa.eu/en/press/press-releases/2023/12/09/artificial-intelligence-act-council-and-parliament-strike-a-deal-on-the-first-worldwide-rules-for-ai/ (accessed: 13.12.2023)

<sup>&</sup>lt;sup>18</sup> Available at: https://www.reuters.com/technology/what-is-european-union-ai-act-2023-03-22/ (accessed: 01.04.2023)

<sup>&</sup>lt;sup>19</sup> 'Regulatory framework proposal on artificial intelligence-European Comm ission. Available at: https://digital-strategy.ec.europa.eu/en/policies/regulatoryframework-ai (accessed: 02.04.2023)

A) Unacceptable risk. Unacceptable risk AI systems are seen as a potential menace to individuals and will be prohibited. The techniques included are: Cognitive behavioral manipulation of individuals or targeted susceptible populations, social scoring, and real-time and remote biometric identification technologies, such as face recognition.

B) **High risk**. Applications concerning transportation, education, employment, and welfare. Companies are required to undergo a preliminary "conformity assessment" and fulfill a comprehensive set of criteria to guarantee the safety of the system.

C) **Limited risk**. AI systems must adhere to basic transparency standards to enable users to make well-informed choices. Upon engaging with the programs, the user may then choose their preference for continued use. This encompasses artificial intelligence systems that produce or alter visual, auditory, or audiovisual material, such as deep fakes.

D) Minimal risk. These applications are already extensively implemented and constitute the majority of the artificial intelligence systems we now engage with. Illustrative instances include spam filters, video games enhanced with artificial intelligence, and inventory-management systems.

The classification of AI systems into different risk categories is determined by certain criteria, including the intended purpose of the AI system, based on the level of potential harm associated with the system, its technological qualities, and its possible influence on the health, safety, and basic rights of individuals. These risk categories are designed to guide the level of regulatory scrutiny and oversight applied to different types of AI applications, ensure the responsible development and deployment of AI technologies, guarantee safety and fundamental rights, enable appropriate regulatory oversight, facilitate innovation, and provide legal charity within the EU.

The AI Act has been subject to criticism from certain factions due to its perceived level of prescriptions, which may impede innovation and introduce superfluous bureaucracy. In addition, experts posited that the recently developed AI chat bot, known as Chat GPT, and similar other applications, purportedly contravened the European Union's extensively formulated strategy for managing and overseeing such advanced software<sup>20</sup>. However, advocates of the AI Act contend that its implementation is imperative to safeguarding the fundamental rights of citizens and mitigating the potential misuse of AI systems for detrimental purposes<sup>21</sup>.

<sup>&</sup>lt;sup>20</sup> Available at: https://www.politico.eu/article/eu-plan-regulate-chatgpt-openaiartificial-intelligence-act/ (accessed: 03.04.2023)

<sup>&</sup>lt;sup>21</sup> Available at: https://www.weforum.org/agenda/2023/03/the-european-union-s-ai-act-explained/ (accessed: 03.04.2023)

#### 2.1.3. Africa

Similar to the European Union, the African Union (AU) has been collaborating with its 55 constituent states to promote governance throughout the African continent. Within the continental framework the AU has successfully established a working group on artificial intelligence, formulated a blueprint specific to Africa for the regulation of AI, ratified Resolution 473, and adopted the Malabo Convention to address the potential impact of AI on human rights and safeguard personal data.

The Malabo Convention, the only binding regional treaty of privacy and personal data protection outside the European continent, came into force in June 2023, nine years later after its approval in 2014<sup>22</sup>. It is a comprehensive convention that aims to establish a set of overarching regulations and principles pertaining to three main areas: the protection of personal data, electronic commerce, and cyber-security and cybercrimes within the continent introducing several fundamental rights for individuals whose data is being processed, including the right to be informed, the right to access their data, the right to object, and the right to have their data erased, as outlined in Articles 9-23 of the Convention. Despite being a pioneering framework for the African continent, scholars contend that the Malabo Convention lacks precision regarding its applicability to data processors or controllers located outside the continent<sup>23</sup>. In contrast, the EU's GDPR addresses such scenarios, specifically when processing activities are connected to: (i) providing goods or services to individuals within the European Union; or (ii) monitoring their behavior within the Union [Ryngaert C., 2020: 114].

Furthermore, African countries have the opportunity to use the Smart Africa Blueprint on Artificial Intelligence in order to formulate and implement their own AI initiatives. The Blueprint is an integral component of the Smart Africa Initiative. It serves as a framework for the establishment of an AI strategy, highlighting essential factors and considerations to be taken into account during its formulation<sup>24</sup>. The Blueprint outlines the significant opportunities and challenges associated with the advancement

<sup>&</sup>lt;sup>22</sup> African Union Convention on Cyber Security and Personal Data Protection. Available at: https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection (accessed: 21.09.2023)

<sup>&</sup>lt;sup>23</sup> Available at: https://www.ejiltalk.org/the-african-unions-malabo-conventionon-cyber-security-and-personal-data-protection-enters-into-force-nearly-aftera-decade-what-does-it-mean-for-data-privacy-in-africa-or-beyond/ (accessed: 07.10.2023)

<sup>&</sup>lt;sup>24</sup> Available at: https://smartafrica.org/knowledge/artificial-intelligence-for-africa/ (accessed: 10.10.2023)

and utilization of AI in Africa, along with strategies to effectively address them. Furthermore, it provides specific policy recommendations aimed at maximizing the potential benefits of AI while minimizing associated risks in African nations.

