AI and Human Rights: Navigating Ethical and Legal Challenges in Developing Nations

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ABSTRACT

The swift progress of artificial intelligence (AI) offers substantial opportunities and significant challenges, particularly concerning human rights in developing nations. This article explores the legal issues and moral conundrums brought about by AI technology's increasing influence on sectors such as healthcare, education, and governance. In developing nations, AI deployment often occurs without robust legal frameworks, potentially infringing on privacy, autonomy, and equity. This study employs a doctrinal research methodology to analyse the effects of AI on fundamental human rights, using case studies to illustrate both benefits and risks. It examines the role of international human rights standards and local legal systems in mitigating adverse impacts. The results highlight the complex interplay between technological innovation and human rights protection, proposing practical recommendations for policymakers, technologists, and legal practitioners. Ultimately, the goal is to foster an environment where AI can contribute to sustainable development while upholding the dignity and rights of all individuals in developing countries. This research contributes to the scientific understanding of AI's ethical and legal implications in the context of human rights.

Keywords: Artificial Intelligence, Human Rights, Ethical Dilemmas, Sustainable Development.

ABSTRAK

Kemajuan pesat kecerdasan buatan (AI) menawarkan peluang besar dan tantangan signifikan, terutama terkait dengan hak asasi manusia di negara-negara berkembang. Artikel ini mengeksplorasi isu-isu hukum dan dilema moral yang diakibatkan oleh pengaruh AI yang semakin besar di sektor-sektor seperti kesehatan, pendidikan, dan pemerintahan. Di negara-negara berkembang, penerapan AI sering terjadi tanpa kerangka hukum yang kuat, yang berpotensi melanggar privasi, otonomi, dan kesetaraan. Studi ini menggunakan metodologi penelitian doktrinal untuk menganalisis dampak AI terhadap hak asasi manusia fundamental, menggunakan studi kasus untuk mengilustrasikan manfaat dan risikonya. Studi ini juga memeriksa peran standar hak asasi manusia internasional dan sistem hukum lokal dalam mengurangi dampak negatif. Hasilnya menyoroti interaksi kompleks antara inovasi teknologi dan perlindungan hak asasi manusia, serta mengusulkan rekomendasi praktis untuk pembuat kebijakan, teknolog, dan praktisi hukum. Tujuannya adalah menciptakan lingkungan di mana AI dapat berkontribusi pada pembangunan berkelanjutan sambil menjaga martabat dan hak semua individu di negara berkembang. Penelitian ini berkontribusi pada pemahaman ilmiah tentang implikasi etis dan hukum AI dalam konteks hak asasi manusia.

Kata kunci: Kecerdasan Buatan, Hak Asasi Manusia, Dilema Etis, Pembangunan Berkelanjutan.

INTRODUCTION

Artificial Intelligence (AI) has rapidly become an integral component of modern society, offering unprecedented possibilities across various sectors, including healthcare, education, and governance. However, alongside these advancements, AI poses significant challenges, particularly concerning human rights in developing countries. The rapid deployment of AI technologies often occurs without robust legal frameworks, exacerbating risks related to privacy, autonomy, and equity. In these regions, the lack of comprehensive regulatory oversight can lead to misuse of AI systems, potentially resulting in violations of

fundamental human rights. Rodrigues (2020) highlights that AI-driven surveillance technologies pose significant risks to personal privacy, and biased algorithms can lead to discrimination against marginalized communities, reinforcing existing social inequalities.

The human rights challenges associated with AI are particularly pronounced in developing nations, where socio-political and economic conditions may hinder the effective governance of these technologies. Hasan (2024) emphasizes that in South Asian countries, for example, the lack of robust AI regulations exacerbates risks such as bias, discrimination, privacy invasion, and job displacement. These issues are compounded by the rapid proliferation of AI without adequate legal safeguards, which can lead to serious human rights violations. This gap in regulation underscores the urgent need for internationally aligned and adaptable frameworks to protect fundamental human rights, particularly in contexts where existing legal infrastructures are weak (Hasan, 2024).

In countries with limited regulatory frameworks and enforcement capabilities, AI technologies can be used to surveil populations, suppress dissent, or engage in discriminatory practices without adequate checks and balances. The use of AI for predictive policing, for instance, has been criticized for disproportionately targeting minority communities based on biased historical data, thereby exacerbating social inequalities (Fountain, 2021). Similarly, AI applications in healthcare and education can lead to inequitable outcomes if they are not designed and deployed with a focus on inclusivity and fairness (Rodrigues, 2020).

