POLICY OUTLOOK

The Utility of AI Technology in Political Campaigns:
A Comparative Analysis

Ravale Mohydin
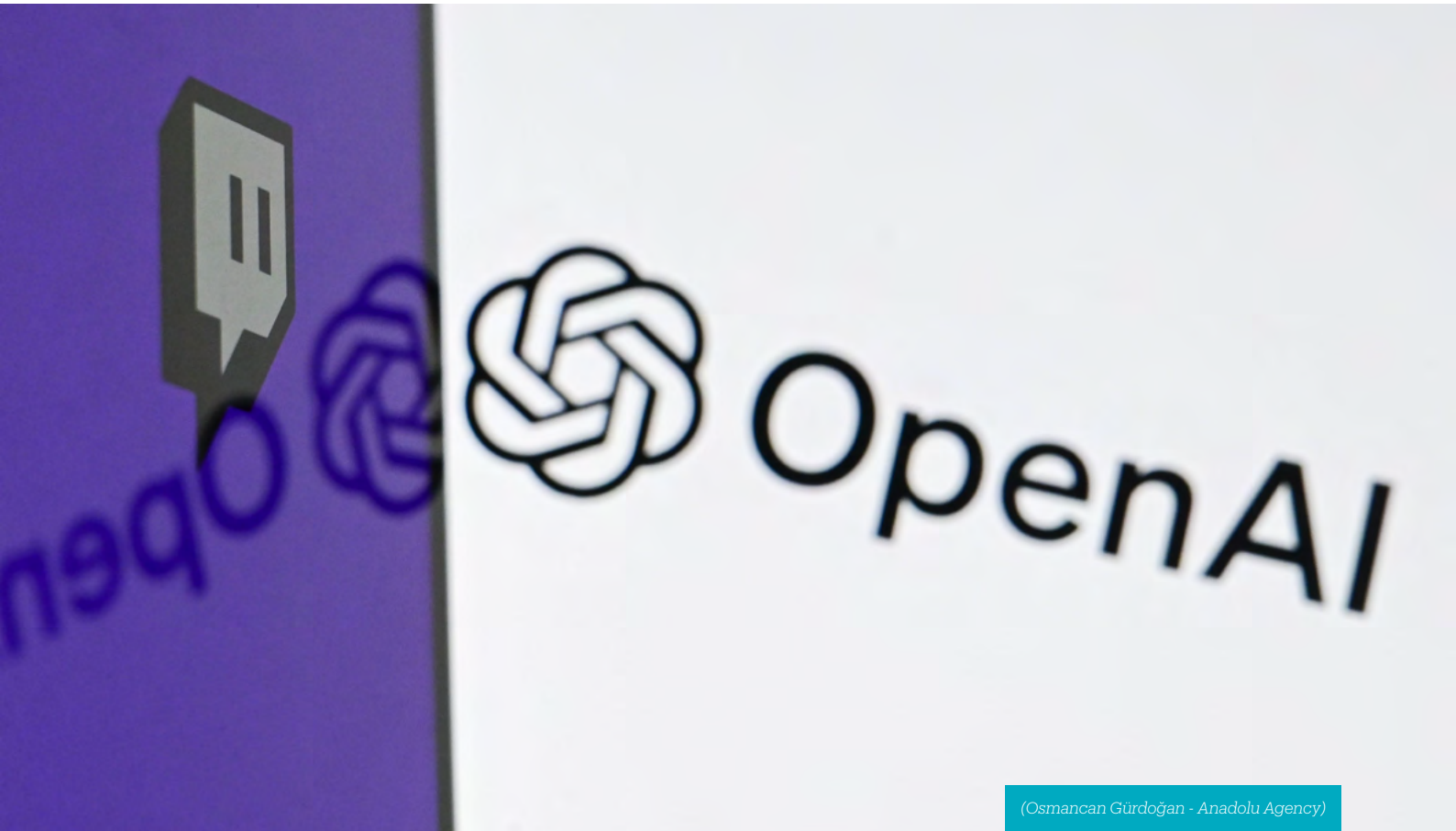
This policy outlook explores the transformative impact of Artificial Intelligence (AI) in political campaigns, analysing trends and actual applications by politicians such as Jean-Juc Mélenchon and Imran Khan. Evaluating AI technologies like predictive analytics, AI-powered chatbots and deepfakes, the paper also addresses privacy and misinformation concerns. As multiple international elections approach in 2024, AI's integration poses challenges and opportunities, urging ethical strategies for transparent, authentic engagement yet reflecting a dynamic interplay between technology and democratic principles in evolving political landscapes.

