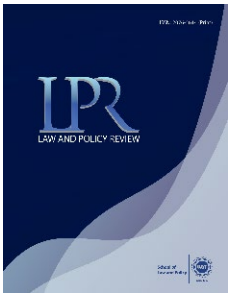
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Interplay of Legal Frameworks and Artificial Intelligence (AI): A Global Perspective

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Abstract

Artificial Intelligences (AI's) growing impact on institutions, economies, and individual lives calls for a careful analysis of how AI interacts with the current legal systems. With an emphasis on a global perspective, the current study intended to provide a critical analysis of the intersection of AI technology and the law. The disparities in AI rules and ethical principles among jurisdictions create both opportunities and problems for global governance, inspiring this endeavor. The current study compared legal frameworks, economic interests, and cultural values of the United States, the European Union, China, Pakistan, India, and Bangladesh to draw a clearer picture of the varied terrain of AI governance. The United States takes a sectoral strategy, with a focus on rules for certain industries, whereas the European Union uses a more cohesive, ethical approach, as seen in its General Data Protection Regulation (GDPR). While the United States pursues a more laissez-faire approach, China pursues a more government-led agenda that mixes regulatory monitoring with market-driven innovation. Although, their legal landscapes are changing quickly, Pakistan, India, and Bangladesh are still in the early stages of developing a comprehensive AI strategy. In its final section, the current study calls for a global discussion on how to regulate AI responsibly and create uniform regulations that can handle the myriad ethical and legal implications of AI.

***Keywords*:** Artificial Intelligence (AI), ethics, global perspective, legal framework, regulation

Introduction

Artificial Intelligence (AI) has graduated from being a fascinating scientific curiosity to a crucial component of todays economies, governments, and social systems. Industries would be revolutionized, scientific research would be bolstered, healthcare would be enhanced, and many other facets of human existence would be profoundly impacted by this. While

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undoubtedly innovative, this technology also raises many moral and legal concerns that put current systems of law and order to test. Problems of this nature include concerns over personal data security, algorithmic prejudice, and legal responsibility. Therefore, it is becoming increasingly important to learn how laws in various countries are changing to accommodate the advent of AI.

When it comes to AI technologies that potentially have far-reaching societal repercussions, the gap between scientific progress and legislative change becomes especially worrisome. A natural follow-up challenge is how to formulate laws and regulations to manage technology that is not only dynamic but increasingly self-sufficient. The current study attempted to investigate the relationship between AI and current legal systems by conducting a worldwide comparative examination of the approaches taken by various jurisdictions to the issues raised by AI.

Moreover, the study also sought to shed light on the intricacies and nuances that characterize the legal governance of AI by analyzing case studies from the United States, the European Union, China, and India. The objective of this study was to add to the ongoing discussion about how to develop globally applicable regulatory frameworks that strike a fair balance between fostering technology innovation and protecting civil liberties.

Literature Review

Early Encounters: Law and Technology

Research to determine the relationship between law and technology has been going on for quite some time. The idea that technology might serve as a kind of regulation has been seminal in driving the conversation about the place of legal frameworks in regulating new forms of technology (Lessig, 1999). This intersection, however, has taken on new dimensions with the emergence of AI, necessitating a reevaluation of preexisting legal theories and norms.

Artificial Intelligence (AI): An Ethical and Legal Quagmire

From data privacy worries to existential threats posed by super-intelligent systems, scholars, such as Bostrom (2014) and Russell (2019) provided thorough explanations of ethical difficulties posed by AI. There are many useful theoretical insights in these texts, however, no practical guidance for legal administration exists. Taking into account the value-

alignment challenge, Tegmark (2018) expands the conversation by highlighting the difficulty to make AI programs follow the social and legal norms. The ethical considerations of AI are the primary emphasis of these contributions, whereas the legal implications are only touched upon briefly.

