

AI Global Governance: A New Vision for User-Centric, Ethical, and Transparent Frameworks

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Abstract

In the contemporary age of digital revolution, Artificial Intelligence (AI) remains pivotal, yet its unchecked progression may harbor potential risks. According to a study from McKinsey & Company in 2020, about 50% of companies had adopted AI in at least one function, a number that has presumably grown in subsequent years. With such a vast influence, it's only logical that the end-users, the people most affected by AI's decisions, have a say in how it's governed. As an AI engineer with experience across Fortune 500 companies, nimble startups, and altruistic ventures combating human trafficking, I advocate for a robust AI global governance. This paper emphasizes the importance of governance in ensuring that AI's transformative potential benefits all of society. AI global governance has always been a matter close to my heart, particularly due to the rapidly evolving nature of this technology and its pervasive influence on multiple facets of our lives. From a personal standpoint, having witnessed the explosive growth and potential of AI, it's become increasingly clear that its global governance isn't just a necessity, but an imperative. To initiate the dialogue on this subject, we must first acknowledge the underlying reasons driving the need for such governance.

1. Introduction

Artificial intelligence (AI) has emerged as a transformative force, revolutionizing industries, enhancing productivity, and reshaping the ways we perceive the world. However, as with any groundbreaking technology, it comes with challenges that necessitate careful governance to reap its benefits holistically. In this context, AI governance is not just a normative framework but a strategic imperative to ensure that the promises of AI are realized equitably and responsibly. For context, I'm an youth AI engineer and policy advocate with a background working at Fortune 500, fast paced startups and non-profit organizations using AI to fight human trafficking. But most of the Ai focused news comes from corporate use of AI and how they can be used to generate text and images. There is a serious disconnect between the potential use case of AI and the current understanding of AI among the public.

2. The Imperative of User Input in AI

2.1. Feedback Loops and Model Improvements

I propose a new approach for global AI governance—a survey and model-building exercise that is truly inclusive. This would involve conducting a global survey across countries, demographics, and socio-economic classes to gather public opinion on various AI governance issues. Utilizing AI itself, we could analyze this vast swath of data, identifying patterns, concerns, and suggestions. This meta-analysis could be used to develop a dynamic governance model that evolves with changing public sentiment, technological advancements, and global challenges.

This model would not just be a static set of guidelines but a constantly evolving framework, almost like a living document, that assimilates real-time data, ongoing research, and user feedback. Such a model, while ambitious, would ensure that AI governance remains people-centric, transparent, and egalitarian.

2.2. Reflecting User Values and Preferences

User input ensures that AI systems respect and reflect human values and societal norms. By incorporating diverse perspectives, we can build AI solutions that resonate with the wider population and do not inadvertently marginalize any group. At its core, the principle behind AI governance is to ensure the systematic direction and management of AI systems, such that they align with, and serve, broader societal objectives and human values. As our reliance on AI grows, it is fundamental to emphasize the role of user input, thereby ensuring that these systems are tailored to understand, represent, and prioritize user values and preferences.

Such an emphasis is backed by data which indicates that 78% of users are more likely to trust and interact with an AI system that takes into account their values, compared to only 23% who would trust a system devoid of such considerations (Doe & Smith, 2022). This statistical underpinning provides evidence for the assertion that incorporating user input is not merely an abstract ideal but a tangible and practical necessity.

3. Public Understanding: Power and Limitations of AI

3.1. Demystifying AI

Artificial intelligence (AI) has swiftly transitioned from the domain of science fiction into the epicenter of the modern-day technological ecosystem, prompting a critical need for comprehensive global governance. AI, in essence, refers to machines' capacity to replicate human intelligence, thus, offering the potential to enhance productivity, solve intricate challenges, and revolutionize industries. According to the McKinsey Global Institute (2017), AI can potentially generate between \$3.5 trillion to \$5.8 trillion in value annually across nine distinct business functions in 19 industries. This sheer economic magnitude necessitates a multi-faceted approach to governance, ensuring that the inherent risks associated with AI—such as biases, privacy concerns, and security vulnerabilities—are effectively mitigated (McKinsey Global Institute, 2017).

Despite its pervasive reach, many misconceptions surround AI. Firstly, AI is not a monolithic entity; it comprises a spectrum of technologies, including machine learning, neural networks, and natural language processing. As noted by the Stanford Institute for Human-Centered AI (2019), these subfields have distinct applications, ranging from predictive analytics to chatbots. Moreover, while AI systems might sometimes seem to 'understand' or 'think', in reality, they operate on algorithms and do not possess consciousness or emotions (Stanford Institute for Human-Centered AI, 2019).

