



Legal and Ethical Dimensions of Artificial Intelligence (AI) Utilization within Indonesia's Pluralistic Society

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ABSTRACT

Social interaction within society required norms and values that regulated relationships between individuals. One essential value supporting social order was moral responsibility. With rapid technological advancement, particularly artificial intelligence emergence, there was an urgent need for a balanced legal and ethical framework. This was especially important in Indonesia's diverse society, guided by Pancasila's foundational values. Digital technology development had significantly impacted law, social relations, economics, education, culture, and public administration. This study employed a qualitative approach through sociological empirical research, relying on social reality observation using logic and real-life experience rather than theoretical speculation. The findings indicated that artificial intelligence use in Indonesia had become increasingly widespread. However, this growth lacked a clear and comprehensive legal framework, contrasting with other countries that had begun formulating policies grounded in ethics and social justice for artificial intelligence governance. Given this situation, all stakeholders, including government, academia, and civil society needed to participate in formulating adaptive and flexible regulations rooted in legal principles, ethical considerations, and human rights. This approach ensured artificial intelligence application in Indonesia served as a tool for equitable, inclusive, and human-centered development, rather than becoming a source of legal uncertainty and social inequality.



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INTRODUCTION

From a philosophical perspective, law is not only concerned with describing "what law is," but also with exploring "what law ought to be" in a normative sense. This normative way of thinking is especially crucial in today's digital era, where regulations must be adaptive without abandoning fundamental values such as justice, equality, and freedom. In other words, the ultimate purpose of law is to realize justice (*gerechtigheit*), ensure legal certainty (*rechtssicherheit*), and provide utility or effectiveness (*zweckmäßigkeit*) for society (Iwan, 2023).

The law must ensure that technological developments do not harm humanity. Moral principles such as distributive justice, responsibility, and protection of minority groups should be integral to every digital policy. For example, regulations concerning artificial intelligence should not only address data protection but also clearly specify how algorithms operate, the right to access information, and the right to object to decisions made by machines. All of these require a robust theoretical foundation to answer the questions: "Is this fair?", "Is this humane?", and "Who is accountable?" (European Commission, 2021).

Artificial Intelligence (AI) has experienced rapid development as part of the Industry 4.0 and Society 5.0 transformations. In today's fast-paced digital era, various legal and ethical challenges have emerged, particularly in multicultural countries such as Indonesia. This article aims to investigate the

relationship between law, ethics, and diversity in the use of AI, as well as to provide a foundation for regulations and technologies that inclusively and fairly embrace all segments of society.

Artificial Intelligence (AI) has become an integral part of our lives, ranging from online shopping recommendations to decision-making in healthcare and finance. However, the rapid advancements in this field have generated significant ethical challenges. This paper also addresses key ethical issues in the use of AI, such as algorithmic bias, privacy concerns, moral responsibility, and the social impacts on society.

In a diverse society like Indonesia, the development and implementation of artificial intelligence must consider legal and ethical aspects that align with the values of diversity. Inclusive regulations that promote social justice are essential to prevent discrimination, violations of rights, and neglect of vulnerable groups. Therefore, laws and ethics concerning artificial intelligence in Indonesia cannot merely adopt international norms but must be shaped by the spirit of nationalism, humanity, and Indonesia's cultural diversity.

This study addresses two critical research questions: First, how can Indonesia develop a comprehensive legal framework that balances technological innovation with the protection of human rights and cultural diversity? Second, what governance mechanisms rooted in Pancasila values can ensure that AI systems operate transparently and inclusively across Indonesia's diverse society?

RESEARCH METHODS

This study employs a qualitative approach (Moleong, 2019). The qualitative approach is chosen because it focuses on understanding social meanings formed through human interactions within specific social contexts. This approach does not aim to measure phenomena statistically but rather to conduct an in-depth exploration of social phenomena as experienced by subjects in their everyday realities. The qualitative approach used here is a type of sociological empirical research, which seeks to gain a deep understanding of social realities through the experiences, perspectives, and interactions of subjects in daily life. It emphasizes observation of actual social facts that are natural and contextual, obtained directly from the field.