National Perspectives: A Closer Look

Calo and other legal experts in the United States examined the legal framework surrounding AI, with a focus on industry-specific rules, such as HIPAA in healthcare and FAA regulations for drones (Calo, 2017). Calo contended that the legislation tailored to individual industries wont be adequate to deal with the far-reaching effects of AI.

Edwards and Veale examined the European Unions General Data Protection Regulation (GDPR) and questioned its efficacy in regulating AI technology and ensuring algorithmic accountability (Edwards & Veale, 2017). Their criticism opened the door to a broader conversation about why the European Union needs a coordinated strategy to AI legislation.

The scholarly literature on Chinas legal landscape regarding AI is sparse. On the other hand, it provides a comprehensive analysis of Chinas AI goals, focusing on the governments significant influence on market and the establishment of rules. Lees research emphasize d the need for non-Western viewpoints to be taken into account in the global governance of AI (Lee, 2018).

Indian academics, such as Arun (2019) investigated how AI might affect society and the economy, however, they warned against its use until more comprehensive regulatory frameworks are in place. Academic research is needed to pinpoint the gaps in Indian law with the suggestion of legislative changes.

The Quest for Global Harmonization

It is generally agreed upon that AI has to be regulated on a global scale (Susskind & Susskind, 2023). When national regulatory methods would be shaped by cultural, economic, and political considerations at the country level, how can global harmonization be achieved in AI governance? To encourage international cooperation on AI governance The Organization for Economic Cooperation and Development (OECD, 2023) suggests a "regulatory sandbox" as a "safe space" to conduct experiments. Kroll (2018)

proposed the use of "algorithmic audits" to generate consistent, public assessments of AI systems in various countries.

Gaps in Literature

Although, there is a growing corpus of research investigating AIs interaction with the existing legal structures, a truly global approach is still lacking. Most of the research is conducted on a national or regional scale which results in a fragmented understanding at best. Additionally, international legal procedures that can be used to properly control AI are not given enough attention.

While the existing literature on AI and law provides some useful insights, it also has several major loopholes, especially when it comes to discussing the difficulties and complexities of developing legally binding standards that can be applied everywhere. The current study sought to address these shortcomings by conducting a cross-jurisdictional analysis of AI governance and by offering recommendations to achieve international regulatory harmony.

Methodology

A particular qualitative methodology called "Comparative Legal Analysis" has been used in the current study to investigate how legal systems around the world interact with AI. Six jurisdictions were covered by the study including Bangladesh, China, Pakistan, India, the United States, and the European Union (EU). Moreover, the study examined and comprehended various approaches used in AI governance as well as the underlying difficulties.

An extensive study of the legal systems, prevailing economic factors, and cultural norms that influence AI policy in these areas forms the basis of the current research. For instance, the study compared the US governments industry-specific regulation approach with the EUs ethical policies, embodied in the GDPR. It contrasted Bangladesh, Pakistan, and Indias developing AI plans with Chinas state-led innovation and control over the market.

Central to the analysis are primary sources, such as legislative texts, policy documents, and court decisions relevant to AI governance in these areas. Additionally, the study encompassed an extensive literature review, examining academic publications on AI regulations and ethics. The study

employed thematic analysis, a qualitative data analysis method, to identify and dissect key themes, that is, privacy, algorithmic bias, and ethical challenges in AIs legal regulation. This methodological choice allows for a nuanced exploration and comparison of these themes across the studied jurisdictions.

The studys recommendations emphasize d the significance of global AI governance enhancement through international cooperation and the development of common ethical norms. The analysis highlighted different potentials and constraints that are unique to each region, arguing in favor of international partnerships, cooperative industrial activities, ethical priorities, and regulatory maturity.

The study's conclusion highlights how AI governance is dynamic and how ongoing international cooperation and communication is essential to strike a balance between ethical governance and technological progress. Reflecting the various approaches and stages of development of AI policy in the investigated locations, this study made an important contribution to the ongoing discussion pertaining to the creation of universal regulatory frameworks for AI.

