AI in Governance and Policy Making

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Abstract: *This comprehensive paper delves into the intricate landscape of Artificial Intelligence (AI) integration within governance and policymaking, assessing its potential transformative impact alongside ethical considerations. By emphasizing the imperative principles of justice, transparency, and privacy preservation in AI applications, the study rigorously examines challenges such as algorithmic bias and transparency deficits. Grounded in an extensive literature review, the research offers strategic insights for fostering inclusive AI policymaking, advocating a design-for-all paradigm, enhanced transparency, accountability mechanisms, public engagement initiatives, and continual adaptive frameworks. The paper systematically identifies critical gaps in AI harm and ethics research, proposing innovative approaches including advanced metrics, empirical evaluations of ethical frameworks, clear-cut AI ethics guidelines, targeted technical training for policymakers, and the establishment of robust AI governance models. While acknowledging AI's potential for efficiency gains, the study underscores the necessity for a nuanced approach, addressing limitations and highlighting the need for ongoing, adaptable research to fully comprehend AI's enduring impact on governance structures.*

Keywords: artificial intelligence, governance, policymaking, inclusive policymaking

1. Introduction

The introduction of AI into governance and policymaking introduces a wave of potential for transformative change that goes beyond traditional bureaucratic processes. This rapidly developing area includes a wide range of uses, including the automation of simple operations to the complicated involvement in formulating complex policy decisions [1]. The role of AI in governance is varied, redefining the terrain of administrative effectiveness and policymaking [2]. Generally, studies show how AI's capabilities with big data result in better informed and faster decision-making processes, greatly reducing the time and resources associated with governance [3].

As important to the technological developments are the ethical considerations that accompany AI use in governance. For example, key work by Stahl (2021) [4] deals with moral dilemmas and ethics problems in AI applications, emphasizing that such systems should not only be effective but also just and transparent and preserve privacy and human rights. Overall, ethical issues focus on preventing algorithmic bias, data protection, and the preservation of democracy [5]. The importance of strong ethical frameworks and standards in AI governance, as discussed by Gianni, Lehtinen, and Nieminen (2022) [6], is highlighted to ensure the responsible application of AI in public administration. Besides ethical issues, the impact of AI on improving public participation in governance is also rising. Such models of governance can be more inclusive and participatory with AI. This entails using artificial intelligence to improve the understanding and reaction of public needs and preferences, which in turn improves democracy [7]. The concept of analyzing public opinions and feedback by AI can result in more efficient and responsive policymaking [7].

However, efficiency gains from AI in governance are not without their challenges. Although AI can automate processes and deliver valuable data-driven insights, there are issues associated with the adoption of AI in governance. Such issues include the over-reliance on AI recommendations, loss of transparency, and challenges in assimilating AI into governance structures [8]. In addition, AI implementation in governance presents vast disparities across the world based on socio-political circumstances and technological development [9]. This international point of view also offers abundant evidence of good practices, policy initiatives, and lessons learned that could guide future developments in AI governance [9].

The interface of AI with governance and policymaking is a rapidly developing domain, offering a fascinating combination of technological revolution, ethical dilemmas, and potential for citizen participation. The international arena of AI governance presents several approaches and perspectives that are very important in defining the future of AI in democratic societies. As such, the main objective of this paper is to analyze and elucidate AI's complex role in governance and policymaking. It aims to narrow the chasm between AI's technological promise and the realities of its use in governing. Through ethical considerations, efficiency gains, public engagement, and the global AI in governance landscape analysis, this paper seeks to address AI's influence on public administration and policy.

2. Research Questions

A set of crucial research questions was formulated to address the research that focuses on AI embedding in governance and policymaking. These questions focus on the central elements of AI in this case, including fair AI algorithm design to combat bias, inclusion in policy outcomes, and frameworks to address harms due to biases and misinformation caused by AI. The scope of the inquiry includes models of transparency and accountability for AI governance, the role of AI in environmental policy towards sustainable development, and public feedback integration into AI-driven governance. The paper also inquiries about the predictive capabilities of AI in real-time policymaking, ethical frameworks for the governance of AI, labor and social policies influenced by AI, cross-border policy collaboration using AI, and training policymakers on technology and ethics. Each question was crafted to guide an extensive investigation into AI's role in

governance, with the goal of yielding valuable insights for future policy and governance frameworks:

