IMPACT OF ARTIFICIAL INTELLIGENCE, BIG DATA AND SOCIAL MEDIA ON INDIAN POLITICAL BEHAVIOURS

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Abstract

Artificial intelligence, big data analytics and social media together have transformed political behaviour in India and also in the entire world. The modern age or digital age reshaping political communication, campaign strategies and voter participation while heightening the concern over privacy, polarization and democratic integrity. It draws on recent empirical work and high profile Indian examples such as Prashant Kishore and the digital campaigns of Prime minister Narendra Modi. This study examines pathways through which these technologies influence political behaviour, assessing both their benefits and their risks. It concludes, by offering policy recommendation aimed at preserving and strengthening democratic system in the face of these rapidly involving digital innovation.

Keywords: *AI, Big Data, Social Media, Political Behaviour, Digital Politics, Democratic Integrity*

Introduction

Political behaviour, referring to how individuals form political opinions, interact with political information, and participate in democratic processes, has historically evolved alongside dominant media and communication technologies of the time (Chadwick, 2017). Over the past decade the rise of has witnessed a dramatic shift, as AI, big data, and social media platforms have become central to the political process. These technologies enable unprecedented levels of data collection, real-time analysis, and targeted communication, fundamentally altering the dynamics of political engagement and participation (Tufekci, 2018).

The origins of AI can be traced back to the 1950s and 1960s,when early systems developed by researchers demonstrated capabilities such as solving mathematical problems, and playing strategy based games like chess. These initial successes raised expectations for the future of artificial intelligence. Particularly with the creation of deep learning and machine learning methods, notable improvements were made in the 21st century. These techniques, which comprise training algorithms on massive datasets, have produced advances in fields including image and speech identification. With continuous research and development focused on developing more sophisticated and able systems, artificial intelligence is still rapidly evolving.

Generative artificial intelligence, including models like GPT4, is now getting much attention. These models can create music, generate human-like text, and even produce images. In content creation,

Propaganda, and marketing campaigns, they are being employed. Politics is using artificial intelligence more and more in several creative and powerful ways.

One application of it is in political campaigns where artificial intelligence systems analyse voter data to produce vary focused political advertising . Monitor social media and other channels using current tools to do sentiment analysis and assess public opinion of candidates and topics, therefore allowing campaigns to modify their strategies in real time.

Likewise, AI-driven chatbots inform voters about candidates, policies, and voting processes, simplifying their participation in the political process. They might display prejudice in their responses, however, based on the datasets they are trained on. Many facets of modern life now include artificial intelligence, including political procedures. Although artificial intelligence presents major risks, including increased efficiency and focused communication in campaigns, it also offers important advantages. AI driven propaganda can heighten political division; deepfakes can harm reputations; and AI generated misinformation can deceive voters. These dangers have already taken many guises, thereby endangering the pillars of democracy, not just theoretical ones. Integrating artificial intelligence into politics calls for thorough thought and control to strike a balance between its advantages and possible hazards to democratic integrity.

An alleged deepfake video showing the false arrest of former U.S. President Donald Trump went viral in March 2024, highlighting the disturbing capacity of artificial intelligence (AI) to produce plausible false information and change public opinion. Fake news and doctored movies swiftly spread throughout the 2019 Indian general elections, subsequently confirmed to be generated by AI, therefore affecting Prime Minister Narendra Modi and his opponents as well as influencing voter attitude and fueling communal tensions. Likewise, in the Brazilian elections of 2020, automated bots were said to have flooded social media with false information, therefore influencing public opinion and eroding confidence in the electoral process—greatly affecting people like President Jair Bolsonaro. And also in the Philippines, the 2022 Presidential elections were said to have been influenced by AI driven targeted advertising that used voter data to produce extremely customised and frequently deceptive political messages.

The possibility for artificial intelligence to create false information, influence voter behaviour, and undermine election security presents major threats to democratic systems. Beyond fake news, AI's impact endangers the integrity of elections worldwide by increasing polarization, creating Deepfakes, disseminating propaganda, and facilitating prejudiced campaigns. Together, these events show how widespread and increasing artificial intelligence threatens to undermine the openness and fairness of democratic elections worldwide. