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# Impacts of Artificial Intelligence on Governance in the Context of Ongoing Digitalization

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Examining the potential impacts of artificial intelligence (AI) on governance is critical to better understand the opportunities and risks societies will face in the future. Issues such as how AI can transform decision-making processes, improve the efficiency of public services and shape democratic participation require in-depth analysis, both in terms of capitalizing on the advantages of technology and anticipating potential threats. In this context, when assessing the impacts of AI on governance, it is essential to reflect on how to strike a balance between leveraging AI's benefits and maintaining a human-centered approach to governance.

### Digital Transformation and AI

Digital transformation represents a fundamental shift in how organizations and societies operate while technology develops rapidly. Initially driven by the spread of information and communication



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technologies, this transformation accelerated with the advent of the internet and mobile technologies. At its core, digital transformation involves the digitalization of processes, data-driven decision making, and the adoption of more efficient work methods in sectors ranging from public services to commerce, education, and healthcare.

Several factors contribute to the onset of digital transformation, including globalization-induced competition, rising customer expectations, and the opportunities provided by technological innovations. AI can be considered as an advanced stage of digital transformation; where it plays a vital role in analyzing the vast amounts of data collected in the digitalization process, making predictions and introducing automation processes. Therefore, the relationship between AI and digital transformation can be summarized as follows; AI enhances digitalization and builds more intelligent, data-driven systems.

While AI has certainly made significant strides and is now integral to many aspects of our daily lives, it is important to view this development as part of the ongoing digital transformation that leads to techno-social formations we are in. For example, AI plays a growing role in the following topics that have been in our lives for quite some time:

- E-government applications and public service digitalization
- Enhancing transparency and accountability
- Digital participation and e-democracy initiatives
- The role of social media in political communication and organization
- Cybersecurity and digital rights

When discussing AI's potential impact, it is useful to keep in mind the continuity in digital developments. Moreover, the recent

consequences of non-digitized are important for understanding the impacts of AI. In thinking about the contributions of AI, we also need to consider the unintended and often unexpected negative effects of digitalization. Below are some recent examples of digital transformation and its broader implications:

### ***The role of social media in the Arab Spring and similar political movements***

Social media has played a significant role in political movements like the Arab Spring<sup>1</sup> by facilitating communication and organization among protesters. In these movements, platforms such as Facebook and Twitter were used to spread awareness, coordinate demonstrations and gather international support, effectively evading traditional media and government censorship. This digital transformation has enabled the rapid spread of information and mobilization of the masses, underscoring the potential of social media to empower citizens and influence political change. However, while social media catalyzed these movements, it was not the sole driver of these movements, which were rooted in deeper socio-political issues.

### ***The pandemic and the acceleration of digital transformation***

The COVID-19 pandemic significantly accelerated digital transformation across various industries, leading to the rapid adoption of digital technologies and applications. This shift was driven by the need to meet new working conditions such as remote working, online business models and digital customer interactions. Governments also embraced these technologies to maintain services and engage effectively with citizens. In Türkiye, for instance, the *E-Nabız* and *Hayat Eve Sığar* applications were vital in healthcare sector. This approach also includes the adoption of digital tools that facilitate online communication, service delivery and information dissemination. The crisis underscored the strategic importance of technology, pushing organizations to invest in digital initiatives and innovate quickly to remain competitive.

### ***The problem of disinformation and misinformation***

The rapid spread of disinformation and misinformation in the digital age has become a significant challenge, impacting areas such as



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public health, democracy, and social cohesion. Social media platforms and technological advancements have facilitated the rapid proliferation of false information, often driven by algorithms and media companies' profit motives. This has contributed to growing public distrust in traditional media sources and reliance on alternative, sometimes unreliable, outlets. Experts recommend various strategies to combat misinformation, such as mobilizing credible journalists, quickly addressing information gaps with accurate data, and being transparent about decision making processes. These efforts require coordinated works among governments, media platforms, and civil society to ensure that accurate information dominates public discourse.

### ***The digital divide and inequalities***

The digital divide and inequalities have been further deepened by the rapid pace of digital transformation, which underscores inequalities in access to technology and digital skills. This digital divide is evident in various dimensions, such as geography, income, education, and gender. For instance, rural and underdeveloped regions in Türkiye often lack access to high-speed internet infrastructure<sup>2</sup> limiting the participation

in the digital economy.<sup>3</sup> Moreover, socio-economic factors such as income and education level significantly affect individuals' ability to access and utilize digital technologies, further deepening the gap between various social groups. Addressing these disparities requires comprehensive strategies focusing on improving connectivity, enhancing digital literacy, and ensuring equitable access to digital resources.