- RQ1: How can AI algorithms be designed to ensure equitable policymaking?
- RQ2: What are the effective methods for measuring and mitigating the harm caused by AI in governance, such as bias or misinformation?
- RQ3: What models of AI transparency and accountability can be integrated into public governance systems?
- RQ4: How can AI-driven decision-making in environmental policy contribute to sustainable development?
- RQ5: What are the challenges and solutions in incorporating public feedback into AI policymaking algorithms?
- RQ6: How can AI be utilized to predict and respond to societal needs in real time for policymaking?
- RQ7: What frameworks can be established for ethical conflicts in AI decision-making in governance?
- RQ8: What is the impact of AI on the labor market and social policies, and how can policy-makers respond?
- RQ9: How can AI be leveraged to improve cross-border collaborations in policymaking?
- RQ10: What are the best practices for training policymakers in AI technology and ethics?

3. Methodology

The methodology of this study is based on an in-depth literature review, which is seen as a crucial element in understanding the complexity of AI governance and policymaking. This review began with a targeted search in different scholarly databases through carefully chosen keywords. These keywords included 'AI in governance,' 'policymaking with machine learning,' and more niche themes such as 'ethical AI in public administration' and 'AI-driven decision making in government.' The inquiry also expanded into the area of 'digital governance and AI,' which included topics such as 'AI transparency and accountability, AI and public policy,' and the problematic issues of algorithmic bias in governance along with AI, data privacy in the public sector, and AI's role in legislative processes.

The databases used in this review were selected for their vast collections of scholarly works, which provided a reliable and extensive source of information. These were JSTOR, Google Scholar, IEEE Xplore, SSRN, ScienceDirect, and Scopus. The subject was explored through different lenses offered by each database, including technical papers and empirical studies to theoretical analyses and policy reviews. This comprehensive and systematic approach allowed for a comprehensive understanding of the current state of artificial intelligence in governance and policy making, which serves as a basis for the study.

4. Results

This review encompasses 30 articles that examine the role and governance of AI across various sectors (Appendix). Among these, there are 7 reviews, 5 theoretical analyses, 3 mixed methods studies, 2 qualitative analyses, 2 case studies, 1 conference paper, 1 policy brief, 1 exploratory workshop, 1 quantitative content analysis, and 1 bibliometric analysis. The results span a wide range of findings, from the need for big data for AI optimization in government operations to challenges in AI governance requiring multi-stakeholder approaches and the identification of biases in AI as a significant concern. The studies propose frameworks for AI transparency, responsibility, and ethics while also highlighting the transformative potential of AI in the public sector and its implications for democracy and public trust.

5. Discussion

The studies reveal that AI has the ability to provide data-driven insights for policy development. This includes AI's capability of working with big data and identifying trends and patterns that might be hidden from human analysts, which further supports more informed policy areas [10]. Further, AI, with its predictive analytics, can anticipate the outcomes of policies, hence enabling policymakers to make proactive decisions [11]. In addition, AI has been found to promote better public participation in policy making. Tools such as sentiment analysis can measure public opinion on social media and other digital platforms, providing a more democratic and inclusive method of policy construction [12]. Nevertheless, along with these advantages, there are major issues, including algorithmic bias, data privacy issues, and the digital divide, which need to be addressed so that equitable policy development can take place [13].

The potential consequences of AI on governance, especially with a long-term focus, remain an unexplored aspect of the role that AI plays in public administration. The incorporation of AI in governmental decision-making procedures has given rise to fears about diminished transparency. As pointed out by researchers, there is a fear that the sophisticated nature of AI algorithms can distort decision-making processes since it becomes hard to understand how decisions are reached [14]. Also, the question of accountability has been emphasized by Santoni de Sio and Mecacci (2021) [15], who suggest that the transferring of decision-making to AI systems may result in a 'responsibility gap' where nobody is responsible for AI-generated decisions. The over-reliance on AI recommendations is another important issue leading to the danger of policymakers relying too much on AI systems, which may result in a lack of human judgment and expertise [16]. These factors altogether indicate a demand for thoughtful deliberation and strong governance structures to guarantee that AI's assimilation into government decision-making procedures is responsible, transparent, and accountable.

The opportunities that can be generated from AI integration in governance and policymaking are significant. The ability of AI to improve operational efficiency is remarkable, providing opportunities for streamlining administrative procedures, minimizing redundancies, and improving the quality-of-service delivery. For example, Al-witwit and Ibrahim (2020) show how AI applications in resource allocation can bring about efficient and timely distribution of public goods [17]. Additionally, AI in data analysis can enable better and more productive policymaking decisions because it allows the discovery of insights from large amounts of data that would otherwise be unobtainable by traditional means [18]. This was highlighted in the study conducted by Olawade et al. (2023) [19], which showed how AI-powered data analytics has helped

to detect public health patterns, resulting in more focused healthcare policies. Such results consider the wider implications for the future of AI integration, indicating that while difficulties abound, possible benefits of using AI as a tool to increase governance and policymaking are massive and worthy of additional exploration and implementation.

5.1 Strategies for inclusive AI in policy making

A design-for-all approach is crucial to AI policymaking, which ensures that technologies developed using AI serve a diverse population fairly. There is a lot of importance in using different types of datasets and viewpoints during the design of AI systems [20]. This method not only overcomes the problem of biases in AI algorithms but also makes AI solutions more relevant and applicable to various demographic categories [16]. By combining data from various sources and ensuring that algorithms are not exclusive, the risk of reinforcing current biases or creating new ones is greatly minimized [20]. This approach is crucial in developing AI systems that are equitable and advantageous to all sectors of society, thereby contributing to a more inclusive future of technology-based government.

Transparency and accountability in AI policymaking are integral principles of ensuring ethical governance through AI integration. Thus, this principle refers to the implementation of an effective AI auditing and reporting framework, which is critical for monitoring AI operations and ensuring that they comply with set ethical standards and policies [8]. In addition, the establishment of explainable AI standards in government applications is essential. Explainable AI contributes to the clarification of decision-making mechanisms in AI systems so that policymakers and citizens can understand them better [21]. This transparency is essential for establishing trust in AI systems and ensuring that they are answerable to the citizens whom they serve. By implementing these mechanisms, government organizations can not only improve their decision-making processes with AI but also preserve the public trust in their activities.

Roche, Wall, and Lewis (2022) point out that ethical boundaries matter for AI policymaking [20]. This includes the creation of solid ethical standards and compliance structures that ensure AI applications meet high standards of human rights and privacy. These boundaries need to be established to foster public confidence and protect against the misuse of AI technology [22]. It requires a delicate balance between using the advantages of AI while respecting individual rights and ensuring that AI systems do not unintentionally cause harm or perpetuate inequalities [20, 23]. The scope of the guidelines should include issues related to ethics, such as data management, algorithm transparency, and how AI decisions affect society's well-being [24]. Also, compliance mechanisms make sure that these guidelines are not only on paper but rather put into practice and measured for efficiency [20, 24]. This holistic view of ethics in AI strengthens the ethical and responsible use of technology in governance and policymaking.

The idea of public engagement in AI policymaking is a key pillar for ensuring the democratic and inclusive implementation of AI. This approach focuses on the need for active dialogues and consultations with different stakeholders—citizens, experts, and policymakers—to ensure that AI-guided policies reflect various interests and needs [7]. The inclusion of citizen input into the AI policymaking process can create a sense of ownership and trust among citizens [25]. This involvement also enables the detection and prevention of issues that may not be obvious from a technical perspective alone. Such inclusive practices help to ensure that AI policies are not only technologically valid but also socially appropriate and accepted.

The adaptation and learning component is integral to AI policymaking as it emphasizes the need for continuous monitoring and updating of AI systems. This recurring procedure is necessary to make sure that AI solutions are up-to-date and efficient in the face of changes in society and new challenges [26]. It encompasses more than simply technical upgrades but also reassessments of AI approaches in light of new data, emerging ethical concerns, and evolving public perceptions [26]. The focus on the resilience and adaptability of AI systems is crucial for dealing with unpredictable threats and responding to changing surroundings [27]. This approach, along with other methods, is designed to promote AI application in governance that is fair, open, and effective, which will result in more responsive and adaptable public administration.