Moreover, despite AU's concerted efforts, member states have yet to demonstrate adequate attention to regulating artificial intelligence at the domestic level. A recent study indicates that a mere 2% of AU members have enacted AI legislation to a limited extent, while only 7% have established a national strategy, expert bodies, and national planning for AI [Davis T., 2022: 10].

#### 2.1.4. The United States

Recent developments in AI laws and regulations in the United States seek to strike a balance between the advantages of AI technology and the potential risks to privacy, security, and fairness.

The National AI Initiative Act of 2020 passed on January 1, 2021 represents a noteworthy advancement in AI regulation within the United States. This legislation entails the implementation of a comprehensive initiative throughout the entirety of the federal government with the aim of expediting research and utilization of artificial intelligence for the betterment of the nation's economic well-being and safeguarding its security interests<sup>25</sup>. The National AI Initiative Act established the National AI Initiative, with the aim of enhancing and consolidating AI research, development, demonstration, and education endeavors across all governmental departments and agencies in the United States<sup>26</sup>. While the law lauds the "continued leadership in artificial intelligence research and development" of the United States, its primary goal is not to regulate the research and implications of AI applications.

The AI Risk Management Framework (hereinafter RMF), developed by National Institute for Standards and Technology (hereinafter NIST), authorized by the Congress, is a comprehensive set of risk management procedures specifically designed for AI applications<sup>27</sup>. It aims to gather knowledge and provide direction without imposing strict rules. Even going

<sup>&</sup>lt;sup>25</sup> Available at: https://www.congress.gov/bill/116th-congress/house-bill/6216/ text (accessed: 04.04.2023)

<sup>&</sup>lt;sup>26</sup> Available at: https://www.orrick.com/en/Insights/2021/11/US-Artificial-Intelligence-Regulation-Takes-Shape (accessed: 06.04.2023)

<sup>&</sup>lt;sup>27</sup> Available at: https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf (accessed: 18.12.2023)

so far as to suggest that users tailor the RMF to their own requirements and employ just portions of it, NIST makes very clear that the RMF is entirely optional.

The AI in Government Act of 2020 was a legislative proposal presented in the House of Representatives during the 116th Congress. Although the bill was approved by the House on September 14, 2020, it did not get any further and eventually failed to be enacted into law<sup>28</sup>. While the Act did not pass legislation, it initiated significant deliberations on the conscientious advancement and use of AI in the public domain. Certain aspects of it have been integrated into other executive orders and policies.

The primary objective of the Advancing American AI Act of 2022 is to foster the growth and use of AI in a manner that is consistent with core US principles like safeguarding privacy, upholding civil rights, and protecting civil liberties<sup>29</sup>. It was first introduced in the Senate in April 2021 and went through various stages of deliberation before being incorporated into the National Defense Authorization Act for Fiscal Year of 2023, effectively entering into force on December 23, 2022, with a grace period<sup>30</sup>. Nevertheless, similar to any other legal framework, this act has some vulnerabilities, including a deficiency in clearly defining U.S. principles and regulations, a narrow concentration only on public procurement, a restricted reach, and the potential for bureaucratic complexity.

Apart from the federal initiatives, a number of states in the United States have implemented their own regulations pertaining to AI. In October of 2019 the state of California has enacted a comprehensive consumer privacy law known as the California Consumer Protection Act. The legislation was subsequently expanded to the California Privacy Rights Act in 2020 and came into force on January 1, 2023<sup>31</sup>. The state of Virginia has recently enacted the Virginia Consumer Data Protection Act, which has been implemented alongside the CPRA as of January 1, 2023<sup>32</sup>. Both of these legislative measures incorporate provisions pertaining to the utilization of AI and machine learning, as well as the protection of user data associated with

<sup>&</sup>lt;sup>28</sup> Available at: https://www.congress.gov/bill/116th-congress/house-bill/2575/ text (accessed: 19.12.2023)

<sup>&</sup>lt;sup>29</sup> Available at https://www.congress.gov/bill/117th-congress/senate-bill/1353/ text/is (accessed: 20.12.2023)

<sup>&</sup>lt;sup>30</sup> Available at: https://digitalpolicyalert.org/change/4281-advancing-americanai-act-s1353 (accessed: 23.12.2023)

<sup>&</sup>lt;sup>31</sup> Available at: https://cppa.ca.gov/regulations/ (accessed: 23.12.2023)

<sup>&</sup>lt;sup>32</sup> Available at: https://law.lis.virginia.gov/vacodefull/title59.1/chapter53/ (accessed: 23.12.2023)

these technologies. Several other states, namely Alabama, Colorado, Connecticut, Illinois, Indiana, Kentucky, Massachusetts, Mississippi, New York, and Vermont have enacted laws or regulations associated with different facets of AI, encompassing data privacy, safeguarding consumer interests, and the employment of AI systems by the government<sup>33</sup>.

Additionally, the federal government has set up a number of organizations to manage AI research, development and rollout. NIST's approach to risk management in AI systems, for instance, includes recommendations for ensuring high-quality data, clear explanations, and equitable outcomes<sup>34</sup>. The Federal Trade Commission has created a specialized department that is responsible for scrutinizing and implementing policies concerning AI and other nascent technologies with the primary objective of curbing fraudulent and inequitable practices. The Artificial Intelligence Capabilities and Transparency Act that was enacted into law in December 2021, seeks to enhance transparency in the government's AI systems, in accordance with the recommendations of the National Security Commission on AI <sup>35</sup>.