### ***The transformation in employment***

Digital transformation has created new job opportunities such as data scientists and artificial intelligence specialists<sup>4</sup>, while increasing the demand for digital literacy and continuous upskilling among workers.<sup>5</sup> Remote and flexible work conditions have also transformed traditional work patterns, offering employees better work-life balance and access to global job markets. However, these changes also pose new challenges, such as job displacement and the widening digital divide, highlighting the need for reskilling and equal access to digital tools.

In light of these ongoing developments, the next section examines the potential impacts of AI on governance.

## Potential Impacts of Artificial Intelligence on Governance

The rapid development and proliferation of AI technologies have the potential to significantly impact governance and democratization processes. However, while assessing this potential, it's essential to recognize the continuity of ongoing digital developments mentioned above, as they provide context for understanding AI's influence. The following sections examine AI's potential impact in this context:

### *AI in Decision Making Processes*

AI systems, with their capacity to rapidly analyze large datasets and detect patterns, are increasingly being integrated into decision making processes. Governments and institutions are using AI-assisted analytics to inform critical decisions, such as policy formulation and resource allocation.

This can make decisions more data-driven and objective. For example, AI can be used to optimize a city's traffic flow, leading to more effective transportation policies. However, concerns about the transparency of AI systems persist. AI algorithms can inherit biases arising from the data they are trained on, potentially resulting in unfair or discriminatory decisions.

In crisis management, such as natural disasters, integrating AI into decision making processes offers notable advantages. For instance, AI can analyze meteorological data to predict disaster

scenarios and optimize emergency response plans. While this can enhance governments' and local authorities' ability to make faster and more effective decisions in pre- and post- disaster operations, relying solely on AI for such critical decisions can lead to unintended consequences, as algorithms may overlook human intuition or local knowledge. Therefore, AI should be viewed as a tool in crisis management, complemented by human oversight.

### *AI-Assisted Public Services and Policy Making*

The digital transformation process accelerated in the pandemic may take an even bigger step forward with AI, increasing the efficiency and accessibility of public services. AI tools like chatbots and virtual assistants can operate 24/7, addressing citizen inquiries and expediting transactions. Singapore's virtual assistant "Ask Jamie", for instance, helps citizens navigate various government agencies.<sup>6</sup>

In policy making, AI systems can analyze large data sets to identify societal trends and needs, enabling the development of more targeted and effective policies. For example, AI-assisted systems can be used in planning health services or creating education programs. However, as AI's role in policy making grows, it is crucial to ensure that human oversight remains central. Policy makers must critically evaluate AI-generated recommendations and consider their ethical implications.



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Issues of transparency and accountability also come to the fore in AI-assisted public services and policy making processes. For example, while AI systems can enhance fairness in the distribution of social benefits, citizens need to be informed about how these systems work, what data they use, and how they make decisions. In the Netherlands, an AI-based system designed to detect social welfare fraud faced criticism for allegedly discriminating against certain groups.<sup>7</sup> Such instances highlight the need for careful monitoring of AI systems and the establishment of robust oversight mechanisms.

### ***Electoral Processes and AI***

AI technologies can influence electoral processes in several ways. On one hand, AI-assisted systems can improve the accuracy of voter registration, strengthen election security and expedite the vote counting process. On the other hand, AI's role in political campaigns has raised concerns about its potential to influence and manipulate voter behavior.

For example, AI algorithms can analyze social media data to predict voter preferences, which can then be used for targeted political advertising. The Cambridge Analytica scandal<sup>8</sup>, has demonstrated how such practices can pose serious risks to democratic processes.

Additionally, AI-assisted tools such as deepfake technology can introduce new challenges to disinformation campaigns by creating fake video and audio recordings. This can make it harder for voters to access reliable information and eroding trust in democratic processes.

The use of AI in electoral processes also has the potential to enhance voter participation and facilitate their engagement in democratic processes. For example, AI-based applications can help voters learn about elections, compare candidates' policies and answer questions about the voting process. In India, an AI application was used to inform voters about candidates in their local constituencies.<sup>9</sup> However, it is critical to ensure that such technologies are

unbiased and transparent, to minimize the risks of manipulation while promoting democratic participation.

### ***AI's Potential Impacts on Democratic Participation***

AI has the potential to increase citizen participation in democratic processes. AI-assisted platforms can enable citizens to more effectively express their opinions and participate in policy making. For example, AI chatbots can collect citizen concerns and relay their feedback to policy makers.