5.2 Addressing Gaps in AI Harm and Ethics Research

This study has also revealed significant voids in AI harm and ethics research, emphasizing the need for comprehensive approaches to address these issues. Nazer (2023) highlights the necessity to devise advanced metrics and approaches for measuring AI-related harm, especially concerning algorithmic bias detection and unintended consequences mitigation [28]. This method aims to provide a structured assessment of AI systems to determine the points where biases might appear, whether in data sources, algorithm design, or implementation processes [29]. In addition, strong measures are required that would help to eliminate these biases and ensure AI systems perform fairly. This proactive approach to addressing the negative effects of AI is essential for the responsible application and implementation of AI technologies in different areas.

Testing ethical frameworks in AI applications is essential. This entails conducting empirical studies that are important in assessing the efficiency of these frameworks. This type of research is conducted to objectively evaluate different ethical models in various governance settings, analyzing their feasibility, suitability, and performance under real-life conditions [30]. Using a range of ethical models, researchers try to determine how different forms of AI ethics operate in different situations and which ones are most effective for ensuring the ethical governance of AI. This process is essential for ensuring that AI applications not only adhere to ethical standards but are also specific to the challenges and requirements of various governance environments.

The formulation of AI ethics guidelines that are clear and actionable is important. This includes the establishment of pragmatic and enforceable guidelines for AI use, which are essential in guaranteeing that applications based on artificial

intelligence always follow ethical principles [22]. This process involves dealing with conflicts and ambiguities in the current ethical norms [24]. It is a thorough review and revision of existing guidelines to address any inconsistencies or ambiguous instructions, making AI ethics understandable and implementable in the real world. This strategy seeks to create a strong ethical framework for AI that guides its design and implementation in accordance with society's values and norms.

There is also an important requirement for developing technical skills among policymakers in the field of AI. This can be viewed as an important step towards closing the current gap between technical skills and policymaking practices [11]. The introduction of AI technical training into public governance education is recommended as a fundamental strategy for this. Such training would help policymakers develop a better understanding of AI technologies and allow them to make more informed decisions regarding the adoption and regulation of AI [24]. This information is not only useful in the governance of AI but also vital for predicting and responding to issues arising from the adoption of AI in public domains.

One of the most important aspects in the implementation and monitoring of responsible AI is developing efficient AI governance models, as Papagiannidis et al. (2022) note [31]. These involve extensive studies on organizational structures that can effectively govern and control AI systems [31]. It is suggested that the establishment of AI regulatory authorities should be seen as an important initiative to ensure continuous monitoring and adherence to standards and regulations [24]. Also, the development of collaborative governance frameworks is recommended to promote coordination among different stakeholder groups such as government agencies, private sector organizations, and civil society [32]. These platforms are intended to develop an integrated and holistic approach for AI governance enabling responsible and ethical use of the AI technologies. This type of governance is essential in dealing with the gaps found in AI harm and ethics research to ensure that its benefits are fully maximized while minimizing risks.

5.3 Evidence and Limitations in Current Research

The study of AI in governance reveals a complicated terrain, which is characterized by, on the one hand, promising evidence and, on the other, significant limitations. AI is very adept at handling large datasets, thereby improving the efficiency of policymaking [18]. This is especially the case for industries such as health care and environmental policy, where AI's analytical skills result in better informed decision making [19]. Nevertheless, the works of Curtis, Gillespie, and Lockey (2023) contradict this position, as their research reveals cases where AI resulted in biased decisions that deepened the digital divide and caused privacy and security issues [33]. These results indicate a fundamental necessity for a moderate approach in AI usage at governance, where its benefits are used wisely, and its vulnerabilities are cautiously addressed.

Current AI research has numerous limitations. Stahl (2021) points out a critical concern in that AI technologies are often unable to capture the subtleties of human nature that lie at the core of policy making [4]. This shortcoming may result in policies that do not represent human needs and values. Moreover, the absence of holistic frameworks for AI accountability and ethics in governance is a large issue. However, the lack of such structures leads to ethical predicaments and accountability problems in AI applications [34]. Another important problem is that training data for AI systems does not necessarily represent all demographics, which creates biases and inequities in AI-based decision making [28]. All these limitations emphasize the need for a more subtle approach to AI governance.