Furthermore, both the current and preceding U.S. presidents have issued several executive orders to govern and advance AI. The primary focus of attention has been on these orders, including Executive Order 13859, Executive Order 13960, OMB Memo M-21-06, the Blueprint for an AI Bill of Rights (2022), and Executive Order 14091<sup>36</sup>. Nevertheless, these directives have faced significant criticism from academics who characterize them as yet another instance of an "ineffective" U.S. AI strategy, contending that they are incapable of establishing any official U.S. policy<sup>37</sup>.

Apart from the regulations imposed by the federal and state authorities, there exist several industry-specific guidelines and initiatives concerning AI. The Partnership on AI is a collaborative consortium comprising various entities such as corporations, academic institutions, and non-governmental organizations, with the objective of formulating optimal guidelines for artificial intelligence systems that are characterized by ethical, open, and trust-

<sup>&</sup>lt;sup>33</sup> Available at: https://www.brookings.edu/blog/techtank/2023/03/22/how-california-and-other-states-are-tackling-ai-legislation/ (accessed: 09.04.2023)

<sup>&</sup>lt;sup>34</sup> Available at: https://www.nist.gov/news-events/news/2023/01/nist-riskmanagement-framework-aims-improve-trustworthiness-artificial (accessed: 10.04.2023)

<sup>&</sup>lt;sup>35</sup> Available at: https://www.congress.gov/bill/117th-congress/senate-bill/1705/ text?r=82&s=1 (accessed: 23.12.2023)

<sup>&</sup>lt;sup>36</sup> Available at: https://carnegieendowment.org/2023/05/03/reconciling-u.s.-approach-to-ai-pub-89674 (accessed: 20.12.2023)

<sup>&</sup>lt;sup>37</sup> Available at: https://www.wired.com/story/bidens-ai-bill-of-rights-is-toothless-against-big-tech/ (accessed: 20.12.2023)

worthy attributes. The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems is a program that seeks to advance the ethical and responsible development and deployment of AI<sup>38</sup>.

#### 2.1.5. Brazil

Brazil's legal framework governing AI encompasses several regulations, including the Civil Framework for the Internet, the Consumer Protection Code, and the Access to Information Law<sup>39</sup>. Furthermore, Brazil has implemented a nationwide AI strategy, Brazilian Strategy for Artificial Intelligence ("EBIA") with the objective of promoting research and innovation in the field while simultaneously ensuring ethical utilization of the technology. The EBIA is derived from the five principles outlined in the OECD AI Principles, which are [Filgueiras F., 2023: 2]: (i) promoting inclusive growth, sustainable development, and well-being; (ii) prioritizing values centered on human beings and equality; (iii) ensuring transparency and explanation; (iv) emphasizing robustness, security, and protection; and (v) enforcing responsibility.

Bill 21/20 marked a significant milestone in Brazil as the first legislation specifically targeting AI. It has introduced a decentralized approach to AI regulation, emphasizing that regulation should be the exception rather than the norm which each economic sector would be responsible for regulating AI applications within its domain<sup>40</sup>. For instance, the federal agency overseeing the healthcare sector would regulate AI applications in that particular field. Although the Act was supported by the private sector and passed by the Brazilian Congress, it was not implemented because the Brazilian Senate decided to form a Commission of Jurists to propose a new bill instead of voting on it. This decision was made due to serious concerns that the act would weaken the legal protections provided in Brazil and have negative impacts on fundamental rights such as data protection, freedom of expression, and equality [Belli L., 2023: 48]. The Act also fails to address the risks associated with artificial intelligence, while allowing for the development, commercialization, and operation of systems that are not reliable and human-centered.

<sup>&</sup>lt;sup>38</sup> Available at: https://standards.ieee.org/industry-connections/ec/autonomoussystems/ (accessed: 12.04.2023)

<sup>&</sup>lt;sup>39</sup> Available at: https://www.informationpolicycentre.com/brazil-ai-project.html (accessed: 13.04.2023)

<sup>&</sup>lt;sup>40</sup> Available at: https://cyberbrics.info/non-official-translation-of-the-brazilian-artificial-intelligence-bill-n-21-2020/ (accessed: 22.12.2023)

This situation puts Brazil at risk of becoming a platform for irresponsible individuals to violate rights and freedoms without facing any consequences. With all these going on, researchers express concern over Brazil's current status in the field of AI, however, the Brazilian Senate has recently released a comprehensive report spanning 900 pages, outlining recommendations for the regulation of AI tools in response to the emergence of the Chat GPT-like AI phenomenon<sup>41</sup>.

#### 2.1.6. Australia

In November 2019 the Australian Government has unveiled the AI Ethics Principles, which comprise a framework of directives designed to promote ethical, transparent, and accountable development and implementation of AI technology within the country<sup>42</sup>. In accordance with the AI Standards Roadmap of 2020, Australia endeavors to establish itself as a prominent nation in the advancement and implementation of artificial intelligence, despite the absence of a specialized legislative framework pertaining to AI, Big Data, or any variant of automated decision-making instruments yet today "at the back of the pack" in regulating AI<sup>43</sup>.