Introduction

In the ever-evolving realm of political campaigning, the advent of Artificial Intelligence (AI) has become a game-changer, revolutionising time-honoured tactics and swaying election results worldwide. This policy outlook investigates the complex influence of AI in political campaigns, tracing its historical progression, varied uses, and the attendant consequences and dilemmas. An in-depth analysis of the literature and case studies, such as Jean-Luc Mélenchon's holographic canvassing and Imran Khan's innovative deployment of AI during his imprisonment ahead of Pakistan's elections, highlights prominent examples of AI adoption.

This study scrutinises critical AI technologies in campaign strategies, including predictive analytics and AI-driven video production. It evaluates their beneficial and potentially harmful effects, paying special attention to ethical considerations. The discourse on privacy, misinformation, and the principled employment of nascent AI tools is gaining traction. The paper juxtaposes AI's functionality across different political landscapes, considering the cultural and legal elements that dictate its acceptance and efficacy.

As pivotal elections loom in 2024, AI's integration into political campaigns is pivotal, marking a watershed in blending advanced technology with the tenets of democracy. AI's ability to craft personalised messages, the extensive outreach capabilities of chatbots, and the emergence of deepfake technology offer a spectrum of challenges and prospects. The paper presents recommendations for ethical campaign strategies, emphasising transparency and using these innovations to cultivate authentic interactions that will define the trajectory of digital political engagement.

In this vibrant context, the interplay between technology and democratic principles is poised to evolve continually, redefining the way political figures resonate with their supporters and the electorate at large.

Historical Context of Political Campaigns

Political campaigns, particularly in the United States (US), where the origins of political campaigning lie, during the 1800s were characterised by a distinct lack of the modern technologies and mass media we associate with contemporary elections. In the 19th century, political campaigns were primarily localised affairs, often confined to individual states or regions. Candidates relied heavily on print media, particularly newspapers, to disseminate their messages. The campaign strategies were often rooted in the tradition of public speeches and debates, with candidates travelling extensively to connect with voters directly. Notable elections during this period, such as the contentious contest between Thomas Jefferson and John Adams in 1800, demonstrated the intense and often personal nature of early American political campaigns.

As the 19th century progressed, the emergence of political parties and the expansion of suffrage changed campaign dynamics. The adoption of the convention system to nominate candidates and the rise of political rallies signalled a growing sophistication in campaign organisation. However, the absence of nationwide communication networks limited the reach of these efforts. The 1800s laid the groundwork for the transformation of political campaigns, setting the stage for the influence of mass media and technology in the 20th century.

Political campaigns have evolved significantly across time and geographies, shaped by diverse historical, cultural, and technological contexts. As noted above, in the US, early campaigns were often localised, relying on personal connections, grassroots efforts, and town hall meetings. The introduction of mass media in the 20th century marked a pivotal shift, as candidates leveraged radio, television, and eventually the internet to engage broader audiences. The ground-breaking "two-step flow of communication" theory by Lazarsfeld and Katz in 1955 highlighted the influential role of opinion leaders who mediated political messages between mass media and the public, underscoring the importance of interpersonal communication in shaping political opinions during campaigns.

For example, the first televised US presidential debate on September 26, 1960, between John F. Kennedy and Richard Nixon marked a pivotal moment in American politics. Kennedy's calm and composed demeanour contrasted sharply with Nixon's visibly fatigued appearance, influencing public perceptions. This landmark event highlighted the transformative power of television in shaping electoral outcomes and set the stage for the importance of visual communication in modern politics. In the United Kingdom (UK), the landscape of political campaigns experienced notable changes with the prominence of televised debates, notably in the 2010 general election. The emergence of third-party organisations and think tanks, such as the Institute for Fiscal Studies, has played a pivotal role in shaping policy discourse during UK elections.

Research on the global impact of social media in elections has highlighted the changing dynamics of political communication. The ability of social media to foster direct engagement between candidates and voters, mobilise support, and influence public opinion has become a defining feature of contemporary election campaigns worldwide. However, it also raises important questions about the regulation of online political discourse, the spread of misinformation, and the potential manipulation of social media platforms for political purposes.