However, the current state of research in AI governance is marked by its early but fast-growing nature and an ever-increasing number of case studies and theoretical analyses. Today, the number of research topics is very diverse and includes ethical issues, technological problems, and sector-specific applications. But they also point to an important gap in the form of a lack of longitudinal studies, which are essential for comprehending AI's lasting influence on governance [35]. This gap highlights the necessity for large-scale, long-term studies to measure the lasting impact and possible development of AI in government. The scope of current research, which addresses several facets of AI implementation, illustrates the broadness and diverse nature of AI in governance.

The overall trend in the field is that AI has great potential to change governance and policymaking processes, though. The transformative power of AI in simplifying the decision-making process, increasing efficiency, and providing new insights through data analysis is well known [36]. But this optimism is somewhat curbed by major ethical, privacy, and fairness issues. These challenges require critical consideration, especially in the design and implementation of AI systems. AI in governance presents a set of complex ethical issues and privacy concerns because of the high use of data and fairness aspects mainly related to algorithmic bias but also referring to its effect on different groups of society [23, 29]. For dealing with these challenges, cross-disciplinary collaboration is considered necessary involving professionals from technology, ethics, policy making and other such fields [37]. This collaborative effort is crucial to ensure that the integration of AI in governance is not only technologically viable but also morally and socially acceptable.

Furthermore, AI governance research reliability and validity are challenged, as most studies rely on particular cases or models that might not be generalizable. Therefore, specific contexts of these studies may make it problematic to generalize their findings [38]. Also, the domain of research with ethical and societal implications is still developing, trying to catch up with the fast pace of AI technology [39]. The ever-evolving nature of AI development also makes research easily outdated since new technologies and applications are being developed. This scenario highlights the need for constant research that is flexible and sensitive to AI technology development and usage in governance.

6. Conclusion

This literature review on AI in governance and policymaking has provided important findings that inform a wide range of

major research questions. It focused on the intricacies of developing fair AI algorithms to achieve non-biased and equitable policy outcomes, highlighting the need for systems that can quantify harm from AI, such as bias and misinformation. The results underscore the necessity of transparency and accountability in AI systems for public governance, revealing that AI can help promote environmental policies toward sustainable development. The research also focused on the difficulties and potential solutions to include public feedback in AI policymaking algorithms, highlighting how AI can simultaneously anticipate and respond to societal demands in real-time for policymaking. Ethical frameworks are essential in AI governance for navigating decision-making dilemmas. In general, the study widens our understanding of AI effect on labor market and social policies, its capabilities in enhancing cross-border policy making alliances, and necessity of training policymakers with AI technology to ethics. This research, therefore, not only identifies the enormous opportunities for AI to revolutionize governance but also emphasizes the careful use of this technology while addressing its limitations.

References

[1] M. Kuziemski, G. Misuraca, "AI governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings," Telecomm. Policy, vol. 44(6), pp. 101976, 2020. doi: 10.1016/j.telpol.2020.101976.

[2] S. N. Giest, B. Klievink, "More than a digital system: how AI is changing the role of bureaucrats in different organizational contexts," Public Management Review, vol. 0, pp. 1–20, 2022. doi: 10.1080/14719037.2022.2095001

[3] Y. Duan, J. S. Edwards, Y. K. Dwivedi, "Artificial intelligence for decision making in the era of Big Data – evolution, challenges and research agenda," International Journal of Information Management, vol. 48, pp. 63–71, 2019. doi: 10.1016/j.ijinfomgt.2019.01.021

[4] B. C. Stahl, "Ethical Issues of AI," Artificial Intelligence for a Better Future, pp. 35–53, 2021. doi: 10.1007/978-3-030-69978-9_4.

[5] K. Manheim, L. Kaplan, "Artificial Intelligence: Risks to Privacy and Democracy," Yale Journal of Law & Technology, vol. 21, pp. 106–188, 2019.