In this context, the researcher acts as the primary instrument, engaging directly with informants to collect data through in-depth interviews, participatory observation, and documentation. This method enables the researcher to examine the structures, relationships, and social meanings that exist within society, as well as to understand the significance of social relationships and societal structures in shaping individual behaviour (Neuman, 2014).

RESULTS AND DISCUSSION

The Existence of Law and Ethics in Indonesian Society

Law and ethics are two fundamental elements in regulating society. Although they differ in their basis and nature, both work together to maintain order and justice within a community. To better understand how law and ethics function as norms that shape social consciousness and govern human behaviour, it is useful to examine them from philosophical and sociological perspectives.

Generally, law can be described as a set of rules established and enforced by authorized institutions to regulate citizens' behaviour, with sanctions imposed for non-compliance (Kelsen, 1945). On the other hand, ethics is a branch of philosophy that examines moral issues and the rules regarding what is considered right and wrong by individuals or groups (Berten, 2000).

A key distinction between law and ethics lies in their nature: law originates externally and is objective, created by official organizations, whereas ethics arises internally and is subjective, growing from individual conscience or social consensus (Rahardjo, 2006). Despite their differences, law and ethics are interconnected. In many instances, laws are grounded in moral values accepted by society. For example, the prohibition of murder in criminal law stems from moral values that respect life (Soper, 1992). However, not everything deemed morally wrong is illegal, and not all that is legal is morally right.

Ethics is very important when we decide if a law is fair or not. If a law doesn't match what most people believe is right, it might be seen as unfair. For example, the laws that allowed racial discrimination in South Africa during apartheid were legal, but morally they were wrong (Kohlberg, 1981).

Rules and ethics show what a society values and help it grow. Rules without good morals don't have a solid reason to exist, and ethics without rules can't be followed properly. So, having a balance between rules and ethics is key to building a fair and civilized society (Soper, 1992).

In today's world, the link between ethics and law is more complicated than ever. New technology and changing social ideas mean the law needs to change, but it also needs to keep its core moral values. Because of this, teaching people about both law and ethics is very important for everyone in the country.

Using artificial intelligence involves important ethical questions. We need to make sure AI is fair, clear, and respects people's dignity (UNESCO, 2021). In a country like Indonesia, which has many different cultures, religions, and ways of life, AI systems should reflect these diverse values.

Some key ethical concerns when dealing with diversity in AI include: a) Algorithmic Bias: AI systems built using data from the majority might not work well for minority groups (O'Neil, 2016); b) Unequal Access to Technology: If AI isn't developed in a fair way, it can make the gap between those who have access and those who don't wider, especially in poorer areas (Donny, 2022); c) Anonymization and Cultural Identity: Tools like facial or voice recognition may not work well for Indonesia's many different looks and ways of speaking. In Indonesia, the ethics of AI should be based on Pancasila, especially the parts about fairness, respect, and unity.

The government has created a plan for AI development from 2020 to 2045, but it's mostly about the technical side and different sectors (Kominfo RI, 2020). To make sure AI is used properly, rules should: a) Be based on human rights and local values, so AI doesn't favor one group over another and supports national identity; b) Make sure AI is open and responsible, so people can understand why decisions are made by computers; c) Require checks to find out if AI systems are causing unfairness or harm, whether they are used by the government or private companies.

The Formation of Moral Responsibility

When utilizing artificial intelligence to make critical decisions, such as in medical diagnostics or credit approvals-it becomes essential to determine who is accountable for those decisions. Since AI systems are non-human tools, they cannot be held morally accountable in the same way as human agents. Therefore, responsibility must still lie with human actors, whether those who develop or deploy the AI systems.

Moral responsibility serves as a fundamental basis for fostering positive and harmonious social relationships. It urges individuals not only to consider their own interests but also to safeguard the well-being of others. In today's complex modern society, strengthening moral responsibility is crucial for maintaining integrity and humanity in communal life.

Society consists of individuals coexisting within a complex social structure. Within such social interactions, the need arises for rules and values that govern relationships among individuals. One of the key values in maintaining social order is moral responsibility a concept that implies each person must be willing to act in a way that contributes to the welfare of others and society at large (Levinas, 1963).