The increasing role of social media in elections during the 2000s reflects a transformative shift in political communication practices, shaping democratic processes on

a global scale. The prevalence of mobile technology and social media has facilitated outreach to rural and remote areas, transforming the dynamics of political engagement. In the Middle East, the Arab Spring uprisings in the early 2010s demonstrated the transformative potential of social media in shaping political movements. Platforms like Twitter and Facebook played a crucial role in facilitating communication, coordination, and mobilisation among activists, leading to significant political changes in countries like Tunisia and Egypt. As campaigns adapt to the evolving media landscape, scholars explore the challenges and opportunities of new communication technologies in political mobilisation.

Moreover, examining political campaigns in various countries provides crucial insights into the fusion between global trends and local dynamics. Comparative studies across nations enrich understanding of the diverse strategies employed in political campaigns, emphasising the need for nuanced approaches that consider cultural, technological, and historical factors, especially when considering the efficacy and usefulness of AI. The evolution of global political campaigns reflects a complex interplay of traditional and modern communication methods influenced by each country's unique historical and cultural backdrop.

Emergence of AI in Political Campaigns

The emergence of Artificial Intelligence (AI) in political campaigns represents a transformative shift in how candidates engage with voters and navigate the complexities of modern electioneering. Campaigns employ machine learning algorithms to analyse vast datasets, tailoring messages to specific demographics with unprecedented precision. This personalized approach enhances campaign effectiveness but also raises ethical questions about the potential manipulation of public opinion. AI-driven tools, such as chatbots and automated messaging systems, enable campaigns to scale up their interactions with voters, providing instant responses and collecting valuable data. However, concerns emerge regarding the potential for algorithmic bias, shaping voter perceptions based on their online interactions.

Predictive analytics powered by AI have become a cornerstone of modern campaign strategy. As campaigns use machine learning to predict voter behaviour, questions arise about transparency, fairness, and the inadvertent reinforcement of existing biases within the algorithms. Machine learning algorithms analyse online discourse to gauge public opinion, allowing campaigns to adapt their messaging in real-time.

However, the potential for algorithmic misinterpretation and the spread of misinformation pose challenges for responsible AI use in political contexts. Furthermore, ma-

chine learning algorithms play a crucial role in identifying and mitigating cyber threats, safeguarding electoral processes from hacking and disinformation campaigns. The integration of AI-driven holograms represents an innovative dimension in the evolution of political campaigns. Recent advancements have seen campaigns explore the use of AI to create lifelike holographic representations of candidates, enabling them to virtually address multiple audiences simultaneously.

This technology, while in its nascent stages, holds the potential to revolutionize the way political figures engage with voters. The incorporation of AI in holographic campaign events is exemplified in its ability to personalize interactions. By leveraging machine learning algorithms, holograms can adapt responses based on real-time audience reactions, creating a more dynamic and engaging experience for viewers. This aligns with the broader trend of personalization in political communication facilitated by AI technologies.

While AI offers unparalleled advantages in efficiency and data analysis for political campaigns, the ethical implications, potential biases, and concerns surrounding privacy and manipulation require careful consideration. A comprehensive understanding of AI's multifaceted impact on political processes is imperative to strike a balance between leveraging technological advancements and preserving the integrity of democratic principles. Below are case studies of the use of AI in political campaigning in a wide variety of political contexts that can shed light on how and why AI can be helpful as well as damaging in different settings.

Case Study: The 2016 US Election and Donald Trump's Unexpected Victory

The role of AI and data-driven methodologies in shaping the outcome of the 2016 US presidential election, resulting in Donald Trump's unexpected victory, is well documented. Leaked internal Cambridge Analytica company documents offered a nuanced understanding of how AI was strategically employed to execute micro-targeting strategies and deliver tailored messages across various digital channels, ultimately contributing to the success of the Trump campaign. The campaign used sophisticated survey research, data modelling, and performance-optimisation algorithms to execute a comprehensive strategy involving over 10,000 ads across major platforms such as Google, Snapchat, Twitter, Facebook, and YouTube. Specifically, the campaign effectively leveraged platforms such as YouTube's masthead, Twitter's "conversational ads," Snapchat's swipe-up feature, and Google's search

advertising. These meticulously crafted advertisements, viewed by billions, were strategically designed to resonate with diverse voter profiles, showcasing the influential role of AI in shaping political communication strategies.

