

Human Rights and Ethical Principles In New And Emerging Technologies

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ABSTRACT

This paper examines the critical significance of ethical principles and human rights concerns in the development and deployment of new and emerging technologies. While these technologies provide numerous advantages, they also present significant ethical and human rights challenges. Respect for human dignity, transparency, accountability, and justice are fundamental to the development and deployment of new technologies responsibly. Considerations regarding human rights, such as the right to privacy, freedom of thought and expression, and non-discrimination, must also be respected. To ensure that ethical principles and human rights considerations are incorporated into the development and deployment of new technologies, ultimately benefiting society while protecting individual dignity and rights, collaboration among stakeholders with diverse backgrounds and perspectives is necessary.

Keywords: Ethical Principles, Human Right, Right to Privacy, Emerging Technologies

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1. BACKGROUND TO THE STUDY

Emerging technologies such as artificial intelligence, biotechnology, and robotics have the potential to profoundly alter our society. While these technologies provide many advantages, they also pose significant ethical and human rights challenges. Respect for human dignity is one of the most important ethical principles that should govern the development and deployment of new technologies. This principle recognizes that all individuals have inherent worth and that their dignity must be protected and respected in all circumstances, including the development and use of new technologies. Transparency, accountability, and fairness are additional essential ethical principles that should govern the development and deployment of new technologies.

The development and deployment of new technologies must be conducted in an open and transparent manner, with explicit communication about their potential risks and benefits, in order to be transparent. Accountability necessitates that those responsible for developing and deploying new technologies are held responsible for their actions, including any potential damage that may result from their use. Fairness requires the development and deployment of new technologies in a fair and equitable manner, ensuring that all individuals have equal access to the benefits they provide.

2. RELATED LITERATURE

Today's emerging technologies include artificial intelligence, machine learning, nanotechnology, biotechnology, genetic technology, and neurotechnology, in addition to machine learning and other advances in computing (Nelson & Gorichanaz, 2019). The ongoing and rapid development of these technologies is accompanied by a number of uncertainties, particularly regarding the perception of risks and benefits posed to society and the role that these technologies will play in shaping society (Mathiyazhagan, 2022).

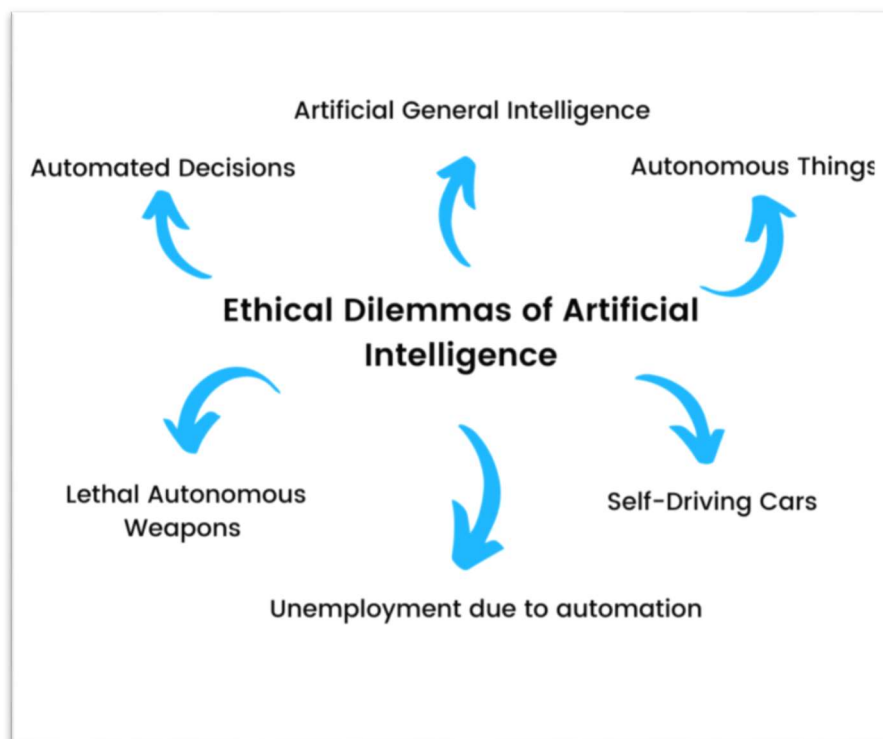


Figure 1: Ethical Dilemmas of Artificial Intelligence (Dilmegani, 2021)