Country/Region Profiles

The United States

The United States takes a sectoral and largely market-driven approach to AI governance. The country lacks a comprehensive legislative framework, like that of the EU, to regulate AI technologies. AI applications are instead governed by domain-specific legal frameworks, such as the Health Insurance Portability and Accountability Act (HIPAA) for healthcare and the Federal Aviation Administrations (FAA) standards for unmanned aerial vehicles.

AI regulation in the United States is sector-specific, with several authorities responsible for AI applications in different fields (Calo, 2017). While, this method is useful to address domain-specific difficulties, it can make it difficult to address broader ethical and legal concerns with AI.

Governance of AI falls under the purview of several federal departments. To safeguard consumers, the Federal Trade Commission (FTC) monitors business AI activities to ensure that they are legal. In a

similar vein, the FDA monitors the use of AI in healthcare, specifically the approval of machine learning-based algorithms used in medical devices.

Case law is an important part of the U.S. AI governance environment because there is no federal legislation that covers the topic in its entirety. Cases regarding AI and privacy have been heavily influenced by the precedents made in cases, such as (Robbins v. Lower Merion School District, 2010) which dealt with the illegal usage of laptop webcams in a school district.

There has been an increasing momentum in recent years to pass federal laws addressing AI specifically. The goal of legislation, such as AI in Government Act is to lay the groundwork for the responsible use of AI by the government through establishing guidelines and mandating that all federal agencies follow them. These projects show a move towards a more centralized approach to AI regulation, even though they are at varied degrees of legislative approval.

The United States policy on AI regulation has been significantly influenced by civil liberties organizations. When it comes to molding public discourse on the ethical implications of AI, organizations, such as the American Civil Liberties Union (ACLU) and the Electronic Frontier Foundation (EFF) are indispensable.

American market principles mean that tech giants, such as Google, Microsoft, and IBM can shape the future of AI. While, this encourages creative thinking, it also raises certain red flags concerning the possible monopolization of certain technologies.

Market factors, federal agencies, and civil rights' organizations all play a part in the United States form ation of AI governance. There are sometimes blind spots in cross-sectoral issues, such as data protection and algorithmic accountability, however, its sectoral strategy does allow for quick innovation and adaptability. The publics understanding of particular issues posed by AI is expanding and with it comes the need for a more unified, all-encompassing legal framework.

The Federal Trade Commission (FTC) is frequently responsible for enforcing privacy-related AI legislation in the United States. If a company engages in misleading data collection or use methods, it would face consequences from the FTC (Peppet, 2014). Another important law that

regulates AI applications in the healthcare sector is HIPAA, which primarily concerns itself with the privacy and security of patients medical records.

Accountability for AI-made choices is becoming an increasingly pressing issue. Some academics have proposed expanding the existing U.S. laws, such as the Civil Rights Act to deal with the problems caused by algorithmic discrimination (Barocas & Selbst, 2016). However, there is still a major hole in the area of algorithmic responsibility due to the lack of a universal legal framework (Whittaker et al., 2018).

Discussions around intellectual property rights for AI-generated content have been launched by the United States Patent and Trademark Office (Abbott, 2018). However, difficulties arise in cases of AI-created works since current U.S. copyright law does not recognize AI as an entity capable of holding copyrights.

Civil liberties discussions have been sparked by law enforcements use of facial recognition technologies. There is a cautious approach to implementing AI in law enforcement, as evidenced by the Justice in Policing Act of 2020s proposed restrictions on the use of face recognition technologies (Warner & Sloan, 2014).

The United States approach to AI legislation is sector-specific, however, it does not provide a coherent framework to address broader legal and ethical concerns. The absence of a centralized regulatory system reveals gaps in addressing cross-sectoral concerns, even as current rules are tailored to control AI applications in specialized fields. The need for a more unified, all-encompassing approach to AI governance is highlighted by the current fragmented regulatory landscape.