Upon its integration into the Trump campaign in June 2016, Cambridge Analytica faced substantial challenges related to data infrastructure. The absence of a unified data, digital, and tech strategy presented an opportune landscape for the integration of AI. Disparate data sources were connected by implementing data science programs, underscoring the transformative role of AI in enhancing the campaign's data-driven capabilities.

Furthermore, a constant feedback loop was utilised, facilitated by AI, which played a crucial role in monitoring the effectiveness of messages across the aforementioned diverse platforms. This adaptive feedback mechanism empowered the campaign to refine algorithms in real time, enabling the delivery of thousands of distinct messages based on evolving data and voter responses. The flexibility and responsiveness of AI emerged as instrumental components in the dynamic landscape of political campaigning.

While the AI-driven strategies employed by Cambridge Analytica proved effective, ethical concerns arose regarding the extensive data-gathering capabilities of firms in the political landscape. This revelation prompted reflections on the moral implications and regulatory considerations surrounding the deployment of AI in democratic processes. The strategic application of AI in the 2016 US election served as a notable case study, highlighting the evolving intersection of technology, data, and political campaigns, and necessitating a nuanced examination of its implications on the democratic framework.

Case Studies: The Use of Holographic Projections in 2017 French and 2014 Indian General Elections

In anticipation of the initial round of the French presidential election held in 2017, the far-left candidate Jean-Luc Mélenchon concluded his campaign by orchestrating a rally simultaneously across 12 locations through holographic projection, reaching 11 cities in France. Notably, this pseudo-holographic manifestation of Mélenchon was not the exclusive virtual iteration of the 70-year-old politician in this electoral campaign. The campaign also developed Snapchat and Instagram filters featuring the veteran statesman, allowing supporters to capture his virtual presence in unconventional settings (see Image A)
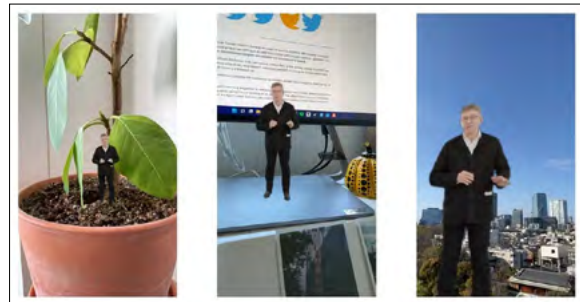
Image A: *Snapchat and Instagram filters of Jean-Luc Mélenchon*

The incorporation of 3D hologram technology into Indian Prime Minister Narendra Modi's 2014 Indian General Election campaign marked a significant advancement, offering a unique and captivating experience that transcended traditional political communication. This technological innovation was particularly impactful in engaging with demographics in underdeveloped regions, where the less-educated public found this approach not only accessible but also fascinating. Modi's campaign strategy extended beyond conventional rallies to include diverse, hard-to-reach at times, geographical settings, from the mountains of the Himalayas to the plains of Punjab, as well as the smaller towns of Himachal Pradesh and Andhra Pradesh.

Narendra Modi's Bharatiya Janata Party (BJP) strategically orchestrated over a thousand gatherings, leveraging technology throughout the 2014 election campaign. The deployment of hologram technology allowed citizens to listen to Modi's messages in awe and be genuinely impressed by the transformative power of technology. This multidimensional use of technology created a sense of wonder, significantly shaping the public's perception of political discourse and participation. Blending technology with political outreach became a powerful tool in Modi's campaign, facilitating a dynamic and innovative approach to engaging with diverse constituencies across the country (see Image B).

Image B: *A 3D hologram of Narendra Modi campaigning in the 2014 Indian General Election*

Case Study: AI Generated Campaign Speech in 2024 Pakistan General Election

Former Pakistani Prime Minister Imran Khan, currently in jail, delivered a speech via an audio clip generated through AI during a virtual rally, marking a unique event in the country (see Image C). The four-minute address, aired on social media platforms such as YouTube, Facebook, and Twitter, featured an AI-generated image of Khan accompanied by photos from past Pakistan Tehreek-e-Insaaf (PTI) rallies. The PTI organised the online rally to navigate a government ban on public gatherings in preparation for the upcoming general elections on February 8. The AI-generated voice, reflecting Khan's statements, mentioned the challenges faced by the party and praised the sacrifices made during a state crackdown on PTI.