#### 2.2. Artificial Intelligence Regulations by OECD

The Organization for Economic Cooperation and Development (hereinafter OECD) has formulated a comprehensive Framework for the Classification of AI Systems. This framework serves as a valuable tool for policy makers, regulators, legislators, and other stakeholders to evaluate the potential benefits and drawbacks associated with various categories of AI systems. It also aids in the development of informed AI policies. The OECD Principles on Artificial Intelligence have introduced a novel framework that categorizes AI applications based on their potential impact on individuals, society, and the planet<sup>44</sup>. Additionally, the AI system's lifecycle serves as a complementary structure to comprehend the fundamental technical features of a system<sup>45</sup>.

<sup>&</sup>lt;sup>41</sup> Available at: https://brazilian.report/tech/2023/03/21/ai-regulation-brazil/ (accessed: 13.04.2023)

<sup>&</sup>lt;sup>42</sup> Available at: https://www.industry.gov.au/publications/australias-artificial-intelligence-ethics-framework (accessed: 13.04.2023)

<sup>&</sup>lt;sup>43</sup> Available at: https://www.theguardian.com/australia-news/2023/nov/07/ australia-ai-artificial-intelligence-regulations-back-of-pack (accessed: 27.12.2023)

<sup>&</sup>lt;sup>44</sup> Available at: https://oecd.ai/en/ai-principles (accessed: 27.12.2023)

<sup>&</sup>lt;sup>45</sup> A First Look at the OECD's Framework for the Classification of AI Systems, Designed to Give Policymakers Clarity. Available at: https://oecd.ai/en/wonk/a-first-

The Classification of AI Systems is founded on a four-fold classification system that partitions AI systems into dimensions, namely Context, Data and Input, AI Model, and Task and Output<sup>46</sup>. Each dimension of an AI system possesses distinct properties and attributes, including sub-dimensions that are pertinent to evaluating policy considerations specific to that system. As per the data for 2022, no less than 60 countries across the globe have implemented certain forms of artificial intelligence policies. It has been made possible, in part, due to the efforts of the OECD, as over 40 countries have adhered to the OECD's framework<sup>47</sup>.

## 3. AI Regulation in South Asian Countries

South Asia comprises eight countries, namely India, Pakistan, Bangladesh, Afghanistan, Nepal, Sri Lanka, Bhutan, and the Maldives situated in the Southern region of the Asian continent. With a population exceeding two billion, South Asia stands as the most densely populated region globally. According to Oxford Insights' *Government AI Readiness Index* of 2022 based on how the three main indicators: (i) Government; (ii) Technology; and (iii) Data & Infrastructure are prepared to adapt AI tools, every South Asian country is below the global average except for India. It has a sense now to examine the measures being taken by South Asian nations to govern the implementation of artificial intelligence within their respective jurisdictions:

## 3.1 India

Although the Indian government issued various reports and policy documents, such as NITI Aayog's Responsible AI for All delineating the parameters regarding the utilization, accountability, and responsibility of AI-driven technologies, there is currently no codified legislation, statutory regulations, or official governmental directives that specifically govern the use of AI in India<sup>48</sup>. The Digital Personal Data Protection Bill enacted in 2022 may serve as a supplement to the protection of AI data, despite

look-at-the-oecds-framework-for-the-classification-of-ai-systems-for-policymakers (accessed: 14.04.2023)

<sup>&</sup>lt;sup>46</sup> OECD Framework for the Classification of AI Systems. Available at: https://www. oecd-ilibrary.org/science-and-technology/oecd-framework-for-the-classification-ofai-systems\_cb6d9eca-en (accessed: 14.04.2023)

<sup>&</sup>lt;sup>47</sup> Ibid.

<sup>&</sup>lt;sup>48</sup> Available at: https://www.niti.gov.in/sites/default/files/2021-08/Part2-Responsible-AI-12082021.pdf (accessed: 28.12.2023)

receiving mixed reviews domestically and internationally<sup>49</sup>. Furthermore, the Digital Health Laws and Regulations Report of 2023 encompasses a range of subjects, including the exclusive employment of AI and machine learning in the medical industry<sup>50</sup>. On Oxford Insights' AI Readiness Index 2022, India placed 32 out of 181 countries.

#### 3.2 Pakistan

The Pakistani government is focused on using the most recent technologies rather than taking any steps to regulate artificial intelligence. A national task group is established by the Pakistan's Ministry for Planning, Economic and Special Initiatives to create a 10-year framework for accelerating the use of AI in the commercial, economic, government, educational, and healthcare sectors<sup>51</sup>. The Prevention of Electronic Crimes Act of 2016 ("PECA") with the Personal Data Protection Bill of 2021 may partially be enacted in severe odds to regulate AI in Pakistan<sup>52</sup>. Pakistan ranks 90th in the AI Readiness Index for 2022.

#### 3.3 Bangladesh

The ICT Division of Bangladesh has released a revised and updated version of 2020's National Strategy for Artificial Intelligence Bangladesh in 2023, highlighting the potential positive effects of AI on the country's economy, education, agriculture, and trade<sup>53</sup>. Moreover, the paper briefly discusses the urgency of implementing a policy and a legal framework. The nation has not implemented any particular legislation or regulatory measures, nor has it undertaken any proactive steps to regulate the aforementioned technology. Bangladesh occupies the 80th position in Oxford Insights' AI Readiness Index 2022.