Furthermore, AI systems can analyze complex policy documents and legal texts to create summaries for citizens, thus providing a better understanding of political issues. This can contribute to a more informed electorate.

Another potential impact of AI on democratic participation is its ability to facilitate direct citizen involvement in decision making. For instance, AI-based platforms can allow citizens to submit proposals to local governments or parliaments, provide feedback through surveys or vote on public policies. In some Swiss municipalities, AI-assisted tools are being used to enable direct citizen participation in urban planning projects.<sup>10</sup>

However, the development and dissemination of such tools raises important ethical and legal issues such as data privacy, security and democratic oversight.

The potential of AI to enhance democratic participation may be limited by factors such as the digital divide and disparities in technological literacy. Citizens who lack access to or familiarity with AI-assisted systems may risk exclusion from democratic processes. Additionally, the lack of transparency and accountability of such systems can make democratic participation even more difficult. Differences in the level of digital literacy in society can also affect individuals' trust in these systems and create an environment of distrust towards these technologies that can influence public policies. Finally, the increasing role of AI in decision making processes may overshadow the human factor and undermine the principle of representative democracy.

### **Recommendations**

In light of the ongoing digital transformation and the increasing role of AI, the following recommendations can help improve governance:

- **Digital Literacy and Access:** For AI to be used effectively in governance, digital



➔ **AI has the potential to enhance participatory governance. By developing digital platforms where citizens can contribute to public policies, it is possible to expand democratic participation.**

literacy must be improved. Especially in developing countries such as Türkiye, providing access and supporting the effective use of AI technologies by offering digital education programs will make a significant contribution to participatory democracy.

- **Transparency and Accountability:** It is of great importance that AI-assisted decision making processes are transparent and auditable. In order to overcome the trust issues caused by digital transformation, the public should be informed about how AI-based systems work, the data they rely on, and the algorithms they use.
- **Data Protection and Ethical Standards:** The European Union is engaged in important initiatives to protect ethical standards both in terms of data protection and Artificial Intelligence regulation. Türkiye can be expected to follow a similar path in this direction since AI sensitive government efforts in Türkiye

have already begun. In 2021, Türkiye’s first “National Artificial Intelligence Strategy”<sup>11</sup> and on July 4, 2024, the “National Artificial Intelligence Strategy 2024-2025 Action Plan”<sup>12</sup> was published by the Presidential Digital Transformation Office. This plan includes strategies to train AI experts, support research and entrepreneurship. Considering the scope and dimensions of AI, involving more stakeholders in the strategy and planning will enhance the strategy’s success.

- **Participatory Governance and Digital Democracy:** AI has the potential to enhance participatory governance. By developing digital platforms where citizens can contribute to public policies, it is possible to expand democratic participation. For this, digital democracy practices should be made more widespread in Türkiye.

## NOTES

1. The Arab Spring is a wave of political and social movements characterized by mass protests and uprisings against repressive regimes that began in Tunisia in 2010 and quickly spread to other countries in the Middle East and North Africa.
2. <https://journo.com.tr/dogu-guneydogu-internet-dijital-ucurum>
3. <https://www.kalkinmakutuphanesi.gov.tr/assets/upload/dosyalar/turkiyede-kirsal-ve-kentsel-ekonomilerin-entegrasyonu-projesi-kirkep-arastirma-raporu.pdf>
4. <https://www.yok.gov.tr/Sayfalar/Haberler/2024/yapay-zeka-dijitallesme-ve-buyuk-veri-alanlarinda-yeni-program-ve-bolumler-aciklandi.aspx>
5. <https://dergipark.org.tr/en/download/article-file/2462318>
6. <https://opengovasia.com/2018/08/06/jamie-virtually-knows-everything/>
7. <https://academic.oup.com/hrlr/article/22/2/ngac010/6568079?login=false>
8. In this scandal, a company called Cambridge Analytica collected Facebook users' personal data without their permission and used it for political campaigns, such as Donald Trump's. <https://bipartisanpolicy.org/blog/cambridge-analytica-controversy/>
9. <https://www.pbs.org/newshour/world/indias-latest-election-embraced-ai-technology-here-are-some-ways-it-was-used-constructively>
10. <https://www.digital-public-services-switzerland.ch/en/implementation/egovernment-implementation-plan/promoting-e-participation-projects-and-innovations>
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## RECOMMENDED READINGS

- *Refektif* Special Issue: *Yapay Zeka'nın Sosyal Hayata Etkileri* (<https://dergi.bilgi.edu.tr/index.php/reflektif/issue/view/11>)

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