Despite reported internet outages and disruptions during the live stream, the PTI claimed over five million views. Khan, who has been incarcerated since August on various charges, denies allegations, asserting that the cases against him are politically motivated. The PTI accused the government of intentionally disrupting the internet to hinder Khan's supporters from watching the online speech. NetBlocks, an internet tracking company, confirmed significant social media restrictions during the event. The Pakistan Telecommunication Authority denied internet disruptions, urging caution in spreading unconfirmed news. Pakistan's free speech activist Usama Khilji acknowledged the PTI's "innovative" use of AI for the virtual event but cautioned against the unchecked use of AI tools in political campaigns.

Haroon Baloch, associated with Bytes for All, a Pakistan-based human rights organisation focused on utilising technology for sustainable development, democracy, and social justice, characterised the PTI's utilisation of AI technology for election mobilisation as "undoubtedly innovative". However, Baloch underscored potential challenges in the prelude to the upcoming 2024 elections. He observed that despite PTI's standing as a significant political entity, it faces constraints in actively participating in the imminent general elections, constituting, in his view, an infringement upon its constitutional rights. With that said, Baloch articulated apprehensions about the deployment of synthetic media, contending, "Nonetheless, the use of synthetic media will open the floodgates of deep fakes, and they may wield considerable influence over the electoral outcomes".

Image C: *Former Pakistani Prime Minister Imran Khan uses AI for a 'virtual election rally' while imprisoned.*

Comparative Analysis of AI Utility in Political Campaigns

Cultural and legal factors are pivotal in assessing how AI is employed in political campaigns worldwide. These factors may contribute to variations in approaches as well as successes and failures associated with using AI technologies in the political arena. In the US, AI-driven targeting proved effective in Donald Trump's 2016 election campaign. However, this success came at a cost, as the use of AI became a controversial aspect of his presidency. The AI-powered targeted approach worked for Trump, but it also became a point of contention, making many wary of the implications and ethics surrounding the use of AI in political campaigns internationally. It informed the development of data protection laws that have a direct impact on the utilisation of AI, such as the EU's General Data Protection Regulation (GDPR), which came into effect in May 2018, restricts the collection and processing of personal data, affecting the deployment of AI algorithms for targeted campaigning in the EU.

One of the reasons for Narendra Modi's significant success in India's political landscape may be the effective utilisation of AI during political campaigning. Aligned with Modi's campaign focus on technology, AI-driven strategies resonated well with the Indian audience. For many Indians, incorporating AI was not just a campaign tool but also a source of entertainment. Additionally, as noted above, AI was employed by Imran Khan to connect with voters in Pakistan because he was not able to deliver live speeches while campaigning for Prime Ministership. Culturally, Pakistanis hold a reverence for technology and have been documented to appreciate the effort, and there are currently no legal barriers hindering the use of AI in political campaigns in Pakistan. AI allows for innovative ways of political communication, particularly when traditional methods are restricted. This may not be possible if tools like OpenAI DALL-E or ChatGPT are not allowed in political

campaigning. Understanding these contextual nuances is crucial for assessing the utility and impact of AI in political campaigns across diverse global contexts to avoid throwing the baby out with the bath water.

Future Trends and Recommendations

In the ever-evolving landscape of political campaigns, 2024 will see many important elections worldwide and is poised to witness a paradigm shift with the integration of cutting-edge AI. As candidates gear up for the campaign trails globally, the emergence of AI-generated personalised fundraising emails, interactive chatbots, and the potential utilisation of deepfaked campaign avatars is set to redefine the dynamics of political engagement.

AI-Generated Emails

One of the most striking developments is incorporating AI-generated personalised fundraising emails. Campaigns have long relied on mass emails to reach potential donors, but AI promises to take this outreach to a new level. Instead of generic messages, AI algorithms can analyse vast datasets to craft emails tailored to the recipient's preferences, interests, and donation history. Constituents can receive an email that not only aligns with their political beliefs but also speaks directly to their concerns and aspirations. The significance lies in the potential to establish a more profound connection between candidates and voters. AI can analyse past interactions, social media engagements, and public statements to create a nuanced understanding of an individual's political inclinations. By leveraging this information, campaigns can send targeted messages that resonate on a personal level, fostering a sense of direct engagement that goes beyond traditional campaign rhetoric.