<sup>&</sup>lt;sup>49</sup> The Digital Personal Data Protection Bill. 2022. Chapter 1. Available at: https:// www.meity.gov.in/writereaddata/files/The%20Digital%20Personal%20Data%20 Protection%20Bill%2C%202022.pdf (accessed: 28.12.2023)

<sup>&</sup>lt;sup>50</sup> Available at: https://iclg.com/practice-areas/digital-health-laws-and-regulations/india (accessed: 15.04.2023)

<sup>&</sup>lt;sup>51</sup> Available at: https://gulfnews.com/world/asia/pakistan/pakistan-forms-task-force-to-accelerate-ai-adoption-drive-economic-growth-1.95143892# (accessed: 16.04.2023)

<sup>&</sup>lt;sup>52</sup> Available at: https://moitt.gov.pk/SiteImage/Misc/files/25821%20DPA%20 Bill%20Consultation%20Draft(1).pdf (accessed: 29.12.2023)

<sup>&</sup>lt;sup>53</sup> National Strategy for Artificial Intelligence. Bangladesh. Available at: https://ictd. portal.gov.bd/sites/default/files/files/ictd.portal.gov.bd/page/ 6c9773a2\_7556\_4395\_ bbec\_f132b9d819f0/Draft%20-%20Mastering%20National%20Strategy%20for%20 Artificial%20Intellgence%20-%20Bangladesh.pdf (accessed: 29.12.2023)

#### 3.4 Afghanistan

Based on the sources available, it appears that the Afghan government has not implemented any discernible policies, frameworks, or strategies that involve artificial intelligence. Afghanistan's ranking in terms of AI readiness is the lowest globally (181th position).

#### 3.5. Nepal

The Nepali government's Digital Nepal Framework passed in 2019 is a five-year initiative that incorporates the adoption and development of artificial intelligence (AI) in Nepal<sup>54</sup>. However, there has been no indication that the government has taken any legislative measures to regulate AI in Nepal. Nepal is positioned at 139 on the Oxford Insights AI Readiness Index 2022.

#### 3.6. Sri Lanka

In 2019 the Sri Lanka Association of Software and Services Companies ("SLASSCOM") has introduced a national policy framework for AI in Sri Lanka, with the aim of encouraging the implementation and adoption of AI within the country<sup>55</sup>. Currently, there is a dearth of information regarding any efforts to establish regulatory frameworks for AI. Sri Lanka's AI readiness rank is 105.

## 3.7. Bhutan

Despite the absence of any explicit legislation or regulation dealing with AI in Bhutan, the Information, Communications and Media Act of Bhutan of 2018 encompasses a broad spectrum of subjects, including media ownership and management, content regulation, cyber-security, data protection, and access to information. This legal framework may be employed to govern the deployment of AI within a circumscribed domain in the country<sup>56</sup>. Bhutan is ranked 99 in Oxford Insights' AI Readiness Index 2022.

#### 3.8. The Maldives

Maldives is extensively working on importing and developing AI technologies in the country, but the smallest country in this region lacks any

<sup>&</sup>lt;sup>54</sup> Available at: https://nepalindata.com/media/resources/items/15/bEN\_Digital\_ Nepal\_Framework\_V7.2March2019.pdf (accessed: 17.04.2023)

<sup>&</sup>lt;sup>55</sup> Available at: https://www.ft.lk/Front-Page/SLASSCOM-launches-Sri-Lanka-s-first-AI-policy-framework/44-680805 (accessed: 18.04.2023)

<sup>&</sup>lt;sup>56</sup> Available at: https://www.bicma.gov.bt/bicmanew/data/publications/act/ BICM\_Act\_2018\_English.pdf (accessed: 26.12.2023)

established regulations, policies, or legal frameworks specifically designed to govern and regulate AI. The island nation was ranked 121 in Oxford Insights' AI Readiness Index.

## 4. Discussion

South Asia is vast. The region is responsible for nearly 11.5% of the global Gross Domestic Product (GDP) and represents 25% of the world's population as of 2022 data. Again, the literacy rate in the South Asian region was recorded at 73.28%, which stands far below the global average of 86.80%, but AI tools are likely to be used on everybody equally, which is very likely to create an abnormal situation because illiterate people are not as aware of safeguarding personal data as literate people.

The potential for religious bias in social media AI algorithms [Ashraf C., 2022: 777] and the likelihood of deep fakes spreading hoaxes are significant concerns in South Asia<sup>57</sup>. Given the sensitivity of the region's population to religious beliefs, historical evidence suggests that such phenomena could have devastating consequences, potentially resulting in the loss of thousands of lives.

Due to the aforementioned reasons, it is imperative that the regulation of artificial intelligence in the South Asian region be given priority. However, there is a noticeable lack of promising efforts by these countries to establish effective laws and regulations for the proper regulation, control, and maintenance of AI. However, it is evident from the legislative review mentioned earlier that developed and economically prosperous nations have formulated laws covering AI and have successfully implemented them.