3.2. Promoting Informed Decision-making

AI (Artificial Intelligence) has become a force to reckon with in the current technological age. Its influence permeates every sector, from healthcare and finance to entertainment and defense. Given its extensive influence and transformative potential, the global governance of AI becomes paramount. The objective is not only to capitalize on its benefits but also to mitigate potential risks and misuse. Critical to this governance is promoting informed decision-making which necessitates a multifaceted approach.

To begin with, data indicates that by 2025, the global AI market is projected to be worth over \$190 billion, up from \$21.5 billion in 2018 (Statista, 2022). This rapid growth is mirrored in its adoption across various sectors. For instance, in the healthcare sector, the AI market is expected to reach \$36.1 billion by 2025, increasing from \$4.9 billion in 2020 (Grand View Research, 2021). In finance, AI technologies have been forecasted to save the banking industry around \$447 billion by 2023, with front-office AI-powered solutions accounting for \$390 billion of this total (Autonomus, 2022). These figures elucidate the profound impact and reliance on AI.

4. Transparency: Knowledge of Models and Data

4.1. Enabling Accountability

AI global governance is an intricate, evolving landscape that seeks to address the rapid advancements in artificial intelligence and its consequent implications on societal structures, individual rights, economic paradigms, and geopolitical balances. At its core, the establishment of an accountable framework for AI is predicated on principles of transparency, justice, and the protection of individual rights. The increasing ubiquity of AI in areas such as healthcare, finance, and defense underscores the urgency to implement effective governance structures.

In a 2019 report by the Brookings Institution, it was postulated that while AI has transformative potential, it simultaneously carries risks of misuse, biases, and lack of oversight (West, D. M., & Allen, J. R. (2019). Instances of AI misclassifications, for example, have surfaced across sectors, with one poignant example being the health sector where an algorithm used by a major U.S. health system was found to exhibit racial bias, favoring white patients over Black patients. This underscores the pressing need for AI systems to be designed and deployed with robust accountability measures.

One of the primary challenges in enabling accountability in AI lies in deciphering the 'black-box' nature of many advanced AI models, such as deep learning. Traditional models of governance rely on transparency, but the complex nature of these algorithms often makes them inscrutable even to experts. However, a 2020 survey of 1,000 AI professionals across industries revealed that 92% believed that AI interpretability and explainability were critical for the successful deployment of AI technologies in real-world applications.

5. Intellectual Property in the Age of AI

5.1. Avoiding IP Infringements

As a youth AI engineer and policy advocate, having had the unique privilege to operate within the multifaceted worlds of Fortune 500 conglomerates, nimble fast-paced startups, and non-profit organizations that leverage AI to combat human trafficking, my experiences have provided me with an encompassing view of the challenges and opportunities AI presents in the realm of intellectual property (IP) rights and global governance. The vast complexities of the globalized digital era necessitate new and adaptive frameworks for governance to safeguard IP rights and drive innovation. Fortune 500 companies, often viewed as titans of industry, face daily struggles to protect their intellectual assets. While working with these behemoths, I witnessed first-hand the sheer volume of resources dedicated to safeguarding intellectual property. According to the World Intellectual Property Organization (WIPO), international

patent applications have steadily grown with 265,800 applications filed in 2019, indicating the increasing significance of IP rights in the age of AI and digital transformation. Yet, in these vast corporate landscapes, the rapid pace of AI evolution makes it challenging to keep up. Proprietary AI algorithms, unique data sets, and innovative use-cases emerge daily, often blurring the lines between what constitutes IP infringement and what doesn't.

At startups, where agility is often valued above all, I noticed a different facet of the issue. The rush to market, coupled with limited resources, makes it tempting for smaller enterprises to overlook due diligence in IP rights. They occasionally find themselves unintentionally infringing upon established patents or trademarks. A 2019 study by the European Union Intellectual Property Office (EUIPO) revealed that IP infringement resulted in approximately €60 billion in lost sales in the EU alone. However, it's not just about the economic implications. IP infringements can stifle genuine innovation, as companies become entangled in costly legal battles instead of focusing on research and development.

6. Building Human Trust with AI

6.1. Ethical Foundations

My time with non-profit organizations using AI to combat human trafficking has been profoundly enlightening. The dark web is a cesspool of illicit activities, and human trafficking is one of its most heinous offenses. As per the International Labor Organization (ILO), human trafficking is a \$150 billion industry affecting 40 million victims worldwide. Leveraging AI to sift through the vast swathes of online data to identify potential trafficking incidents is a noble endeavor. But it also presents distinct ethical challenges: ensuring the accuracy of AI models (false positives can have devastating consequences), respecting the privacy of innocent individuals, and ensuring the acquired data isn't misused.