Moral responsibility refers to the obligation that emerges when one recognizes what is ethically right or wrong. Unlike legal obligations, which are enforced externally, morality arises from within and stems from one's sense of empathy and concern for others. In ethical terms, moral responsibility involves the human capacity to think critically and make decisions that consider their consequences for others (Kant, 1998). For instance, helping a neighbor in need may not be mandated by law, yet it reflects a sense of human compassion and mutual care. Likewise, refraining from spreading misinformation or fake news demonstrates moral responsibility by upholding honesty and social order within the community (Bok, 1999).

The development of moral responsibility does not occur instantly; it is cultivated through both formal and informal education. Institutions such as the family, schools, and broader social environments play a significant role in instilling ethical values from an early age. Character education functions as a vital tool for enhancing moral awareness and fostering social responsibility, particularly among the youth (Rheingold, 2002).

In the current era, rapid technological advancement and the pervasive influence of social media pose new challenges. The speed and scale at which information is disseminated demand that media

users act ethically in sharing and responding to information, exercising discernment and wisdom in their digital conduct.

The Convenience and Impact of Technology on Modern Society

The pace of technological change over the past few decades has been extraordinarily rapid. From the digital era to artificial intelligence (AI) systems and the Internet of Things (IoT), technology has significantly reshaped how people interact, work, and live (Schwab, 2016). On one hand, technological advancements have brought about increased convenience and improved outcomes; on the other hand, they have also given rise to previously unknown challenges—such as unequal access to technology, growing dependency on electronic devices, and serious concerns regarding personal data privacy.

One of the most evident consequences of technological development is increased efficiency. For instance, communication technologies now enable instant interaction across continents via video calls, emails, and social media applications (Castells, 2000). In the healthcare sector, telemedicine offers patients the opportunity to consult with medical professionals remotely, without the need to physically visit healthcare facilities (Mars & Scott, 2010).

However, the integration of AI also generates significant disruptions in social and economic structures, particularly through the displacement of human labor by machines. Many tasks that were once performed by individuals are now handled by automated systems, raising concerns over massive job losses and widening income inequality (Brynjolfsson & McAfee, 2014).

Technological progress has also driven the extensive use of machinery in industrial production and services, accelerating the manufacturing process while minimizing human error. This is clearly illustrated by the adoption of robots in manufacturing lines and the implementation of contactless payment systems in modern retail environments. (Brynjolfsson & McAfee, 2014).

As time progresses, life has indeed become more convenient, but emerging issues cannot be ignored. One such issue is social disruption, particularly when machines or automated systems replace human labour, leading to permanent job loss for many individuals (Harari, 2018).

Moreover, technological advancement has deepened the digital divide between those who have access to and the ability to use technology, and those who do not. Excessive reliance on digital technologies, especially social media and online gaming, also affects mental health and interpersonal relationships (Twenge, 2017).

Concerns regarding the confidentiality and protection of personal data have become increasingly urgent. Personal information is often collected without the clear consent of the individual and may be exploited for harmful purposes by certain actors (Zuboff, 2019). Ensuring data privacy and ethical use of information is therefore a critical issue that must be addressed proactively.

To ensure that artificial intelligence benefits humanity without violating legal frameworks and ethical norms, interdisciplinary collaboration is essential—bringing together technology developers, policymakers, researchers, and civil society. Several concrete steps can be taken in this direction: first, establishing adaptable regulations grounded in human rights; second, implementing the principle of “ethics by design” in AI system development; and third, engaging the public in transparent and accountable AI governance processes. In conclusion, while technological innovation offers vast potential, it must be managed with ethical foresight and inclusive governance to ensure that its benefits are equitably distributed and its risks responsibly mitigated.

Legal and Ethical Challenges in the Use of Artificial Intelligence (AI)

One of the main issues is determining who should be held legally responsible if an AI system causes harm. Under conventional legal frameworks, only individuals or legal entities can be held accountable. AI, as a non-human entity, cannot be sued directly (Calo, 2015). Some international legal scholars propose assigning liability to the creators or developers of AI systems, similar to how liability is handled for defective products. However, this approach remains controversial because AI systems can evolve and learn independently over time, often beyond the original control of their creators.