According to the *Government AI Readiness Index* by Oxford Insights, the 30 highest-ranking countries exhibit a greater GDP per capita compared to those ranked lower, particularly in comparison to countries in South Asia. The countries and organizations taken for comparison in this paper above show the same. In 2022 the European Union members exhibited an average GDP per capita of \$38,411, while the Maldives recorded the highest GDP per capita of \$15,883 in all the South Asia<sup>58</sup>. Again, none of the South Asian countries are members of the OECD, an intergovernmental organization for economic cooperation among "elite-class" countries. As mentioned

<sup>&</sup>lt;sup>57</sup> Available at: https://www.scmp.com/week-asia/politics/article/3255388/ indias-politics-descends-ai-arms-race-deepfakes-threaten-elections-and-theyre-notonly-ones-risk (accessed: 15.03.2024)

<sup>&</sup>lt;sup>58</sup> Available at: https://www.cbs.nl/en-gb/news/2023/16/dutch-gdp-per-capita-ranks-fourth-in-the-eu (accessed: 19.04.2023)

above, OECD has proposed a very effective regulatory framework that can work as mainframe for any country's AI regulatory initiative.

As a result, an unwanted and unavoidable legal inequality in South Asia because most of the AI tools are used globally by international tech giants and multinational behemoths, but those tools are not regulated in this region, which may lead to legal discrimination and put billions of people in a grave technological and privacy nightmare. E.g., the current AI phenomenon differs significantly from previous technological revolutions, such as the Internet. Unlike the Internet revolution, which allowed thousands of start-ups to emerge from scratch, the AI revolution requires more capital than creative ideas. During the AI revolution, innovation and successful implementation have become increasingly expensive, leading to a concentration of power among tech giants like Google, Microsoft, Apple, Meta, Amazon, and others<sup>59</sup>. Again, South Asian countries have an enormous potential for developing AI technologies on their own, primarily through already-established domestic tech corporations and start-ups. However, these new AI applications will also need to be controlled.

The lack of successful development of AI laws in South Asian governments can be attributed to various reasons, which have resulted in legislative deficiencies in this region.

## 4.1. Definition of AI

Similar to the Internet and other comparable technologies, the definition of artificial intelligence exhibits a diverse and relative nature that varies across different regions. The challenge of regulating AI arises from the difficulty that lawmakers face in formulating a universally applicable definition of this technology, even within a given jurisdiction [Shchitova A.A., 2020: 616]. For instance, the definition that is deemed appropriate for Europe or America may not be applicable to other regions of the world, such as the Middle East or South Asia.

## 4.2. Types of Laws and Regulations Required

The regulation of the rapid and concerning growth of artificial intelligence has revealed current laws are inadequate in governing AI due to their focus on human conduct and behavior, rather than that of intelligent machines. The varying definitions of AI necessitate distinct regulatory and le-

<sup>&</sup>lt;sup>59</sup> Available at: https://www.politico.com/newsletters/digital-future-daily/2023/03/22/ai-might-have-already-set-the-stage-for-the-next-tech-monopoly-00088382 (accessed: 19.04.2023)

gal frameworks to comprehensively encompass artificial intelligence tools within legislative measures. Furthermore, implementation of artificial intelligence technologies varies across industries and nations, necessitating the development of distinct regulatory frameworks.

#### 4.3. Design of Al Itself

Contemporary AI programs that rely on machine learning algorithms capable of acquiring knowledge from data lie at the highly adaptable spectrum. In contrast to rule-based AI, this type of AI would analyze numerous chess games and dynamically identify patterns to inform its moves. Additionally, it would develop its own scoring algorithm<sup>60</sup>. In the context of this particular AI, there exists a lack of predetermined guidelines pertaining to the resolution of the given problem. Instead, the guidelines solely pertain to the process of acquiring knowledge from data. In contrast to conventional engineering systems, the behavior of AI systems cannot be guaranteed by developers. In contrast to traditional automobiles that were manufactured with a predictable functionality, the emergence of self-driving cars, as well as chatbot Chat GPT and AI image generators such as Midjourney and Dall-E, has introduced a level of uncertainty for developers regarding the performance of their algorithms in various scenarios<sup>61</sup>. And the inability to fully comprehend the complete attributes and anticipate the actions of artificial intelligence has given rise to the concept of the "AI Black Box".

#### 4.4. Insufficient Number of Experts and Infrastructure

A primary factor contributing to inadequate laws and regulations regarding artificial intelligence in South Asia is the insufficient number of experts within legislative bodies who possess a comprehensive understanding of AI's design, characteristics, and societal implications. The complexity of AI programs necessitates a highly sophisticated understanding of their mechanisms, which poses a challenge to the development of effective laws and regulations governing the field.

#### 4.5. Economic Impediments

As it was previously mentioned, South Asian nations exhibit comparatively weaker economic conditions in contrast to their counterparts who have already established legal frameworks and regulations for artificial in-

<sup>&</sup>lt;sup>60</sup> Available at: https://www.popsci.com/artificial-intelligence-takes-chess-beyond-brute-force/ (accessed: 19.04.2023)

<sup>&</sup>lt;sup>61</sup> Available at: https://fortune.com/2023/04/03/how-to-regulate-ai-challenges-three-experts/ (accessed: 21.04.2023)

telligence. Consequently, various sectors, such as the judiciary and parliament, are allocated a relatively lower budget compared to other sectors, impeding any innovative endeavors such as the regulation of artificial intelligence.

#### 4.6. Inadequate Research

The manifestation of economic barriers hinders the progression of social research. Research sheds light on contemporary society, individuals, and their perspectives on various topics. The scarcity of research on the impact of artificial intelligence on the populace of this area poses a challenge in comprehending the issue and formulating regulatory frameworks for policymakers.