The public must rely on personal anecdotes, media coverage, social networks, or cultural predispositions as sources of information because first-hand experiences and interactions with emerging technologies are minimal by definition ('New Technologies for Human Rights Law and Practice', 2018).

AI's potential to automate, rationalize, and enhance economic processes and products by making better use of data is the most frequently cited advantage. Difficult to quantify, but widely believed to be enormous, the economic benefits fuel much of the policy debate (Chatterjee & N.S, 2022). However, AI is not limited to generating wealth; it can also be used to resolve specific problems. AI in healthcare has the potential to enhance diagnoses and accessibility and is frequently cited as an example (Faunce, 2014).

A number of ethical and human rights concerns are raised by AI. It can result in prejudice and discrimination, raise privacy and security concerns, contribute to economic and other inequalities, result in political and power imbalances, and restructure human interaction, thoughts, and lives (Stahl et al., 2022). How societies can retain the benefits of AI while identifying, addressing, and mitigating its disadvantages is a topic of extensive debate. Here, a comprehensive strategy that promotes the use of AI for human flourishing is required (Salerno et al., 2023). Such an approach necessitates consideration of numerous aspects, including human rights and ethical values. It necessitates education and awareness-raising that translate into individual, professional, and corporate responsibility (Boldt & Orrù, 2022).

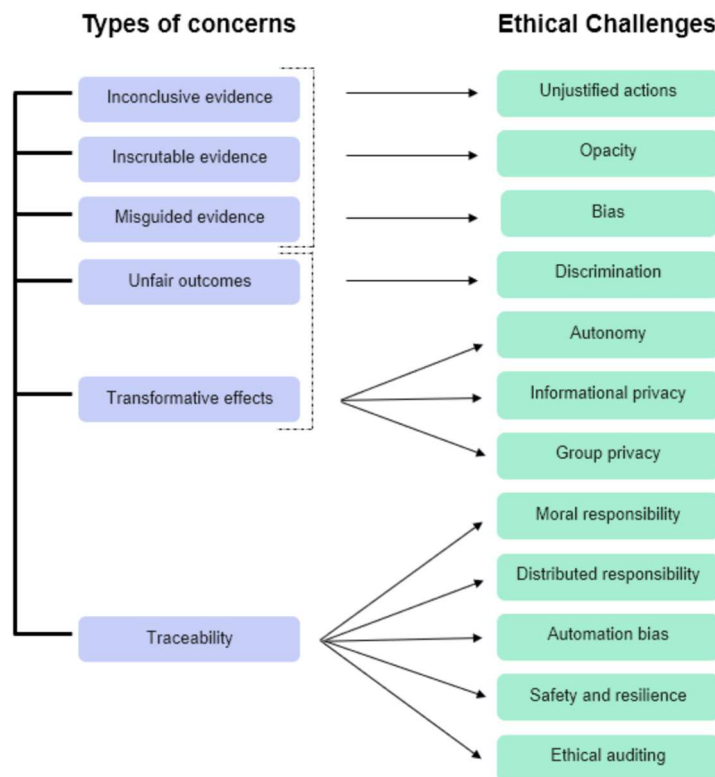


Figure 2: Types of concerns and ethical challenges (Mittelstadt, 2021)

The pervasive use of emerging technologies, such as surveillance tools and AI-enabled technologies, can pose threats to democratic liberties (Székely et al., 2011). The UN Special Rapporteur on the freedom of peaceful assembly and association has expressed concern regarding the increased use of digital surveillance tools in the context of peaceful assembly, observing that broad justifications such as national security or public order are routinely used to justify their use (Human Rights And Emerging Technologies, 2019). The role of emergent technologies such as artificial intelligence in accelerating discrimination is a well-known topic. This matter has become a significant agenda concerning to ethical debate. According to studies, AI technology affects virtually all recognized human rights. A number of human rights issues are affected by artificial intelligence (Stahl et al., 2023).