European Union (EU)

Significant progress has been achieved in establishing a unified regulatory framework for AI across the EU, with the European Commissions White Paper on AI serving as a cornerstone. The EUs Data Protection Regulation (GDPR) provides framework for rigorous data security measures (GDPR). When it comes to enacting comprehensive legal frameworks for regulating AI, the European Union (EU) has been at the forefront (AI). The EU intends to develop comprehensive laws in order to manage diverse AI applications, in contrast to the sectoral approach seen in the United States. These regulations would be based on the principles of

data protection, consumer rights, and algorithmic openness (Edwards & Veale, 2017).

The General Data Protection Regulation (GDPR), which went into effect in 2018, is the backbone of EU's approach to data privacy in the digital sphere. Significantly, it mandates stringent compliance rules for data collection, usage, and storage in AI technology that handles personal data. Individuals have the right to explanation under GDPR, which allows them to request more information regarding how automated decisions about them were made (Wachter et al., 2017).

The EUs foundational approach to online privacy is the General Data Protection Regulation (GDPR), which came into effect in 2018. The data-processing AI technology would be severely impacted, as it would require stringent compliance standards for data collection, consumption, and storage. In the event that an individual is adversely affected by an automated decision, they have the "right to explanation" under GDPR (Wachter et al., 2017).

Principles including openness, fairness, and robustness were emphasized in the Ethics Guidelines for Trustworthy AI, published by the European Commissions independent High-Level Expert Group on AI (European Commission, 2019).

Despite its progressive stance, the EUs approach has been criticized for being too restrictive and potentially stifling innovation (Koops et al., 2010). Furthermore, there is still a considerable barrier to achieving a uniform application of GDPR and other AI-specific rules throughout all member states.

The EU has made significant attempts to provide a unified, ethical framework for the regulation of AI. The EUs GDPR and other legal measures provide a framework to deal with the intricacies of AI-related problems, such as privacy, consumer rights, and algorithmic transparency. The EUs role in global AI governance is shaped by how successfully it strikes a balance between innovation and strong regulatory measures.

China

Chinas approach to AI legislation is unique in that it combines heavy government oversight with market-based experimentation. A plan for the regulation and growth of AI has been laid out in the governments "New

Generation Artificial Intelligence Development Plan" (NGAIDP). Chinas central planning and emphasis on technical innovation as a vital component of national policy makes it a one-of-a-kind setting in the field of AI governance. Opportunities and challenges arise from Chinas AI governance since it is so intertwined with the countrys national goals, in contrast to the EUs human rights -centric strategy and the United States sectoral regulation (Webster et al., 2017).

The "New Generation Artificial Intelligence Development Plan" (NGAIDP) was released in 2017 which serves as the core piece of Chinas AI administration. Focusing on technology innovation, industry expansion, and regulatory regulations, this comprehensive plan intends to make China the global leader in AI by 2030 (Lee, 2018).

Chinas major regulatory body for AI and other internet -based technology is the Cyberspace Administration of China (CAC). Its purview extends beyond technical specifications to encompass moral and safety concerns as well.

China does not have a national law that addresses AI regulation. However, a few municipalities have begun enforcing their own set of rules. While not legally binding, the 2019 Beijing AI principles highlight ethical aspects, such as openness and justice.

Although, not as stringent as the EUs General Data Protection Regulation (GDPR), Chinas Personal Information Protection Law (PIPL) and the Data Security Law (DSL) represent major efforts toward data protection and governance. However, skeptics believe that the legislation primary purpose is to increase governmental surveillance rather than to safeguard citizens personal information.

Facial recognition technology and other forms of AI are widely used for public surveillance in China. Even though, its mea nt to improve public safety, this practice raises serious ethical concerns regarding peoples right to privacy and other personal liberties. The incorporation of AI analytics into Chinas social credit system adds even another tier of government control over individual people lives in the country.

In China, the study of AI ethics is just getting started. Although, there is less public discussion of ethical AI in China than in the West, initiatives, such as the Beijing AI principles suggest that ethical considerations are increasingly prioritized.

Chinese viewpoints on AI ethics contain a Confucian moral framework, placing a premium on social harmony and community well-being as opposed to the Western focus on individual rights and privacy. This perspective shapes how Chinese public and government think about AIs ethical implications.