[6] R. Gianni, S. Lehtinen, M. Nieminen, "Governance of Responsible AI: From Ethical Guidelines to Cooperative Policies," Frontiers in Computer Science, vol. 4. 2022. https://www.frontiersin.org/articles/10.3389/fcomp.2022.873437

[7] C. Wilson, "Public engagement and AI: A values analysis of national strategies," Government Information Quarterly, vol. 39(1), pp. 101652, 2022. doi: 10.1016/j.giq.2021.101652

[8] C. Novelli, M. Taddeo, L. Floridi, "Accountability in artificial intelligence: what it is and how it works," AI and Society, 2022. doi: 10.1007/s00146-023-01635-y

[9] J. Tallberg, E. Erman, M. Furendal, J. Geith, M. Klamberg, M. Lundgren, "The Global Governance of Artificial Intelligence: Next Steps for Empirical and Normative Research," International Studies Review, vol. 25(3), pp. viad040, 2023 doi: 10.1093/isr/viad040

[10] I. Pencheva, M. Esteve, S. J. Mikhaylov, "Big Data and AI – A transformational shift for government: So, what next for research? Public Policy and Administration, vol. 35(1), pp. 24–44, 2020. doi: 10.1177/0952076718780537

[11] M. Ramezani, A. Takian, A. Bakhtiari, H. R. Rabiee, S. Ghazanfari, H. Mostafavi, "The application of artificial intelligence in health policy: a scoping review," BMC Health Services Research, vol. 23, pp. 1416, 2023. doi: 10.1186/s12913-023-10462-2

[12] E. Corbett, E. Denton, S. Erete, "Power and Public Participation in AI," Equity and Access in Algorithms, Mechanisms, and Optimization, Boston, 2023. doi: 10.1145/3617694.3623228

[13] V. Božić, "Risks of Digital Divide in Using Artificial Intelligence (AI)," 2023. doi: 10.13140/RG.2.2.18156.13443.

[14] K. de Fine Licht, J. de Fine Licht, "Artificial intelligence, transparency, and public decision-making," AI and Society, vol. 35(4), pp. 917–926, 2020. doi: 10.1007/s00146-020-00960-w

[15] F. Santoni de Sio, G. Mecacci, "Four Responsibility Gaps with Artificial Intelligence: Why they Matter and How to Address them," Philosophy & Technology, vol. 34(4), pp. 1057–1084, 2021. doi: 10.1007/s13347-021-00450-x

[16] A. Zuiderwijk, Y.-C. Chen, F. Salem, "Implications of the use of artificial intelligence in public governance: A systematic literature review and a research agenda," Government Information Quarterly, vol. 38(3), pp. 101577, 2021. doi: 10.1016/j.giq.2021.101577

[17] S. S. I. Al-witwit, A. A. Ibrahim, "Improving Operational Efficiency of Government using Artificial Intelligence," IOP Conference Series: Materials Science and Engineering, vol. 928(2), pp. 022014, 2020. doi: 10.1088/1757-899X/928/2/022014

[18] V. Charles, N. P. Rana, L. Carter, "Artificial Intelligence for data-driven decision-making and governance in public affairs," Government Information Quarterly, vol. 39(4), pp. 101742, 2022. doi: 10.1016/j.giq.2022.101742

[19] D. B. Olawade, O. J. Wada, A. C. David-Olawade, E. Kunonga, O. Abaire, J. Ling, "Using artificial intelligence to improve public health: a narrative review," Front Public Health, vol. 11, pp. 1196397, 2023. doi: 10.3389/fpubh.2023.1196397

[20] C. Roche, P. J. Wall, D. Lewis, "Ethics and diversity in artificial intelligence policies, strategies and initiatives," AI and Ethics, vol. 3(4), pp. 1095–1115, 2023. doi: 10.1007/s43681-022-00218-9

[21] L. Nannini, A. Balayn, A. L. Smith, "Explainability in AI Policies: A Critical Review of Communications, Reports, Regulations, and Standards in the EU, US, and UK," The 2023 ACM Conference on Fairness, Accountability, and Transparency, Chicago, 2023. doi: 10.1145/3593013.3594074

[22] C. Cath, "Governing artificial intelligence: ethical, legal and technical opportunities and challenges," Philosophical Transactions: Mathematical, Physical and Engineering Sciences, vol. 376(2133), pp. 20180080, 2018. doi: 10.1098/rsta.2018.0080

[23] L. Belenguer, "AI bias: exploring discriminatory algorithmic decision-making models and the application of possible machine-centric solutions adapted from the pharmaceutical industry," AI Ethics, vol. 2(4), pp. 771–787, 2022. doi: 10.1007/s43681-022-00138-8