#### 4.7. Lack of Inter-governmental Cooperation

It is evident that nations with constrained resources, who are affiliated with intergovernmental and regional establishments such as the EU, AU, and OECD, have exhibited greater proficiency in formulating and executing AI regulations in comparison to other countries. The South Asian Association for Regional Cooperation (SAARC), an inter-governmental organization, was established with the aim of promoting regional development through government agreements. South Asian countries could use SAARC to develop an AI governance framework but the persistent conflict between India and Pakistan has hindered SAARC's success, despite its initial promise as a beacon of hope for the region. In the absence of several economic treaties, the states in question lack consensus on matters pertaining to the judiciary, policing, and technology.

In the present complex geopolitical climate, the decision of a nation to pause its development of artificial intelligence may create an opportunity for another nation to advance. However, the South Asian region is currently trailing behind in terms of both AI implementation and regulation. This situation is expected to significantly impede the region's ability to adapt to the fourth industrial revolution, as AI is widely recognized as a crucial driving force in the industry both presently and in the future.

## 5. Recommendations

The regulation of artificial intelligence is a multifaceted and intricate subject that requires examination of ethical, legal, and technological dimensions, all of which are becoming more stringent due to the aforementioned factors. World leaders and experts are advocating for the self-regulation of AI technology by their developers. For instance, the Biden administration in the US has granted firms the flexibility to voluntarily enforce safety and security measures, and the South Asian may follow this step in certain sectors where low risk applications are involved. In July 2023, the White House disclosed that a number of AI manufacturers like Amazon, Anthropic, Google, Inflection, Meta, Microsoft, and OpenAI, have committed to implementing self-regulatory measures for their systems<sup>62</sup>.

However, self-control alone is insufficient. Limits, such as regulations, need well-rounded, evidence-based advice from governments, academic institutions, and civil society. This leads us to our last option, government-enforced rules and legislation. The Centre for Information Policy Leadership ("CIPL") researchers have put up 10 so far optimal universal recommendations that are also instructive in South Asian nations. The recommendations propose<sup>63</sup> the following provisions.

#### 5.1. Flexible and Adaptable Framework

An elastic and versatile framework had to be established, which would delineate the desired results rather than dictating the specific methods to get them. In order to be efficient, legislation regarding AI must possess the ability to stay up-to-date as technology and applications progress. Rules should be impartial towards technology and should be founded on principles and desired results.

#### 5.2. Risk-based Approach

Implementing a risk-based regulatory strategy for AI that takes into account risks and rewards comprehensively would provide businesses a set of criteria to evaluate the probability and severity of potential damage, as well as the necessary actions to minimize it.

#### 5.3. Building on Legal Framework and Refurbishing Legislations

An AI regime that is flexible and adaptive should be based on current legal frameworks. By depending on these frameworks as much as possible, the possibility of introducing overlapping or contradictory laws is reduced.

<sup>&</sup>lt;sup>62</sup> Available at: https://www.nytimes.com/2023/07/21/us/politics/ai-regulationbiden.html (accessed: 24.12.2023)

<sup>&</sup>lt;sup>63</sup> Available at: https://www.informationpolicycentre.com/uploads/5/7/1/0/ 57104281/cipl\_ten\_recommendations\_global\_ai\_regulation\_oct2023.pdf (accessed: 24.12.2023)

This, in turn, minimizes legal ambiguity and ensures consistent safeguards. Given the economic and judicial obstacles, South Asian countries have the potential to modify their existing legal systems to include the governance of artificial intelligence. This would eliminate the need of implementing expensive and wholly new laws in each individual country.

#### 5.4. Empowering Individuals through Transparency, Explainability and Mechanism for User Feedback and Redress

The notion of individual empowerment is fundamental to effective privacy legislation, and this principle also applies to AI. The CIPL's recommendation report emphasizes the need for regulations, co-regulatory frameworks, and industry practices to ensure that AI is reliable and beneficial for everyone. To achieve this, developers and deployers of AI should provide transparency that is suitable for the situation and meaningful. This transparency should include information about the inputs and operations of AI systems, while also safeguarding privacy, data protection, security, safety, and trade secrets. Explainability, as a component of transparency, serves as a mechanism to enhance accountability and foster confidence. Developers and deployers must provide comprehensive explanations of the influence of AI systems on decision-making and outcomes that affect humans. They should consider the trade-offs, such as the balance between explanation and security/safety, as well as explanation and accuracy.

## 5.5. Making Demonstrable Organizational Accountability

Organizations should be able to show that they are using accountability frameworks and governance programs that provide them the means to comply with all applicable laws and other standards in order for regulations to promote accountability in the larger ecosystem.

## 5.6. Accountability on Al Governance

To ensure AI is held accountable, stakeholders should collaborate with policymakers and regulators to create frameworks and tools. In addition to meeting basic legal and regulatory requirements, businesses should be incentivized to establish accountability frameworks that help them stand out, build confidence in their data practices, and ultimately generate value. Several methods may improve AI governance accountability<sup>64</sup>: First, using

<sup>&</sup>lt;sup>64</sup> Incentivizing Accountability: How Data Protection Authorities and Law Makers Can Encourage Accountability. Available at: https://www.informationpolicycentre.com/uploads/5/7/1/0/57104281/cipl\_accountability\_paper\_2\_\_incentivising\_accountability\_how\_data\_protection\_authorities\_and\_law\_makers\_can\_encourage\_accountability.pdf (accessed: 25.12.2023)

proven or verified accountability to mitigate enforcement actions and determine consequences or fines may encourage responsible conduct. Second, giving responsible organizations a "license to operate" to create and use AI models ethically may promote ethics. Increasing data utilization in AI initiatives for proven socially useful research, subject to thorough risk assessments and accountability program management, may also boost innovation. Buying AI systems accredited to responsible AI standards helps assure ethical deployment. Finally, requiring public procurement projects to show AI responsibility encourages contractors to get responsible AI certification, promoting responsible AI research and deployment.