As a subset of the broader Belt and Road Plan (BRI), Chinas "Digital Silk Road" initiative aims to export the countrys AI technologies and governance methods to other nations. Resultantly, people around the world are worried about the spread of Chinas unusual government model, which prioritizes collective interests over individual freedoms.

The United States and EU take different approaches to AI governance; however, Chinas strategy is strongly tied to the countrys strategic national interests. A regulatory landscape has been developed in the country under specific programs, such as NGAIDP and organizations, for instance the CAC. However, the emphasis is on technological superiority and centralized control rather than on individual rights or ethical considerations. For any comparative study of international AI governance, a grasp of Chinas approach is now essential as the country seeks to export its AI governance model worldwide.

Majority of the people are concerned about the possibility for authoritarian control in Chinas approach to AI. Human rights abuses have prompted proposals for a more ethical approach to AI regulation, notably in the context of surveillance and social credit systems.

The Confucian ethical foundations, state-led growth, and global aspirations that characterize Chinas AI governance model are all distinctive features. Privacy and other personal liberties are two areas where this could potentially cause ethical and human rights issues. Chinas approach to governance would impact international discussions over how to manage AI as it develops.

India

India is just beginning to draft a complete legal framework for AI. The current legal framework is rather broad and does not adequately address the novel difficulties brought about by AI systems. India is still developing its approach to AI governance, which attempts to strike a balance between the rapid development of AI and the need for ethical considerations and legal frameworks. Indias position on AI governance is impacted by the countrys

distinct socio-cultural milieu, economic imperatives, and booming IT industry, making it one of the worlds fastest -growing economies.

In 2018, India unveiled its National Strategy for Artificial Intelligence, a detailed document outlining the countrys goals and plans for AI development written by the National Institution for Transforming India (2018). The strategy places an emphasis on inclusive growth and singles out the fields of medicine, agriculture, and instruction as areas of particular importance.

There is dearth of AI-specific laws in India at the present time. The Information Technology Act of 2000 (IT Act) and other existing legal structures, however, act as a regulating mechanism until more permanent solutions can be found (Sachdeva et al., 2022). When it comes to significant AI-related difficulties, such as algorithmic bias, the Act only covers data protection and cybercrime.

In India, academic institutions and the civil society are leading the way in developing a discourse on AI ethics. There has been some progress in raising awareness about issues, such as data privacy, consent, and fairness, however, these have not yet been codified into law.

Indias growing tech nology sector is an important player in the evolution of AI regulation. Best practices and recommendations are developed by industry groups, such as the National Association of Software and Service Companies (NASSCOM) in conjunction with government entities (India AI, 2020).

Indias diverse population and large income gap shape the countrys approach to regulating AI. While making moral decisions, its important to think about more than just the rights of the person, as in Western thought.

India is a founding member of the Global Partnership on Artificial Intelligence (GPAI) and has participated in numerous international conversations on AI governance through groups, such as the World Economic Forum.

It has been argued that discriminatory practices and misuses are possible due to Indias piecemeal approach and lack of comprehensive regulation. Even with the ongoing legislative debates surrounding the Data Protection Bill, the data privacy remains a serious problem.

India is forging its own path in AI governance; however, it has the enormous task to balance the society's requirements with the rapid development of AI technology. Policies show a proactive stance, yet there is still a lack of AI-specific, comprehensive regulation. For both Indians and the rest of the world trying to figure out how to deal with the ethical and regulatory challenges posed by AI, the development of Indias AI governance model would have far-reaching consequences.

Pakistan

Pakistans geopolitical and economic factors, as well as the ever-changing technology landscape, inform the countrys early initiatives in AI governance. The purpose of this section is to provide an overview of Pakistans approach to AI governance, including the countrys AI policy, regulatory frameworks, and ethical considerations.