Artificial Intelligence (AI) is now exerting a significant influence across various domains of human life, including business, education, and governance. However, alongside this rapid development, crucial issues arise concerning legal and ethical dimensions. The advancement of AI technology has provided numerous opportunities to enhance efficiency and foster innovation. Yet, AI's capacity for

autonomous decision-making raises a host of unresolved ethical and legal questions (Bostrom & Yudkowsky, 2014). At the international level, several countries have begun drafting regulations to govern the development and deployment of AI, but a global consensus has yet to be reached (Mittelstadt, 2019).

AI systems are not merely technical innovations—they are the result of moral and legal choices that affect many aspects of human life. Therefore, our approach to AI must integrate clear legal frameworks with strong ethical principles. In the Indonesian context, diversity, the values of Pancasila, and social justice should serve as the foundation for creating policies and regulations governing the use of AI. In doing so, Indonesia can strive to become a nation that is not only technologically advanced but also socially just and dignified.

Legal Perspective on the Use of Artificial Intelligence in Indonesia

The rapid advancement of artificial intelligence (AI) technology has transformed many sectors, including government, healthcare, education, and finance. In Indonesia, AI has begun to be utilized in public services, surveillance systems, and business operations. However, the increasing use of AI raises several legal concerns, such as determining legal responsibility, ensuring the protection of personal data privacy, and mitigating the risks of human rights violations (Bostrom & Yudkowsky, 2014).

Artificial intelligence technology has brought significant changes to Indonesia's digital era. AI is now employed in various sectors, such as chatbots for public services, fraud prevention in finance, and health data analytics. However, these developments raise an important question: Is Indonesia's legal framework adequately prepared to regulate the use of AI effectively? In fact, legal regulations are necessary to ensure certainty, protection, and justice for individuals interacting with the technology. With AI systems becoming increasingly autonomous in decision-making, clear legal regulations are essential to ensure that their usage remains aligned with societal interests.

Long before the current developments, many thinkers, especially from the modern era—had warned about the impact of technology on humanity and the environment. They emphasized the importance of using advanced technologies wisely. Philosophers such as Hans Jonas and Don Ihde have made substantial contributions to the development of moral principles regarding technology. Hans Jonas, with his concept of the “ethics of responsibility,” argued that technological progress requires moral responsibility toward future generations. He emphasized that the consequences of technological advancement are so vast that the choices we make today will shape the future of all humankind.

Don Ihde, a pioneer in the philosophy of technology known as post phenomenology, explored how human-technology interactions shape our perception of the world. Ihde rejected the notion of technology as neutral, arguing instead that technology actively mediates human thought and behaviour (Ihde, 1990).

In Indonesia, the transformations driven by technological advancements have had significant impacts and brought benefits across various sectors, including law, society, economy, education, culture, and public administration. However, to date, Indonesia has yet to establish specific regulations that directly govern artificial intelligence. Only a few relevant legal provisions exist, such as: a) Law No. 11 of 2008 concerning Electronic Information and Transactions (ITE Law), which provides a legal basis for the use of electronic systems, although it does not specifically discuss AI (ITE Law/2008-ITE Law/2024). b) Government Regulation No. 71 of 2019 concerning the Implementation of Electronic Systems and Transactions, which regulates the implementation of electronic systems, including data protection (GR No. 17/2019). c) The Personal Data Protection Bill (PDP), which has become Law No. 27 of 2022, provides an important framework for protecting data in AI development (Law/27/2022).

The use of artificial intelligence (AI) technology in Indonesia is rapidly expanding, yet it remains constrained by an unclear legal framework. Legal studies indicate that the current regulations are insufficient to address the complex issues arising from AI implementation. Therefore, it is crucial for the government, academia, and other stakeholders to develop specific and flexible legal frameworks for AI that incorporate legal values, ethics, and human rights principles. The goal is to ensure that AI becomes a tool for equitable and inclusive development, rather than a source of legal uncertainty and injustice.

At present, several major legal challenges are associated with the use of AI in Indonesia. First is the issue of legal liability: in cases where harm or damage arises from AI-generated decisions, it remains unclear who should be held legally responsible—the developer, the operator, or the end user of

the technology (Calo, 2015). Second is the problem of asymmetrical information and the lack of algorithmic transparency: many AI systems function as “black boxes,” offering no clear explanation of how decisions are made (Wachter et al, 2021).