Privacy is regarded as a fundamental right that must be safeguarded and is associated with human dignity. The right to privacy is related to other rights, such as the freedom of association and expression. Different administrations recognize data protection as a fundamental right (Cox et al., 2023). Protection of data principally is associated with the protection of personal data. This concept is intimately concerned with the right to privacy. If privacy is at stake, human rights are violated and therefore emergent technologies must endeavour to address these issues (Charlesworth & Sewry, 2002; Khan et al., 2022).

3. FINDINGS

Ethical contemplation on emerging technologies has resulted in a large number of questions that reflect enduring concerns about the relationship between human nature and technological advancement. Due to the fact that these issues are not wholly novel, they can be accommodated to some extent by existing normative principles. The ethical debate is translated into legal terms by presuming a dimension of fundamental rights. The majority of issues raised can be framed internationally as human rights and nationally as constitutional rights and general legal principles. Additionally, data ownership, sharing, and control; lack of transparency with respect to data collection processes and structures; challenges in obtaining informed consent and justifying exceptions to consent standards; mistrust in governments; the role of anonymization and pseudonymization; fear of privacy violations, discrimination, and stigmatization; and the role of anonymization and pseudonymization are equally issues of concern raised by researchers and industry players.

4. CONCLUSION

In addition to ethical principles, the development and deployment of new technologies must also take human rights into account. Among these are the right to privacy, freedom of thought and expression, and non-discrimination. It is crucial that new technologies are developed and deployed in a manner that respects and protects these fundamental human liberties. The issue of trust is fundamental to the application of emerging technologies. Thus, trust in a nascent technology is necessary for its acceptance and greater social integration. Without trust, societal acceptance of the technology is problematic.

5. RECOMMENDATION

To ensure that ethical principles and human rights considerations are incorporated into the development and deployment of new technologies, it is essential that a diverse range of stakeholders participate in the process. In addition to technology developers and industry executives, this includes civil society organizations, policymakers, and the general public. By cooperating, these parties can ensure that new technologies are developed and deployed in accordance with ethical principles and human rights, while realizing their potential to benefit society.

6. FUTURE WORKS

As new and emerging technologies continue to reshape our world, it is crucial that they are developed and utilized in accordance with human rights and ethical principles. The following are potential future works in this field:

6.1 Development of ethical frameworks

There is a need for the development of ethical frameworks that can guide the creation and application of new and emerging technologies. These frameworks should be based on human rights principles and be adaptable enough to accommodate shifting technologies and circumstances.

6.2 Assessment of Impact:

As new technologies are developed, it is essential to evaluate their potential impact on human rights and ethical principles. This may entail undertaking impact assessments, engaging with stakeholders, and monitoring the practical application of technologies.

6.3 Development of Governance Structures

Effective governance structures are required to ensure that new and emerging technologies are developed and utilized in accordance with human rights and ethical principles. This includes the creation of regulatory frameworks, ethical review committees, and accountability mechanisms.

6.4 Collaboration and Dialogue

Collaboration and dialogue between various stakeholders, such as governments, industry, civil society, and academia, are essential for ensuring that new and emerging technologies are developed and used in a manner that promotes human rights and ethical principles. This may involve the establishment of multi-stakeholder platforms, the formation of alliances, and the dissemination of information to the general public.

6.5 Education and Training

Education and training are necessary to ensure that individuals comprehend the ethical implications of new and emerging technologies. This may involve the creation of educational resources, training programs, and initiatives aimed at developing the capacity of various stakeholders.