The Pakistani Governments Ministry of IT and Telecommunications started talking about the formulation of a national AI policy in 2018. Initial drafts of the policy focused on capacity building, ethical implications, and the role of AI in economic development, however, it has yet to be formally adopted (Government of Pakistan, 2018).

No specific law has yet been introduced to regulate AI in Pakistan. In its place, rules are a patchwork of earlier laws, such as the Electronic Transactions Ordinance of 2002 that are ill-equipped to manage ethical and legal challenges, unique to AI.

Although, AI governance is still in its infancy, discussions of ethical implications are gaining ground in academic and policy communities. Data privacy, security, and algorithmic fairness are just few issues that are entering mainstream discussion on a national scale (Khalid, 2023).

Pakistans AI ecosystem is flourishing due to the cooperation between businesses and educational institutions. Universities, such as the National University of Science and Technology (NUST) are forming alliances with software development firms to further AI study and development (National University of Sciences & Technology [NUST], 2020).

The religious and ethical principles that characterize Pakistans culture have a role in the countrys approach to AI governance. For instance, cultural and religious sensibilities inform how legal considerations of surveillance and data privacy are interpreted.

Pakistans participation in international forums for governing AI is small but expanding, suggesting a desire to adopt international best practices. The Digital Rights Foundation is one group that actively promotes international cooperation and sharing of expertise.

Some worry that Pakistans AI industry could stagnate due to lack of a coherent policy and outmoded regulatory structures. Concerns have been raised about the future regulation of AI technologies in Pakistan due to the lack of attention paid to ethical aspects.

Pakistan is still in the early stages of developing its approach to AI governance which must balance economic goals with ethical concerns. A major obstacle still stands in the way of widespread adoption of AI: the lack of a coherent policy and regulatory framework. Establishing a fair and efficient AI governance model in the future would require cooperation between government agencies, academic institutions, and private enterprises, as well as participation in global debates.

Bangladesh

In the early phases of incorporating AI into its government, economy, and social systems is the growing South Asian nation of Bangladesh. Challenges, such as a lack of legislation and ethical rules, hamper the countrys approach to AI, which is driven by its developing IT industry, government policies, and foreign collaborations.

The Government of Bangladesh has unveiled their "Digital Bangladesh" goal for the year 2020, which includes the use of AI technologies in government, healthcare, and education (Government of Bangladesh, 2019). In March 2020, however, a concrete, all-encompassing national AI policy was developed by the Government of Bangladesh.

The Information and Communication Technology (ICT) Act of 2006 lays a platform for regulation, notwithstanding the absence of a specific legislative framework for AI in Bangladesh (Khan et al., 2021). However, these statutes lack the sophistication to handle the knotty problems of AI ethics and administration.

Data privacy and security are two areas of ethics that have not received enough attention in Bangladesh. These kinds of discussions rarely extend beyond the ivory tower and have not yet had an impact on public policy.

The tech sector in Bangladesh, especially startups and SMEs, is becoming increasingly curious about AI solutions. The Bangladesh Association of Software and Information Services (BASIS) is among the groups preparing their workforce for the advent of AI 9 (Bangladesh Association of Software and Information Services [BASIS], 2021).

The cultural norms of Bangladesh which place a premium on social stratification and community values, would likely determine the countrys approach to AI ethics and governance.

Bangladesh is an active participant in the Global Partnership on Artificial Intelligence (GPAI), sharing information and working together on AI projects with nearby countries, such as India (The Global Partnership on Artificial Intelligence [GPAI], 2021).

The lack of a well-defined legal framework and an emphasis on ethical issues are two main complaints leveled against Bangladeshs approach to AI governance. Another barrier to efficient administration is the scarcity of resources, especially human capital, that is trained to work with AI.

When it comes to governing with AI, Bangladesh is just getting started. The governments plan and industrys actions have potential, however, there are still major obstacles to overcome. Comprehensive lawmaking, attention to ethical leadership, and improved infrastructure all fall under this category. These factors must be prioritized in order to construct a reliable and moral AI governance model as Bangladesh strives to become a digital society.