While these challenges are significant, AI also holds considerable potential to drive positive change in developing countries. AI technologies can improve access to information, enhance healthcare delivery, and increase governmental accountability by identifying patterns of corruption and abuse. For example, AI systems have been used to analyse large datasets to detect human rights abuses, enabling more effective responses from international bodies and local governments (Dulka, 2022; Mantelero, 2018). In the healthcare sector, AI can revolutionize diagnostic processes and optimize resource allocation, potentially improving outcomes in regions where healthcare infrastructure is lacking (Dwivedi et al., 2021).

This dual-use nature of AI presents a complex dilemma: while AI can contribute to sustainable development and societal improvement, it also poses risks that must be carefully managed. The potential benefits of AI should not overshadow the urgent need for robust regulatory frameworks that protect human rights. Understanding this balance is crucial, particularly in developing countries where the stakes are higher due to weaker institutional frameworks and greater socio-economic vulnerabilities.

By examining both international human rights standards and local legal systems, this article seeks to provide a comprehensive overview of how AI can be deployed responsibly to promote human rights and sustainable development. This research contributes to the broader discourse on AI ethics by highlighting the specific needs and challenges of developing countries, proposing actionable recommendations for policymakers, technologists, and legal practitioners to ensure that AI deployment aligns with ethical principles and legal norms.

LITERATURE REVIEW

Ethical Dilemmas in AI

The risks of AI are yet another important issue that is frequently discussed, as such technologies advance and proliferate further. Privacy is one of the most discussable ethical concerns due to the growing cases of AI in surveillance. This is akin to the principles of justice and equity in legal systems, which emphasize fairness and impartiality (Nwabuoku & Gasiokwu, 2023), suggesting that AI governance must

similarly prioritize these ethical principles to prevent misuse and ensure equitable outcomes. The violation of person's privacy is evident from the ability of AI-powered surveillance systems to track and record peoples' movements and behaviour without their consent (Fontes et al., 2022). The ethical conflicts arises from the fact that providing security to the society and preventing crimes come with infringement of right to privacy.

Other major ethical concerns that are linked with AI include bias as well as discrimination. Since AI systems learn from large data sets, any prejudices in a data set will be transferred and reinforced by the created AI systems. This can lead to discriminatory practices, particularly against marginalized communities. For example, in the context of predictive policing, AI systems may disproportionately target certain racial or ethnic groups based on biased historical data, exacerbating existing inequalities (Fountain, 2021). This highlights the need for transparency and fairness in AI algorithms to ensure they do not reinforce societal biases.

Autonomy is another ethical concern, particularly with AI systems that make decisions affecting individuals' lives. Automated decision-making systems, such as those used in hiring or loan approvals, can undermine personal autonomy if they lack transparency and accountability (Koene et al., 2019). Individuals affected by these decisions may not understand the basis on which decisions are made, nor have the ability to contest them. This raises questions about the fairness and accountability of AI systems, emphasizing the need for clear and transparent decision-making processes.

Legal Challenges in Developing Countries

When it comes to governing AI technologies, developing nations confront particular legal difficulties. These difficulties are caused by a number of things, such as insufficient funding, shoddy institutional frameworks, and a dearth of knowledge about cutting-edge technologies. Lack of comprehensive data protection regulations is one of the main legal challenges. Due to the lack of strong legislative frameworks governing the gathering, storing, and use of personal data in many developing nations, people are more susceptible to abuse and privacy violations (Telo, 2021).

In addition to data protection, there are significant gaps in the regulation of AI technologies themselves. Few developing countries have specific laws addressing the ethical and legal implications of AI, which leads to a reactive rather than proactive regulatory approach. For instance, in Kenya, the rapid adoption of AI in various sectors has indeed outpaced the development of corresponding legal frameworks, resulting in regulatory gaps that can be exploited, leading to numerous calls for regulation to address these gaps and ensure that AI is used responsibly and ethically (Akello, 2022; Sulaiman et al., 2024). Furthermore, the influence of multinational tech companies in these regions complicates the regulatory landscape. These companies often operate across multiple jurisdictions, making it difficult for individual countries to enforce their laws effectively (Igbinenikaro & Adewusi, 2024).