[24] D. Huttenlocher, A. Ozdaglar, D. Goldston, "A Framework for U.S. AI Governance: Creating a Safe and Thriving AI Sector," MIT Schwarzman College of Computing, 2023. https://computing.mit.edu/wp-content/uploads/2023/11/AIPolicyBrief.pdf

[25] A. Jungherr, "Artificial Intelligence and Democracy: A Conceptual Framework," Social Media + Society, vol. 9(3), pp. 20563051231186353, 2023. doi: 10.1177/20563051231186353

[26] M. Fagan, "AI for the People: The Use of AI to Improve Government Performance," M-RCBG Faculty Working Paper Series, 2024. https://dash.harvard.edu/handle/1/37374826

[27] V. Moskalenko, V. Kharchenko, A. Moskalenko, B. Kuzikov, "Resilience and Resilient Systems of Artificial Intelligence: Taxonomy, Models and Methods," Algorithms, vol. 16(3), pp. 3, 2023. doi: 10.3390/a16030165

[28] L. H. Nazer, "Bias in artificial intelligence algorithms and recommendations for mitigation," PLOS Digital Health, vol. 2(6), pp. e0000278, 2023. doi: 10.1371/journal.pdig.0000278

[29] N. Turner, P. Resnick, G. Barton, "Algorithmic bias detection and mitigation: Best practices and policies to reduce consumer harms," 2019. https://www.brookings.edu/articles/algorithmic-bias-detection-and-mitigation-best-practices-and-policies-to-reduce-consumer-harms/

[30] J. Yin, K. Y. Ngiam, H. H. Teo, "Role of Artificial Intelligence Applications in Real-Life Clinical Practice: Systematic Review," Journal of Medical Internet Research, vol. 23(4), pp. e25759, 2021. doi: 10.2196/25759

[31] S. J. M. Grootjans, M. M. N. Stijnen, M. E. A. L. Kroese, D. Ruwaard, M. W. J. Jansen, "Collaborative governance at the start of an integrated community approach: a case study," BMC Public Health, vol. 22(1), pp. 1013, 2022. doi: 10.1186/s12889-022-13354-y

[32] E. Papagiannidis, I. M. Enholm, C. Dremel, P. Mikalef, J. Krogstie, "Toward AI Governance: Identifying Best Practices and Potential Barriers and Outcomes," Information Systems Frontiers, vol. 25(1), pp. 123–141, 2023. doi: 10.1007/s10796-022-10251-y

[33] C. Curtis, N. Gillespie, S. Lockey, "AI-deploying organizations are key to addressing 'perfect storm' of AI risks," AI and Ethics, vol. 3(1), pp. 145–153, 2023. doi: 10.1007/s43681-022-00163-7

[34] E. Hohma, A. Boch, R. Trauth, C. Lütge, "Investigating accountability for Artificial Intelligence through risk governance: A workshop-based exploratory study," Frontiers in Psychology, vol. 14, pp. 1073686, 2023. doi: 10.3389/fpsyg.2023.1073686

[35] V. J. Straub, D. Morgan, J. Bright, H. Margetts, "Artificial intelligence in government: Concepts, standards, and a unified framework," Government Information Quarterly, vol. 40(4), pp. 101881, 2023. doi: 10.1016/j.giq.2023.101881

[36] R. Gruetzemacher, J. Whittlestone, "The transformative potential of artificial intelligence," Futures, vol. 135, pp. 102884, 2022. doi: 10.1016/j.futures.2021.102884

[37] L. Jaillant, A. Caputo, "Unlocking digital archives: cross-disciplinary perspectives on AI and born-digital data," AI and Society, vol. 37(3), pp. 823–835, 2022. doi: 10.1007/s00146-021-01367-x

[38] J. Chubb, P. Cowling, D. Reed, "Speeding up to keep up: exploring the use of AI in the research process," AI and Society, vol. 37(4), pp. 1439–1457, 2022. doi: 10.1007/s00146-021-01259-0

[39] P. Robles, D. J. Mallinson, "Artificial intelligence technology, public trust, and effective governance," Review of Policy Research, vol. 0, pp. 1–18, 2023. doi: 10.1111/ropr.12555