AI-Powered Chatbots

As campaigns seek innovative ways to engage voters, AI-powered chatbots are poised to play a pivotal role. These digital entities, trained on vast datasets representing candidates' views, personalities, and policy stances, can approximate the act of direct communication. These employ tools driven by large language models (LLMs), exemplified by technologies like ChatGPT and the creative application DALL-E. Voters can receive text messages from chatbots urging them to vote, providing real-time updates on campaign events, and even engaging in conversations to address individual concerns. The essence of this approach lies in its ability to scale personalised interactions. While it's impossible for a candidate to show up in person in every home, AI-driven chatbots can emulate the experience of a personalised campaign outreach on a massive scale. By simulating genuine conversations, these chatbots can create a virtual whistle-stop tour, even reaching hard-

to-access voters in the comfort of their homes and fostering a sense of direct connection with the candidate on a scalable basis.

Deepfake AI Technology

AI-powered chatbots can be combined with visuals to enable the spectre of 'deepfakes'. Deepfake AI is a type of AI that can be used to create convincing images, audio, and video hoaxes. Deepfakes involve altering pre-existing source content, either by replacing one person with another or generating entirely new content portraying individuals engaging in actions or making statements they never actually did. While this raises concerns about misinformation and potential misuse, proponents argue that controlled and transparent use of deepfakes could enhance campaign outreach. For instance, a carefully crafted deepfake avatar could deliver campaign messages in multiple languages, engage with diverse demographics, navigate the challenges of a hectic campaign schedule, and significantly lower the costs of campaigning.

Balancing Pros and Cons

Striking the right balance between innovation and ethical considerations will ensure public trust in this evolving landscape. Even though AI holds the promise of enhancing political accessibility and mitigating polarisation, it also harbours the risk of disseminating misinformation and amplifying the potential for voter manipulation that may unfold in the realm of AI-driven political engagement. Thus, OpenAI has stated that its tools will no longer be available for political campaigning. An example is OpenAI implementing safeguards on DALL-E, refusing requests to generate images depicting real individuals, including political candidates.

Additionally, it has committed to continuously updating ChatGPT to provide accurate real-time information from global news sources and directing users to official voting websites for additional details. With that said, not only are there significant challenges associated with such efforts to prevent the use of AI tools for political campaigning, including AI models not understanding context, resource intensiveness due to constant model upgrading, and bad actors continually developing new techniques to circumvent restrictions as well as competitors filling the gap, it may hinder democratisation of political engagement. AI-driven technologies have the potential to amplify the voices of underrepresented communities and increase political engagement by tailoring campaign messages to address specific concerns.

Blockchain Technology as a Potential Solution

However, concerns about data privacy, algorithmic bias and the concentration of technological power are also im-

portant and must be addressed. To do so, campaigns must prioritise transparency and accountability in their use of AI. Clear communication about data usage, algorithmic decision-making and the ethical guidelines governing AI applications is essential to building public trust.

A potential solution is the use of blockchain technology. Concerns about transparency in algorithmic decision-making have arisen due to the opaque nature of some complex AI models, making it challenging to trace and understand the evolution of these models over time. Blockchain integration addresses this challenge by providing a secure and transparent mechanism for recording the entire life cycle of AI algorithms.

Research emphasises the need for political systems that can explain their decision processes and that blockchain technology's capacity to create an immutable record of algorithmic changes aligns with these ethical considerations, offering a solution to the demand for transparency. The transparent auditing facilitated by blockchain in AI applications is essential in scenarios where algorithmic models influence political decisions or public policies. The decentralised nature of blockchain ensures that once an update is recorded, it cannot be altered, providing an auditable trail resistant to manipulation.

In practical terms, the application of blockchain in recording AI algorithm changes involves creating a decentralised ledger where each modification, update, or version of an algorithm is timestamped and linked to previous records. This ensures that the entire history of an AI model is accessible, verifiable, and secure. Such transparency is crucial for stakeholders, policymakers, and the public to understand the evolution of AI models and assess their impact on political decisions.

More Comprehensive Research Needed

Expanding on this, comprehensive research on the regulation of AI and democracy must be done across diverse countries and contexts. While official regulation of AI is still in its early stages, noteworthy developments, including governmental support for research and development in the AI domain, have taken place.

Major players like the European Union, the US and the Chinese government recognise AI as a key arena for strategic geopolitical and economic competition. Analysing competing policy initiatives aimed at fostering innovation represents a promising step in understanding governments' evolving relationships with AI, along with the corresponding policies and regulations related to the impact of AI on democratic processes, including political campaigning.