Overall, a commitment to human rights and ethical principles should govern the development and use of new and emerging technologies. In addition to the development of effective governance structures and ethical frameworks, this necessitates on-going dialogue, collaboration, and engagement among various stakeholders.

REFERENCES

1. Boldt, J., & Orrù, E. (2022). Towards a unified list of ethical principles for emerging technologies. An analysis of four European reports on molecular biotechnology and artificial intelligence. *Sustainable Futures*, 4. <https://doi.org/10.1016/j.sftr.2022.100086>
2. Charlesworth, M., & Sewry, D. A. (2002). *Ethical Issues in Enabling Information Technologies*.
3. Chatterjee, S., & N.S, S. (2022). Artificial intelligence and human rights: a comprehensive study from Indian legal and policy perspective. *International Journal of Law and Management*, 64(1), 110–134. <https://doi.org/10.1108/IJLMA-02-2021-0049>
4. Cox, D. J., Suarez, V. D., & Marya, V. (2023). Ethical principles and values guiding modern scientific research. In *Research Ethics in Behavior Analysis* (pp. 35–61). Elsevier. <https://doi.org/10.1016/b978-0-323-90969-3.00008-6>
5. Dilmegani, C. (2021). AI Ethics in 2021: Top 9 Ethical Dilemmas of AI. [online] research.aimultiple.com. Available at: <https://research.aimultiple.com/ai-ethics/>.
6. Faunce, T. (2014). Bioethics and human rights. In *Handbook of Global Bioethics* (pp. 467–484). Springer Netherlands. https://doi.org/10.1007/978-94-007-2512-6_98. Human Rights And Emerging Technologies. (2019).

7. Khan, A. A., Badshah, S., Liang, P., Waseem, M., Khan, B., Ahmad, A., Fahmideh, M., Niazi, M., & Akbar, M. A. (2022). Ethics of AI: A Systematic Literature Review of Principles and Challenges. *ACM International Conference Proceeding Series*, 383–392. <https://doi.org/10.1145/3530019.3531329>
8. Mathiyazhagan, S. (2022). Field Practice, Emerging Technologies, and Human Rights: the Emergence of Tech Social Workers. *Journal of Human Rights and Social Work*, 7(4), 441–448. <https://doi.org/10.1007/s41134-021-00190-0>
9. Mittelstadt, B. (2021). THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE DOCTOR-PATIENT RELATIONSHIP. <https://rm.coe.int/inf-2022-5-report-impact-of-ai-on-doctor-patient-relations-e/1680a68859>
10. Nelson, J., & Gorichanaz, T. (2019). Trust as an ethical value in emerging technology governance: The case of drone regulation. *Technology in Society*, 59. <https://doi.org/10.1016/j.techsoc.2019.04.007>
11. New Technologies for Human Rights Law and Practice. (2018). In *New Technologies for Human Rights Law and Practice*. Cambridge University Press. <https://doi.org/10.1017/9781316838952>
12. Salerno, J., Coughlin, S. S., Goodman, K. W., & Hlaing, W. W. M. (2023). Current ethical and social issues in epidemiology. *Annals of Epidemiology*, 80, 37–42. <https://doi.org/10.1016/j.annepidem.2023.02.001>
13. Stahl, B. C., Brooks, L., Hatzakis, T., Santiago, N., & Wright, D. (2023). Exploring ethics and human rights in artificial intelligence – A Delphi study. *Technological Forecasting and Social Change*, 191, 122502. <https://doi.org/10.1016/j.techfore.2023.122502>
14. Stahl, B. C., Rodrigues, R., Santiago, N., & Macnish, K. (2022). A European Agency for Artificial Intelligence: Protecting fundamental rights and ethical values. *Computer Law and Security Review*, 45. <https://doi.org/10.1016/j.clsr.2022.105661>
15. Székely, I., Dániel Szabó, M., & Vissy, B. (2011). Regulating the future? Law, ethics, and emerging technologies. *Journal of Information, Communication and Ethics in Society*, 9(3), 180–194. <https://doi.org/10.1108/14779961111167658>