Comparative Analysis

The legal, ethical, economic, and social realms all need to work together in order to tackle the complex problem of governing AI. While comparing the United States, the EU, China, India, Pakistan, and Bangladesh, it is clear that there are commonalities as well as regional differences in the approaches to AI governance.

While comparing the United States, the EU, China, India, Pakistan, and Bangladesh, there are obvious differences in how AI is governed. The United States and the EU have developed regulatory landscapes that prioritize ethical concerns (European Commission, 2021; US Congress, 2020). However, China prefers a state-controlled approach that places a premium on technological development. In the meantime, developing nations, such as India, Pakistan, and Bangladesh are searching for a happy medium between rapid economic development and responsible government (Government of India, 2019; Government of Pakistan, 2018; Government of Bangladesh, 2019).

Structures of Law

Even though federal rules, such as the Algorithmic Accountability Act are being discussed, the United States operates under a market-driven model, with tech businesses generally self-regulating. In contrast, the EU is aiming towards standardized AI law, with the AI Act of 2021 putting an emphasis on ethical use and data privacy (European Commission, 2021). The Chinese method is highly controlled by the government. On the other hand, India is still developing and a strong policy dialogue shaped by the countrys democratic framework has already begun (Government of India, 2019). Both Pakistan and Bangladesh are still in the early stages of AI development, therefore their governments approaches to the topic are patchy at best (Khalid, 2023).

Both the United States and EU have developed legal frameworks that specifically address AI ethics and governance, with the GDPR of the EU serving as a global standard (European Commission, 2021). China prioritizes technological superiority over moral concerns. There is a dearth of modern legislation in South Asian countries, such as India, Pakistan, and Bangladesh pertaining to AI (Khalid, 2023).

Plans and Programs at the National Level

When it comes to AI policy, there is a stark difference between industrialized and poor countries. The United States and EU policies are well-established (US Congress, 2020; European Commission, 2021). However, Pakistan and Bangladesh are still in the early stages of policy formulation (Government of Pakistan, 2018). Developing countries need to speed up their policy development in order to meet global standards and this disparity highlights the need to do so.

Questions of Morality

Several academic and policy disputes in the United States and Europe center on the concepts of fairness, accountability, and transparency in AI. Due to its centralized political system, China has a less open approach to ethical issues. Academics in India are helping to thaw the countrys attitude towards ethical debates. In contrast, Pakistan and Bangladesh are only getting started, with economic objectives typically taking precedence over ethical concerns (Khalid, 2023).

The importance placed on ethical factors, such as data privacy and algorithmic fairness, varies from one region to the next. In the United States and the EU, such factors are essential to policymaking (US Congress, 2020; European Commission, 2021). In India, however, the conversation is just beginning to include them (Government of India, 2019). However, in both Pakistan and Bangladesh, they continue to exist on the periphery.

Cooperation Between Businesses and Universities

Industrial participation is highest in the United States and China, both of which have made substantial contributions to AI research and applications (Zheng & Shu, 2023). Although, not as industry-focused as the United States or China, the EU does have a number of public-private partnerships (PPPs) in place to advance AI (European Commission, 2021). Tech firms in India, Pakistan, and Bangladesh are involved, albeit on a lower scale, and typically work in tandem with educational institutions (Government of India, 2019; NUST, 2020; BASIS, 2021).

Strong synergy between academics and industry acts as a driving force behind the United States and Europes AI successes. China takes a state -led strategy, although also takes industry feedback into account. In contrast,

South Asian nations are still actively cultivating these crucial partnerships (NUST, 2020).

Impact of Society and Culture

Individual liberties and data privacy are prioritized in the United States and the EU due to their respective sociocultural settings. Collective culture and a centralized political structure inform Chinese government. Ethical and social norms in India are varied.

AI governance is uniquely influenced by sociocultural factors. South Asian countries have mixed cultural, religious, and social considerations in policy-making, in contrast to the more secular approach used by the West when it comes to matters of morality (GPAI, 2021).