Third, concerns over fairness and the prevention of discrimination: AI systems trained on historical data may replicate or even exacerbate existing forms of discrimination, for example in recruitment processes or credit scoring (O’Neil, 2016). Fourth, the absence of regulatory oversight: currently, there is no independent authority specifically tasked with supervising AI development and deployment in Indonesia.

In response to these challenges, some countries have introduced AI regulations based on risk assessment and ethical principles. For instance, the European Union’s Artificial Intelligence Act classifies AI systems by risk level and prohibits those deemed to pose an unacceptable risk. Indonesia can take lessons from such international experiences or adopt a similar approach by enacting an Artificial Intelligence Law focused on the protection of human rights, legal accountability, and social justice. This could involve integrating ethical principles into existing legal norms—such as transparency, accountability, anti-discrimination safeguards, and clear definitions of responsibility. Moreover, the establishment of an independent supervisory body to monitor and evaluate AI systems is equally vital.

Ethical Responsiveness in AI Policy and Upholding Inclusive Diversity

Ethics related to the development and use of artificial intelligence (AI) are deeply intertwined with cultural and societal values. In Indonesia, diversity is not merely a demographic reality, but a foundational principle of national life. Therefore, AI-related regulations and policies must be inclusive, community-driven, and respectful of existing differences. Only through such an approach can AI become a tool for progress and national unity, rather than a source of division or inequality.

The concept of diversity in Indonesia, embodied in the national motto *Bhinneka Tunggal Ika* (Unity in Diversity) and reflected in the values of *Pancasila*, particularly the second and third principles, provides a strong moral foundation for the development of ethical and inclusive AI (Notonagoro, 1983). In this regard, AI should not be employed to reinforce cultural dominance or economic control by certain groups.

Several countries have already begun formulating AI policies that prioritize ethics and social justice. For instance, the European Union is developing the **EU Artificial Intelligence Act**, which adopts a risk-based approach to AI governance. In this context, Indonesia must also formulate regulations that not only address technical standards but also ensure cultural and ethnic representation within public AI systems. This includes implementing **algorithmic audits** to prevent discrimination, protecting vulnerable and minority groups, and integrating ethical and inclusive education at all levels.

Moreover, the establishment of an independent oversight body is essential to ensure that AI applications in both public and private sectors align with societal values. Indonesia’s rich cultural heritage forms a crucial pillar in its social development. The principle of *Bhinneka Tunggal Ika* is more than a slogan—it is the moral compass of national coexistence. As such, AI policy must be constructed on the foundation of inclusive values.

AI ethics in this context must guarantee that all societal groups, regardless of ethnicity, religion, gender, or socioeconomic status—enjoy equal rights in decision-making processes, access to technology, and benefit-sharing from technological advances. Ethical awareness in AI policymaking is a moral imperative amid rapid technological change. In a diverse nation like Indonesia, an ethical approach must not only align with universal principles but also embrace local values, pluralism, and social justice. AI is not merely a technical innovation; it is also a reflection of our shared humanity. Therefore, fair, transparent, and inclusive AI policies are essential for shaping a technological future that respects and promotes human dignity.

CONCLUSION

Artificial Intelligence (AI) systems represent one of the most significant technological innovations that can support human endeavours, particularly in enhancing efficiency and creativity. However, one of the core challenges associated with AI is its non-human nature; as an inanimate entity, it cannot be held personally accountable. In Indonesia, the use of AI is becoming increasingly widespread, yet the legal and ethical frameworks governing its deployment remain unclear and

fragmented. While some regulations exist, they are often scattered and have not been integrated into a unified legal framework.

In principle, the purpose of law is to uphold justice, ensure legal certainty, and promote societal welfare. Law must also function to safeguard the advancement of science and technology from causing harm to humanity. When AI systems are employed to make critical decisions, they should serve as tools for inclusive and equitable development, rather than sources of legal uncertainty and injustice.

AI systems are ultimately operated by humans-specifically, Indonesians from diverse backgrounds, reflecting the national motto *Bhinneka Tunggal Ika* (Unity in Diversity), which encompasses ethics, equality, human rights, pluralism, local values, and social justice. To ensure the continued benefits of AI, it is essential that its development and use are governed by legal and ethical standards that respect diversity. Moreover, effective oversight mechanisms must be established to regulate and audit AI systems.