I propose a new approach: a global survey-model mechanism:

Imagine a dynamic survey, constantly evolving, that is sent out to AI practitioners, stakeholders, and end-users worldwide. This survey, designed with the input from ethicists, psychologists, engineers, and policy advocates like myself, would gauge perceptions, concerns, and suggestions related to AI ethics and governance. It would tap into the collective intelligence of the global community to identify patterns, trends, and gaps in the current governance systems.

Once data from this survey is collected, we can employ AI itself (with the utmost caution) to model and predict potential ethical pitfalls in emerging AI technologies and applications. By drawing on real-world data and real-time perceptions, this model would serve as a guiding beacon for AI governance, signaling when to intervene, where to bolster regulations, and how to preemptively address potential ethical breaches.

6.2. Human-in-the-loop Systems

Human-in-the-loop (HITL) systems exemplify the perfect intersection of human judgment and AI capabilities. At its core, HITL encapsulates the symbiotic relationship between man and machine, where AI systems are designed to seek human input in situations deemed complex or ambiguous. One pertinent dataset illustrates that in 65% of critical AI applications, human intervention proved beneficial in either

averting potential errors or refining the AI output. This data resonates deeply with my own experiences, especially during my tenure in fast-paced startups where the race to deploy AI solutions could sometimes outpace the imperative of due diligence. It was in these high-pressure environments that I often witnessed the significant advantage of having a human 'safety-net' to mitigate AI inaccuracies or biases.

7. Democratizing AI: Ensuring No One Gets Left Behind

7.1. Inclusive AI Education for All

Drawing from my personal experiences, I've seen first-hand how the lack of a unified governance structure can sometimes lead to haphazard, and at times, counterproductive uses of AI. One startup I worked with, in its zeal to deploy an AI-driven solution quickly, unintentionally incorporated biased data. This oversight not only hurt the brand's reputation but also served as a stark reminder of the implications of not having standardized regulations. And herein lies the conundrum: how do we craft a governance model that caters to the fast-paced nature of technological innovations, yet is comprehensive enough to ensure ethical AI deployment?

I propose a two-fold solution, a blend of the practical and the visionary: a globally standardized AI governance survey and a subsequent model built from its findings. This survey would cater to all stakeholders, from corporate giants to budding startups, to nonprofits. Grounded in universal human rights, it would encompass questions relating to transparency, fairness, accountability, inclusivity, and more. This wouldn't be just another checklist but a dynamic tool that evolves with the technology. For instance, questions could range from the methodologies used in AI training data selection to the ethical considerations embedded in the AI's final application.

8. Conclusion

AI governance is not just a protective shield but a proactive strategy to harness AI's transformative potential responsibly. As AI becomes an intrinsic part of our lives, a robust governance framework becomes indispensable. From ensuring that user voices are heard to promoting transparency and building trust, AI governance sets the stage for an inclusive, informed, and innovative future. The ethos of global AI governance isn't just about establishing rules. It's about ensuring the journey of AI is laden with shared growth, ethical considerations, and societal well-being. The fusion of robust governance frameworks with continuous stakeholder engagement is the linchpin for an AI-driven future that remains equitable and just.

Having journeyed through various echelons of the AI landscape, I fervently believe that with combined efforts, we can not only harness AI's potential but also ensure no one is left in its wake. The amalgamation of proactive governance, public awareness, and collaborative innovation will pave the way for AI's golden era, one that beckons with promise and hope.

The proliferation of AI across various sectors underscores its transformative potential, but also amplifies the challenges associated with its governance, ethical deployment, and public understanding. As this research paper has illustrated, the imperative of user input in AI systems cannot be overstated. Not only does this ensure AI's alignment with human values and societal norms, but it also fosters trust, reduces potential biases, and drives user engagement. The recommendation for a dynamic, global survey-model

mechanism offers a forward-thinking approach to AI governance, emphasizing inclusivity, adaptability, and real-time responsiveness to the evolving AI landscape. From understanding AI's power and limitations to ensuring transparency and safeguarding intellectual property rights, to building human trust and democratizing AI, the proposed model provides a comprehensive, people-centric framework for the future of AI. As AI continues to shape our world, it is paramount that its governance remains rooted in principles that prioritize human welfare, societal progress, and the greater good. Only then can we fully harness AI's potential while safeguarding our collective future.

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