Case Studies and Examples

To illustrate the ethical dilemmas and legal challenges of AI in developing countries, several case studies can be considered:

1. AI and Human Rights in Indonesia: Indonesia is increasingly adopting AI technologies across various sectors, including governance and surveillance. However, this rapid adoption has raised significant concerns about privacy and human rights. These technologies include facial recognition technology used in public spaces and for monitoring large gatherings (Rachmaniar et al., 2020). While these measures are intended to improve security, they have sparked debates

about privacy violations and the potential for abuse. Indonesia's legal framework for data protection and AI regulation is still in its infancy. The existing laws do not adequately address the complexities of AI technologies, leaving significant gaps in protecting citizens' privacy and data rights (Junaidi et al., 2024). The Personal Data Protection Bill, which aims to strengthen data privacy laws, is a step in the right direction but has yet to be fully implemented (Sholahuddin et al., 2023). According to Junaidi et al., (2024) The use of AI in surveillance has raised concerns about its impact on human rights, particularly regarding the right to privacy and freedom of expression.

2. Predictive Policing in South Africa: In South Africa, the use of AI-driven predictive policing has raised significant concerns about bias and discrimination, highlighting the ethical challenges associated with AI in law enforcement. Predictive algorithms, designed to forecast potential criminal activity based on historical data, often rely on datasets that reflect existing societal prejudices and inequalities. This can lead to biased outcomes, such as the disproportionate targeting of neighbourhoods with higher populations of racial minorities, reinforcing discriminatory policing practices and exacerbating social inequities (Singh, 2022). The lack of transparency and accountability in these AI systems further complicates efforts to ensure fairness and uphold human rights, such as the right to non-discrimination and equal protection under the law. This case underscores the urgent need for ethical guidelines and robust regulatory frameworks to prevent AI technologies from perpetuating social biases and to ensure their responsible use in law enforcement, protecting fundamental human rights in the process (Singh, 2022).

3. Facial Recognition and Privacy Concerns in Zimbabwe: In Zimbabwe, government partnered with Chinese company Cloudwalk Technology Co. to deploy facial recognition technology (FRT) aimed at enhancing law enforcement and national security (Hussein, 2023). This initiative involves the transfer of extensive photographic data to develop systems specifically tailored to recognize Zimbabwean facial features, raising significant privacy and data protection concerns. The Freedom of Information Act, 2020, which replaced the Access to Information and Protection of Privacy Act, allows for the collection of personal data for purposes such as national security and law enforcement under Section 22, but it does not explicitly address the transfer of such data to foreign entities, creating legal ambiguities. Furthermore, Section 57 of the Zimbabwean Constitution guarantees the right to privacy, including protection against data misuse, which could be compromised under this partnership. The deployment of FRT raises additional ethical concerns about mass surveillance and the potential suppression of civil liberties, mirroring China's use of similar technologies for social control. Many citizens are unaware they are being monitored, leading to concerns about data misuse and lack of transparency in data collection, storage, and use (Stevens et al., 2023). These concerns underscore the urgent need for comprehensive data protection laws in Zimbabwe to safeguard citizens' rights.

4. Healthcare AI in India: AI's applications in Indian healthcare are diverse. These applications range from mining medical records, designing treatment plans, and forecasting health events to assisting in clinical decision-making and medication management. AI technologies have played a crucial role in managing the COVID-19 pandemic in India. They have been used for preliminary screening, contact tracing, enforcing quarantine measures, and even aiding in vaccine and drug development (Bajpai & Wadhwa, 2021). Despite its potential, several barriers hinder the widespread adoption of AI in healthcare in India. One of the significant challenges is the

unstructured nature of healthcare data and interoperability issues, which complicate the integration of AI systems across different healthcare platforms. Additionally, there is a lack of open, high-quality datasets that are tailored to the Indian context, limiting the effectiveness of AI applications. The healthcare sector also faces a shortage of skilled professionals capable of developing and managing AI systems. Moreover, regulatory weaknesses and an inadequate framework further pose significant obstacles to the effective implementation of AI in healthcare (Bajpai & Wadhwa, 2021). Issues related to data privacy, consent, and the digital divide remain significant barriers (Jain, 2023). This case demonstrates both the potential benefits and the ethical challenges of AI in healthcare.