REFERENCES

- Bertens, K. (2000). *Etika*. Gramedia.
- Bok, S. (1999). *Lying: Moral choice in public and private life*. Vintage Books.
- Bostrom, N., & Yudkowsky, E. (2014). The ethics of artificial intelligence. In K. Frankish & W. M. Ramsey (Eds.), *Cambridge handbook of artificial intelligence* (pp. 316-334). Cambridge University Press.
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age*. W. W. Norton & Company.
- Calo, R. (2015). Robotics and the lessons of cyberlaw. *California Law Review*, 103(3), 533-563.
- Castells, M. (2000). *The rise of the network society*. Blackwell Publishers.
- Donny, B. U. (2022). Digital divide dan ketimpangan akses teknologi di Indonesia. *Jurnal Masyarakat Digital Indonesia*, 3(1), 45-56.
- Dworkin, R. (1986). *Law's empire*. Harvard University Press.
- European Commission. (2021). *Proposal for a regulation laying down harmonised rules on artificial intelligence (Artificial Intelligence Act)*. European Commission.
- Harari, Y. N. (2018). *21 lessons for the 21st century*. Jonathan Cape.
- Ihde, D. (1990). *Technology and the lifeworld: From garden to earth*. Indiana University Press.
- Irwan, D. (2023). Peran filsafat hukum dalam pembentukan peraturan daerah di Indonesia. *Rampai Jurnal Hukum (RJH)*, 2(1), 28-34.
- Jonas, H. (1984). *The imperative of responsibility: In search of an ethics for the technological age*. University of Chicago Press.
- Kant, I. (1998). *Groundwork of the metaphysics of morals* (M. Gregor, Trans.). Cambridge University Press. (Original work published 1785)
- Kelsen, H. (1945). *General theory of law and state*. Harvard University Press.
- Kementerian Komunikasi dan Informatika RI. (2020). *Strategi nasional kecerdasan artifisial 2020–2045*. Kominfo.
- Kohlberg, L. (1981). The philosophy of moral development. In *Essays on moral development* (pp. 146-205). Harper & Row.
- Levinas, E. (1969). *Totality and infinity: An essay on exteriority*. Duquesne University Press.
- Mars, M., & Scott, R. E. (2010). Telemedicine service use: A new metric. *Telemedicine and e-Health*, 16(4), 410-416.
- Mittelstadt, B. (2019). Principles alone cannot guarantee ethical AI. *Nature Machine Intelligence*, 1(11), 501-507.
- Moleong, L. J. (2019). *Metodologi penelitian kualitatif*. Remaja Rosdakarya.
- Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches* (7th ed.). Pearson Education.
- Notonagoro. (1983). *Pancasila dalam pembangunan etika bangsa*. Liberty.
- O'Neil, C. (2016). *Weapons of math destruction*. Crown Publishing Group.
- Peraturan Pemerintah Republik Indonesia Nomor 71 Tahun 2019 tentang Penyelenggaraan Sistem dan Transaksi Elektronik. (2019).
- Rahardjo, S. (2006). *Ilmu hukum*. Citra Aditya Bakti.
- Rheingold, H. (2002). *Smart mobs: The next social revolution*. Perseus Publishing.
- Schwab, K. (2016). *The fourth industrial revolution*. World Economic Forum.

- Soper, P. (1992). Some natural confusions about natural law. *Michigan Law Review*, 90(8), 2393-2423.
- Twenge, J. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy*. Atria Books.
- Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik. (2008). *Lembaran Negara Republik Indonesia Tahun 2008 Nomor 58*. (Telah direvisi menjadi Undang-Undang Nomor 1 Tahun 2024 Tentang Informasi dan Transaksi Elektronik)
- Undang-Undang Nomor 27 Tahun 2022 tentang Perlindungan Data Pribadi. (2022). *Lembaran Negara Republik Indonesia Tahun 2022 Nomor 246*.
- UNESCO. (2021). *Recommendation on the ethics of artificial intelligence*. UNESCO.
- Wachter, S., Mittelstadt, B., & Russell, C. (2021). Why fairness cannot be automated. In *Ethics of data and analytics* (pp. 177-189). Auerbach Publications.
- Zuboff, S. (2019). *The age of surveillance capitalism*. PublicAffairs.