## 5.7. Ensuring Liability

Assigning responsibility in the context of AI legislation might be challenging in theory but should primarily go to the entity most directly responsible for causing the damage. Developers, deployers, end users, or a mix of the three might be held liable in certain situations. Systems that have not been adequately vetted for possible hazards or that have given users deceptive indicators about their capabilities may rightfully be held accountable by developers.

#### 5.8. Establishing Unity and Collaboration among Governing Agencies

A new, all-encompassing AI regulator will lead to regulatory overreach, duplication, inconsistency, and a lack of legal clarity; hence, it is not necessary for proper AI governance. The CIPL has called for the establishment of a central government coordination body to help settle these disagreements by establishing broad AI policies and objectives that would apply to all industries and sectors and by easing the process of regulatory alignment, coordination, and joint action among various regulatory agencies. Regulators may find a forum in the coordinating body to debate the relative merits of various policy goals, including topics such as security, privacy, productivity, efficiency, and fairness. It may also make it clear who to ask for advice in certain AI development and deployment scenarios.

#### 5.9. Facilitating Continuous Innovation in Regulations

New kinds of artificial intelligence technologies are developing at a rapid pace, so regulators, regulatory techniques, and tools must also adapt. Regulators must improve their skills, capacities, and operations in a world with competing and multiple interests if they are to stay up. Furthermore, in a society empowered by digital technologies and AI, the conventional methods of supervision that rely on ex post enforcement may not be enough. Regulators, to be strategic and successful, should adopt a risk-based strategy. To effectively oversee the regulation of emerging technologies like AI, innovative regulatory methods like sandboxes and policy prototyping might be useful<sup>65</sup>.

## 5.10. Aiming for Worldwide Compatibility

It is evident that no country can adequately handle AI policy and regulation on its own, considering the transnational character of AI technology, including the data it utilizes for training, R&D, computer infrastructure, and cross-border applications. The continuous assessment and mitigation of emerging hazards, as well as the reliability of AI for people and societies throughout the world, depend on international cooperation. Nations in South Asia may look to the OECD and the European Union for assistance as well as to China, Japan, and the U.S. for collaboration, as these regions have established strong laws on artificial intelligence. Moreover, it has been observed that initiatives undertaken at the organizational level tend to be more efficient and effective than those at the domestic level as it has been experienced in the case of EU, AU, and OECD, particularly in the development of frameworks and drafts. Government-to-Government (G2G) collaborative agreements, both bilateral and trilateral in nature, may present an additional avenue for resolution given the significant commonalities among South Asian nations. Thus, this article suggests that the south Asian nations, who have not yet enacted any legislation to oversee or regulate artificial intelligence, should leverage their regional organization SAARC to interact with each other in terms of infrastructure, funding, and expert pool.

Though CIPL is an outstanding set of recommendations, the CIPL researchers overlooked a crucial aspect: AI rules should not impede the development and exploration of new AI tools and applications. It is imperative that regulators remember: Despite the need to regulate this remarkable technology, it is essential to continue developing it in order to improve standards and security, and South Asian regulators also need to focus on this crucial aspect.

<sup>&</sup>lt;sup>65</sup> Regulatory Sandboxes in Data Protection — Constructive Engagement and Innovative Regulation in Practice. Available at: https://www.informationpolicycentre.com/uploads/5/7/1/0/57104281/cipl\_white\_paper\_on\_regulatory\_sandboxes\_ in\_data\_protectionconstructive\_engagement\_and\_innovative\_regulation\_in\_practice\_\_8\_march\_2019\_.pdf (accessed: 25.12.2023)

## Conclusion

The increasing prevalence of AI in our daily lives has raised significant concerns regarding the regulation of its deployment and utilization. This study conducts a comparative analysis of the regulatory landscape governing AI in South Asia vis-à-vis China, the United States, the European Union, Africa, Brazil, and Australia. Although several regions have made strides in the development of regulatory frameworks for artificial intelligence, South Asia remains comparatively underdeveloped in this regard. The South Asian region faces significant challenges arising from inadequate governmental oversight and standardization, which include potential exploitation of artificial intelligence, ethical considerations, and insufficient public trust. With the discussions and studies mentioned above, it is clear that AI has left a legal void in the South Asian region. Therefore, the paper proposes that South Asian nations adopt a cooperative and forward-thinking strategy towards the regulation of artificial intelligence, which could involve establishing partnerships among governmental bodies, commercial enterprises, and non-governmental organizations. Depending on the current situation, more studies must be conducted on the role of the United Nations in drawing up the AI regulatory framework and ensuring that it is followed by member states so that cross-border crimes may be prevented and privacy can be safeguarded in every corner of the planet.

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#### Information about the author:

MD Mahmud Hasan — Undergraduate Student.

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