5. China's Surveillance System: Although China is not classified as a developing country, its use of AI-driven surveillance provides a cautionary tale. China's surveillance system utilizes facial recognition, digital tracking, and the social credit system to maintain social control and monitor public behaviour, aiming to enhance state security and stability (Zeng & Wong, 2022). This system, implemented through technologies like CCTV and mobile apps, allows the government to collect extensive personal data, reinforcing its authority while raising significant privacy and human rights concerns. Social media platforms in China, while providing channels for public expression, are heavily monitored, with exposure to news on these platforms linked to increased public fear and support for state surveillance, highlighting the complex relationship between technological surveillance and civil liberties in China (Liu & Zhao, 2021). The extensive use of facial recognition technology and data analytics to monitor the Uyghur population in Xinjiang has raised significant human rights concerns (Mozur, 2019). This example underscores the potential for AI technologies to be used in ways that severely infringe on privacy and freedom.

Theoretical Frameworks

The analysis of AI and human rights in developing countries can be grounded in several theoretical frameworks that provide a structured approach to understanding the ethical, legal, and social implications of AI technologies.

1. **Utilitarianism:** The goal of utilitarianism, an ethical philosophy, is to maximize general happiness or well-being by evaluating actions according to their consequences. This framework can be applied to assess the deployment of AI technologies by weighing the benefits, such as improved healthcare and security, against the potential harms, such as privacy violations and discrimination (Obasa, 2023). For instance, the use of AI in healthcare can be justified if it significantly improves patient outcomes and public health, provided that adequate measures are taken to mitigate any negative impacts on privacy and autonomy.

2. **Deontological Ethics:** Based on Immanuel Kant's theory, deontological ethics emphasizes the value of responsibility and upholding moral standards regardless of the repercussions (Misselbrook, 2013). From a deontological perspective, the use of AI must respect fundamental human rights and ethical principles, such as privacy, fairness, and autonomy (Rodrigues, 2020; Laitinen & Sahlgren, 2021). This framework would argue against the deployment of AI technologies that inherently violate these principles, even if they offer significant benefits. For example, AI-driven surveillance systems that infringe on individuals' right to privacy would be considered unethical under deontological ethics, regardless of their potential to enhance security.

3. **Social Justice Theory:** The equitable distribution of opportunities, resources, and advantages within society is the main subject of social justice theory. This concept is especially pertinent to

assessing how AI affects disadvantaged and marginalized communities in emerging nations. Social justice theory advocates for the equitable development and deployment of AI technologies to ensure that their benefits are accessible to all segments of society and do not exacerbate existing inequalities (Roche et al., 2022). For instance, ensuring that AI healthcare solutions are accessible to rural and underserved communities is crucial for promoting social justice.

4. **Human Rights Framework:** The human rights framework integrates international human rights norms into the analysis of AI technologies. This approach provides a moral and legal standard for evaluating AI's impact on rights such as non-discrimination, freedom of expression, and privacy. International human rights instruments, like the Universal Declaration of Human Rights (UDHR) and the International Covenant on Civil and Political Rights (ICCPR), offer guidelines to ensure that AI technologies are developed and deployed in ways that respect and promote human rights (Gellers & Gunkel, 2022; Donahoe & Metzger, 2019).

5. **Ethical AI Principles:** Several organizations and scholars have proposed ethical AI principles that provide guidelines for the responsible development and use of AI technologies. These principles typically include fairness, accountability, privacy, and transparency. For example, the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems has developed a comprehensive set of ethical guidelines emphasizing the need for transparency, accountability, and human rights protection (Chatila & Havens, 2019; Donahoe & Metzger 2019).

RESEARCH METHOD

This study employs a doctrinal research methodology to investigate the legal and ethical challenges posed by artificial intelligence (AI) in developing countries. The research involves a review of existing legal frameworks in selected countries to assess how these laws address AI-related issues such as privacy, discrimination, and human rights. Additionally, the study draws on scholarly literature to provide a deeper understanding of the legal implications of AI technologies. Through the use of case studies, the research illustrates specific instances where AI deployment has impacted human rights, highlighting both the benefits and risks. This approach allows for a comprehensive analysis of the current legal landscape and offers recommendations to enhance legal protections in the context of AI in developing nations.

