Algorithmic Justice and Public Belief: An Ethical Review of AI Implementation on Discord Digital Elections In Nepal

Aisyah Diah Nurmastuti [1*]

Zahrah Putri Haryadi [2]

[1,2] *UIN Raden Mas Said Surakarta, Indonesia*

ABSTRACT

This study discusses the implementation of artificial intelligence in digital elections through the Discord platform in Nepal with a focus on algorithmic justice and public service as key ethical issues. The analysis was conducted using the social reality construction theory of Peter L. Berger and Thomas Luckman, which views the process of externalization, objectification, and internalization as a framework for understanding how technology, algorithms, and public perception intersect with each other in digital political reality. The results show that AI has the potential to increase efficiency and voter participation, but data bias, access inequality, and social construction of technology can affect perceptions of justice and representation of marginalized groups. These findings underscore the need for algorithmic transparency, independent oversight, and data protection to ensure that political realities formed through digital systems remain inclusive and in line with the principles of public welfare.

Keyword: algorithmic justice, social construction, digital elections, artificial intelligence

Introduction

As technology advances, artificial intelligence (AI) has become an integral part of various sectors of life, including in the world of politics. One of the most interesting AI implementations is in the digital election system. This technology is believed to improve efficiency, speed, and accuracy in vote counting, as well as provide better transparency compared to conventional methods. Thus, the use of AI in digital elections promises not only convenience, but also a significant change in the way people engage in the political process (Dad & Khan, 2023). However, behind this great potential, there are ethical

challenges that need to be considered, especially related to algorithmic justice and its impact on the public community.

Algorithmic fairness refers to the application of fairness principles in the design and implementation of algorithms used in digital election systems. The main goal is to ensure that the technology used does not discriminate against certain groups or provide unfair advantages to certain parties (Shrestha & Yang, 2019). For example, algorithms that detect potential fraud or process voter votes must be carefully designed so that they do not bias against specific ethnic, gender, or social class groups. Without algorithmic justice, there is a risk that AI will exacerbate existing inequalities in society, instead of reducing those gaps.

* Corresponding author: dwimastuti4@gmail.com

In addition, in a broader perspective, public benefit refers to the principle of public welfare that must be the foundation of every public policy. In the context of digital elections, this means that the technology applied must provide the greatest benefits for all people, without harming any group in accordance with the concept of Maslahah Mursalah (Purwanto, 2018). The implementation of AI in digital elections must be carried out with attention to the public interest as a whole, not only focusing on the efficiency of the system, but also on its impact on social justice and healthy democracy.

On the other hand, digital technology can offer solutions to increase people's political participation, especially in remote areas that are difficult to reach by traditional electoral systems. An efficient and transparent digital election system can enable voters from diverse backgrounds to participate more easily and quickly. However, if not designed with clear principles of fairness, this technology can also cause harm, either in the form of discrimination against certain voters or damage to the integrity of election results.

One of the big challenges in the implementation of AI in digital elections is data security and privacy. Highly sensitive voter data can be manipulated or misused if there are no stringent arrangements in place to protect it (Bender, 2022). Therefore, it is important to ensure that the use of AI in digital elections not only pays attention to the efficiency aspect, but also safeguards the privacy rights of individuals and prevents misuse of information. This is especially relevant considering the many potential threats to digital data in the modern era.

With the various challenges that exist, this paper aims to examine the application of AI in the Discord digital election in Nepal from an ethical perspective. The main focus is on two important issues: first, how the principles of algorithmic justice can be applied to ensure that elections remain transparent, fair, and non-discriminatory; and second, how this technology can create greater public benefits, by ensuring that the interests and welfare of the wider community can be achieved. With an in-depth evaluation, it is hoped that an optimal solution can be found to integrate AI in Nepal's electoral system, which is not only efficient, but also ethical and fair for all people.