World at Work

The United States and the EU play crucial roles in international frameworks for governing AI (European Commission, 2021). India is also making strides as a major contributor, joining international initiatives, such as the Global Partnership on Artificial Intelligence (GPAI, 2021). Despite this, Pakistan and Bangladesh do not participate actively on the international stage.

Criticisms

Developing countries, such as Pakistan and Bangladesh are often criticized for what is seen as a lack of attention to ethics and lack of comprehensive policies (Khalid, 2023). However, the United States and the EU are often criticized for their approaches to commercial AI exploitation and data privacy concerns, respectively (European Commission, 2021).

Implications

Several conclusions can be drawn from this comparative study. To begin, there is a significant gap in the level of AI governance maturity between industrialized and developing countries. While advanced economies struggle with complex ethical and commercial issues, less developed countries are just beginning to establish the groundwork for rudimentary AI policies.

Secondly, its unclear whether or not industry should play a role in AI governance. While it hastens technological development, it also increases the risk of monopolistic business practices and economic exploitation.

Finally, consideration must be given to the influence of socio-cultural elements, especially in nations where such influences are extremely pervasive. If we want AI governance regulations to be really effective and inclusive, they need to take context into account.

Recommendations

Countries might learn from one another, share best practices, and maybe even work toward a single set of ethical norms if they collaborate globally or internationally to improve the global governance of AI. These principles have the potential to lay the groundwork for a standardized system of AI regulation on a worldwide scale. Nonetheless, here are the key suggestions:

Fostering Regulatory Maturity

1. Developing Nations: Developing nations, such as Bangladesh and Pakistan need to move quickly to create comprehensive AI regulations in order to keep up with the rate of technological change.
2. Developed Nations: The United States and the EU can serve as examples to other nations by reevaluating and updating their ethical frameworks in light of new ethical challenges.

Prioritizing Ethical Considerations

1. Ethical Framework: To better deal with new ethical challenges and serve as examples for other nations, the United States and the EU should reevaluate and update their current frameworks.
2. Cultural Sensitivity: Ethical considerations for countries, such as India, Pakistan, and Bangladesh should be incorporated into AI initiatives that are culturally responsive to their needs.

Enhancing Industry Collaboration

1. Private Sector: The United States and China should collaborate to reduce the power of tech giants and advance ethical AI.
2. Public-Private Partnerships: Together, the United States and China can promote ethical AI while reducing the threat posed by tech monopolies.

Promoting Global Collaboration

1. Global Platforms: The United States and China should collaborate to limit tech companies monopolistic inclinations while also encouraging ethical AI.
2. Cross-Border Ethics: Both the United States and China need to promote ethical AI while working to curb the monopolistic tendencies of the tech industrys biggest players.

Addressing Local Challenges

1. Infrastructure: Infrastructure for AI research and development should be a top priority for developing countries.
2. Education: The growth of AI requires that the infrastructure of developing countries be strengthened.

Conclusion

Global governance faces a number of issues and opportunities due to the interaction between legal frameworks and AI. The full potential of AI technologies cannot be realized without first overcoming the formidable challenge of harmonizing legislation across countries. The goal of future study should be to establish a consensus on a set of principles that strikes a fair balance between the pursuit of innovation and respect for ethical principles.

Complex issues, such as regulatory maturity, ethical considerations, industrial participation, socio-cultural components, and global engagement all need to be taken into account while attempting to control AI. The current study showed that there is a wide variety of approaches to AI governance in place around the world, from the well-established regulatory frameworks in the United States and the EU to the newly forming laws in countries, such as Pakistan and Bangladesh.

Countries still in the early stages of policy creation can learn a great deal from the ethical imperatives driving AI governance, especially in the EU. There are benefits and drawbacks to public-private partnerships in countries, such as The United States.

Although, this research offered a comparative analysis and practical suggestions, it is essential to remember that the subject of AI governance is in constant motion and development. Responsible and ethical use of AI

requires ongoing conversation and cooperation among governments, businesses, and universities around the world.

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