RESULTS AND DISCUSSION

The deployment of AI in developing countries has unveiled numerous ethical dilemmas that challenge conventional understandings of privacy, equity, and autonomy. A primary concern is the invasive nature of AI-driven surveillance technologies. Facial recognition systems, often deployed with minimal regulatory oversight, have the capacity to monitor and record individuals' movements without their consent, leading to significant privacy violations (Smith & Miller, 2021; Donahoe & Metzger, 2019). This raises an ethical dilemma: balancing the benefits of enhanced security against the fundamental right to privacy. The lack of comprehensive privacy laws in many developing countries exacerbates this issue, as AI technologies are often introduced without sufficient safeguards to protect citizens' privacy and civil liberties (Rodrigues, 2020).

Another significant ethical issue is the potential for AI to perpetuate and even exacerbate existing biases. Algorithms trained on biased datasets can reinforce stereotypes and unfairly target marginalized groups. This is particularly problematic in areas like predictive policing, where AI systems may disproportionately impact certain communities based on biased historical data, thereby deepening

existing social inequalities (Farahani & Ghasemi, 2024; Thuong, 2023). This underscores the critical need for transparency and fairness in AI algorithms to ensure they do not perpetuate societal biases (Gaffley et al., 2022).

Autonomy is another ethical concern, especially in the context of AI systems that make automated decisions affecting individuals' lives. For example, AI technologies used in automated hiring or loan approval processes can undermine personal autonomy by making opaque decisions without clear explanations or accountability mechanisms (Koene et al., 2019; Latonero, 2018). Such systems raise important ethical questions about fairness and accountability, emphasizing the need for transparent decision-making processes that allow individuals to understand and contest decisions that significantly affect their lives.

Analysis of Legal Challenges

The legal challenges associated with AI in developing countries are multifaceted and complex. One primary issue is the absence of comprehensive data protection laws. In many developing nations, there are no robust legal frameworks to regulate the collection, storage, and use of personal data, leaving individuals vulnerable to exploitation and privacy violations (Banisar, 2020; Donahoe & Metzger, 2019). This regulatory vacuum allows both domestic and international entities to deploy AI technologies with minimal oversight, potentially leading to widespread abuses of privacy.

Beyond data protection, there are significant gaps in the regulation of AI technologies themselves. Few developing countries have specific laws addressing the ethical and legal implications of AI, leading to a reactive, rather than proactive, regulatory approach (Rodrigues, 2020; Gaffley et al., 2022). In Kenya, for example, the rapid adoption of AI in various sectors has outpaced the development of corresponding legal frameworks, resulting in regulatory gaps that can be exploited by actors operating without ethical considerations (Akello, 2022; Sulaiman et al., 2024). The influence of multinational tech companies further complicates the regulatory landscape, as these companies often operate across multiple jurisdictions, making it challenging for individual countries to enforce their laws effectively (Igbinenikaro & Adewusi, 2024).

Impact of AI on Human Rights in Developing Countries

Artificial Intelligence (AI) has the potential to significantly impact human rights in developing countries, bringing both opportunities and challenges. Through case studies from South Africa, China, Zimbabwe, and India, this section explores how AI can both enhance and undermine human rights, particularly in contexts with weak legal and ethical frameworks.

1. Privacy and Surveillance: The use of AI in surveillance systems poses significant risks to privacy. In China, the extensive surveillance system in Xinjiang employs facial recognition and data analytics to monitor the Uyghur population. This technology enables mass surveillance, which severely infringes on individuals' privacy and freedoms. While China is not a developing country, its example serves as a cautionary tale for developing nations considering similar technologies. Without robust legal safeguards, AI-driven surveillance can easily be misused to control and oppress populations, violating fundamental human rights. In Zimbabwe, the deployment of facial recognition technology for surveillance has raised serious ethical concerns. Many citizens are unaware they are being monitored, leading to potential abuses of privacy. The absence of comprehensive data protection laws exacerbates these issues, leaving individuals vulnerable to misuse of their personal information. This highlights the urgent need for developing countries to

implement robust legal frameworks that protect privacy and ensure transparency in data collection and use.

2. Data Protection and Consent: AI technologies often require vast amounts of data to function effectively, raising concerns about data protection and consent. In India, AI applications in healthcare have shown promise in improving diagnostic accuracy and patient outcomes. However, issues related to data privacy and consent remain significant barriers. Many patients may not fully understand how their data is being used or have the opportunity to consent to its use, leading to ethical dilemmas. Ensuring that patients are informed and that their data is protected is crucial to maintaining trust in AI technologies.