Why is this issue so important to analyze, especially in the context of Nepal? Nepal is a country rich in ethnic, cultural, and religious diversity. The social and political structure in Nepal is very complex, with various groups having limited access to resources and technology. Therefore, the implementation of AI-based digital election systems in the country has the potential to exacerbate social and political inequality if not carried out carefully. Nepalese people, especially marginalized groups, must ensure that they remain equal access to the electoral process and are not marginalized by errors or biases in algorithms.

Method

In examining the application of AI in digital elections in Nepal from the perspective of algorithmic justice and public benefit, this study uses the social

construction theory of Peter L. Berger and Thomas Luckmann as its scalpel. This theory comes from a book titled "Invitation to Sociology: A Humanistic Perspective" which describes the relationship of individuals with society that together create a social reality that is considered objective. This theory is divided into three main elements that are interrelated with each other, namely externalization, objectification, internalization (Dharma, 2018). This approach aims to explore a deeper understanding of various issues related to algorithmic justice, AI ethics, and the social and political implications of the use of AI in the context of digital elections. The literature analyzed consists of journal articles, books, research reports, and other related publications that focus on the application of AI in politics and elections, as well as ethical studies in the use of technology in democratic systems.

Discussion

Elections are one of the important elements in the democratic system, giving people the opportunity to elect representatives and determine the direction of the nation's policies. In today's digital age, many countries are trying to leverage technology to increase participation and effectiveness of the electoral process. Nepal, as a country with a complex social and political structure, is also considering the implementation of an electoral system that uses digital technology, including through the Discord communication platform powered by artificial intelligence. However, the application of artificial intelligence in digital elections must be considered from an ethical point of view, especially related to algorithmic justice and the public interest.

1. Algorithmic Justice: Basic Principles for a Fair Electoral Process

   Algorithmic justice is a concept that emphasizes that systems powered by artificial intelligence must operate without bias, exclusion, or unequal treatment of certain groups. In the context of elections, the aspect of algorithmic justice is very crucial because the results determined by algorithms can affect the legitimacy and integrity of democracy (Bender, 2022). A biased algorithm can cause disparities in adverse treatment for certain groups, which ultimately leads to the unfairness of political speculation.
   Causes of Bias in Algorithms

      Bias in algorithms can arise from a variety of factors, such as:
      Data Bias: AI algorithms are highly dependent on the data supplied to them. If voter data is disproportionate or less inclusive of all walks of life, for example if more data comes from a particular area or a specific ethnic group, the algorithm tends to give that group an advantage. This can result in elections not reflecting the aspirations of the entire community (Shrestha & Yang, 2019).
      Developer Bias: Algorithm developers may inadvertently include their preferences or political views in the creation of algorithms. This often

happens when the makers do not have sufficiently diverse backgrounds or when they ignore the presence of underpaid groups (Bender, 2022).

a) The Impact of Bias in Digital Elections

In Nepal, which has ethnic and linguistic diversity, algorithmic inequities in digital elections can exacerbate pre-existing social and political tensions (Bender, 2022). For example, if the algorithm prioritizes voices from urban areas that are more connected to technology, then voices from remote areas, which have limited access to technology and the internet, are likely to be ignored. As a result, the election results are unable to reflect the expected diversity and fairness.

2. Maslahah Public: Shared Interests in Technology Implementation

Public maslahah is a moral principle that prioritizes the value of using technology and policies for the common good of all people. In the context of AI-based elections in Nepal, the application of artificial intelligence must ensure that technology is used for the good of the many, not for the benefit of a small group of powerful or parties with superior access to technology.

a) Algorithm Transparency

One of the crucial elements to maintain the public benefit is transparency in the algorithm. The public needs to understand how algorithms work, data collection methods, and how election results are determined (Bender, 2022). Without transparency, the public cannot be sure whether the algorithm is biased or detrimental to certain parties (Yang & Lee, 2024). For example, if algorithms prioritize more interactive voices on the *Discord* platform, this can create an imbalance in outcomes because individuals with limited digital knowledge or who live in remote areas cannot contribute fully. With transparency, authorities and the public can identify possible biases or errors in the algorithm and can make improvements before the election takes place.