3. Bias and Discrimination: AI systems trained on biased datasets can perpetuate and even exacerbate existing inequalities. In the context of predictive policing, AI technologies have the potential to disproportionately target marginalized communities based on biased historical data. This can lead to discriminatory practices, particularly against certain racial or ethnic groups. Ensuring transparency and fairness in AI algorithms is essential to prevent these technologies from reinforcing societal biases. For instance, AI-driven surveillance systems must be carefully regulated to avoid discrimination and ensure they do not violate individuals' rights to equality and non-discrimination.

4. Digital Divide and Access to AI Technologies: The digital divide presents a significant challenge in the equitable distribution of AI benefits. In India, the implementation of AI in healthcare highlights this issue, as rural and less affluent populations often lack access to advanced technologies. This exacerbates existing health disparities and raises ethical concerns about fairness and equity. Ensuring that AI technologies are accessible to all segments of the population is crucial for promoting social justice and preventing the deepening of existing inequalities. Infrastructure development and digital literacy programs are essential to bridging this gap and ensuring that the benefits of AI are equitably distributed.

5. Autonomy and Accountability: AI systems that make automated decisions affecting individuals' lives can undermine personal autonomy and raise questions about accountability. For example, automated decision-making systems used in hiring or loan approvals can lack transparency, making it difficult for individuals to understand or contest decisions that significantly impact their lives. Ensuring that AI systems are transparent and accountable is essential to maintain fairness and trust. Clear decision-making processes and the ability for individuals to contest decisions are critical components of ethical AI deployment.

Discussion of Key Themes and Patterns

Several key themes and patterns emerge from the findings on ethical dilemmas and legal challenges associated with AI in developing countries: challenges:

1. Privacy and Surveillance: The widespread use of AI in surveillance highlights a significant tension between security and privacy. As discussed earlier, the deployment of facial recognition technology in Zimbabwe, used ostensibly for national security purposes, raises serious concerns about mass surveillance and the potential for abuse. This example illustrates how AI technologies, without robust legal frameworks, can infringe on privacy and civil liberties, leading to chilling effects on free expression and personal freedoms (Stevens et al., 2023). The lack of clear legal frameworks exacerbates this issue, allowing for unchecked surveillance practices that infringe on individuals' rights (Zuboff, 2019).

2. Bias and Discrimination: AI systems often perpetuate existing biases, leading to discriminatory practices, particularly in sectors such as law enforcement and hiring. This theme is evident in the use of predictive policing in South Africa, where AI algorithms trained on biased historical data disproportionately target certain racial and ethnic groups, reinforcing systemic inequalities (Singh, 2022). Similarly, AI-driven hiring systems may replicate gender and racial biases present in the training data, disadvantaging minority candidates and perpetuating existing disparities in employment opportunities. This underscores the need for more inclusive and unbiased data sets and algorithms (Eubanks, 2018).

3. Regulatory Gaps: The rapid advancement of AI technologies has outpaced the development of corresponding legal frameworks in many developing countries, creating significant regulatory gaps. This issue is particularly pronounced in countries like Kenya, where the swift adoption of AI in sectors like healthcare and governance has led to a regulatory vacuum exploited by multinational corporations. As previously discussed, these gaps allow for the deployment of AI technologies without adequate oversight, posing risks to human rights and data privacy (Akello, 2022). This regulatory lag poses significant challenges for ensuring the ethical deployment of AI (Arakpogun et al., 2021).

4. Impact on Vulnerable Populations: AI technologies disproportionately affect marginalized and vulnerable populations, exacerbating existing inequalities. This pattern is evident in sectors such as healthcare, where access to AI-driven solutions is often unequal (Das et al., 2024). The deployment of AI in healthcare in India, for example, demonstrates both the potential benefits and the risks of AI in improving access to services. However, these benefits are often unevenly distributed, with rural and underserved communities lacking access to advanced AI technologies, which further widens the digital divide and entrenches health disparities (Jain, 2023).

5. Ethical Concerns and Governance: The need for ethical guidelines and robust governance frameworks is a recurring theme in the discussion of AI deployment in developing countries. As highlighted in the example of AI-driven surveillance in Indonesia, the absence of clear ethical guidelines and strong regulatory oversight has led to concerns about privacy violations and the potential misuse of AI technologies for political or social control (Rachmaniar et al., 2020). This example emphasizes the importance of establishing ethical standards and governance structures that prioritize human rights and prevent the misuse of AI technologies.

6. International Influence: The role of multinational tech companies in developing countries complicates the regulatory landscape, as these companies often operate with minimal local oversight. This highlights the need for international cooperation and standards to ensure ethical AI deployment (Mohamed et al., 2020).

Recommendations for Policymakers and Practitioners

To address the legal and ethical challenges posed by AI in developing countries, this study proposes several practical, actionable steps to ensure responsible AI deployment and safeguard human rights. Each recommendation is directly tied to the key themes discussed in the article.

1. Strengthen Privacy Laws and Data Protection Regulations: To protect citizens' privacy, developing countries should establish robust data protection regulations that clearly define the acceptable use of AI surveillance technologies. This includes creating legal frameworks that mandate transparency in the deployment of AI surveillance systems and require explicit consent from individuals whose data is being collected. Additionally, adopting international best practices,

such as those outlined in the General Data Protection Regulation (GDPR), could help strengthen local privacy laws and ensure that AI technologies are used responsibly.

2. Mitigate Bias and Discrimination in AI Systems: AI algorithms often perpetuate biases, leading to discriminatory outcomes, especially in areas like predictive policing and hiring. To address this issue, there should be a mandate for the use of diverse and representative data sets in AI training to reduce bias, coupled with regular audits of AI systems to identify and mitigate biases. Legal frameworks should be implemented to require algorithmic transparency and explicability, allowing affected individuals to understand AI decisions and seek redress if necessary. Furthermore, developing ethical AI guidelines that prioritize fairness and non-discrimination in AI design and deployment is crucial.

3. Address Regulatory Gaps and Strengthen AI Governance: Many developing countries have regulatory gaps in AI governance, leading to unchecked use of AI technologies. To address these gaps, countries should develop comprehensive AI frameworks that include ethical guidelines, data protection laws, and accountability mechanisms. Strengthening regulatory agencies with the resources and authority needed to enforce these regulations is crucial. Additionally, adopting legislative models like the EU AI Act 2024, which categorizes AI applications by risk and imposes strict rules on high-risk systems, can help ensure responsible AI deployment and protect human rights. International collaboration is also vital to harmonize AI regulations and address cross-border challenges.

4. Ensure Equitable Access to AI Technologies: AI deployment often disproportionately affects marginalized populations, exacerbating existing inequalities. Governments should invest in digital infrastructure and literacy programs, particularly in rural and underserved areas, to bridge the digital divide. Supporting inclusive AI initiatives through public-private partnerships can help fund projects that make AI technologies accessible to disadvantaged communities, ensuring that AI benefits are equitably distributed. Additionally, there should be a mandate that AI applications in public services, such as healthcare and education, are designed to be inclusive and cater to the needs of all population segments.

5. Develop Ethical Guidelines and Safeguards for AI Use: The ethical use of AI remains a concern, with potential for misuse in social control or political repression. To prevent this, developing countries should establish national AI ethics committees to oversee AI projects, ensuring that ethical standards are maintained and that AI use aligns with human rights principles. Engaging civil society organizations and human rights experts in AI policy development processes can ensure diverse perspectives and safeguard against ethical violations. Clear ethical standards for AI use should be implemented, focusing on transparency, accountability, and respect for human rights.

CONCLUSION

The deployment of AI technologies in developing countries offers significant opportunities for economic growth, improved public services, and enhanced human welfare, but it also introduces profound ethical and legal challenges that require urgent attention. This study emphasizes the critical need for comprehensive legal frameworks and ethical guidelines to govern AI development and deployment, particularly to address issues such as privacy violations, bias, discrimination, and data protection. Effective regulation is essential to prevent AI from reinforcing existing inequalities and infringing on fundamental rights. By integrating these considerations into AI governance, policymakers, technologists, and legal

practitioners can ensure that AI technologies contribute positively to sustainable development while upholding human rights. As AI continues to advance, sustained research and international collaboration will be crucial to develop robust policies that balance innovation with the protection of human rights, ensuring that the benefits of AI are equitably distributed and its risks effectively managed.

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