b) Data Security and Privacy

Elections conducted digitally depend heavily on the way voters' personal data is collected and stored. This situation raises significant concerns regarding data security and privacy. For example, voters' personal data such as name, address, voting choice, and political preferences need to be strictly protected. In Nepal, with low levels of digital literacy and knowledge of personal data protection, data leaks or misuse can undermine public trust in the electoral process. Unsecured data security can also lead to potential manipulation or hacking that could affect the outcome of the election.

c) Prevention of Bias and Discrimination

As part of efforts to counteract algorithmic injustice and safeguard the public benefit, AI systems should be developed with the goal of minimizing bias and discrimination. This can be done through the application of periodic algorithmic audits, ensuring the representation of diverse data,

and applying techniques to detect and correct biases in data and decision-making processes. Bias in AI systems can create inequalities in voting rights or opportunities to engage in the electoral process, which is contrary to the principles of justice and democracy.

3. Ethical Considerations in the Application of AI to *the Digital Discord* Elections in Nepal

In discussing the application of AI to Discord-based digital elections in Nepal, several ethical issues must be considered to ensure that these technologies operate in accordance with the principles of justice and public welfare. Some ethical considerations that need to be analyzed include:

a) Social Effects
AI has the potential to influence public views as well as political behavior patterns. For example, algorithms on platforms like *Discord* might magnify political divisions by displaying only information that aligns with individual preferences, creating echo chambers. This can exacerbate social and political tensions (Hasibuan et al., 2024), especially in a country with ethnic and cultural diversity such as Nepal. Therefore, it is crucial to ensure that the algorithm spreads information in a balanced manner and does not reinforce divisions.

b) Public Participation in AI Development
The stages of developing and applying AI in digital elections need to involve input from the public. In order for the use of AI to be done fairly and effectively, the public must be given the opportunity to contribute to explaining how this technology is implemented, both in terms of transparency, fairness, and social impact. In Nepal, the involvement of the public in public discussions on the application of this technology is essential to ensure that their interests are safeguarded and that elections are conducted in accordance with democratic principles.

c) Responsibilities and Oversight
Finally, in the use of AI in digital elections, there is an urgent need for clear accountability mechanisms. Who is responsible if there is an error in the algorithm that affects the election results? Oversight conducted by independent agencies and transparent audits will ensure that this technology is not abused and that the election results are acceptable to all parties (Bender, 2022).

Conclusion

The application of artificial intelligence (AI) in digital elections, particularly on platforms such as *Discord* in Nepal, promises efficiency as well as increased political participation. However, this potential is overshadowed by serious ethical challenges related to algorithmic justice and the fulfillment of public needs. The

research shows that if the principles of algorithmic justice are not strictly applied, there is a high chance that AI systems will exacerbate the inequalities that already exist amid Nepal's social and political diversity, for example through existing biases in data and developers that ignore marginalized groups as well as remote areas. From the point of view of Maslahah Public, the use of AI in elections must be oriented towards the welfare of the community, which requires full protection of the integrity of the democratic process and the rights of voters.

Therefore, to implement AI ethically and fairly in the electoral system in Nepal, the following steps are essential. First, transparency and auditing of algorithms should be implemented, where there should be procedures that allow authorities and the public to understand how algorithms operate, prevent bias, and ensure fair outcomes. Second, data protection and privacy must be a requirement, strict regulations are needed to protect sensitive voter data to prevent manipulation and maintain public trust, especially considering the low level of digital literacy. Third, accountability and independent oversight are indispensable to establish a clear accountability system and ensure that any algorithmic errors are passed on and misuse of technology is prevented.

In this way, the integration of AI technology should not only emphasize the efficiency of the system, but should fundamentally ensure that every Nepali, regardless of ethnic background or access to technology, can participate equally in the political process. Through a commitment to these three critical steps, the goal of a healthy democracy and a great public benefit can be realized.

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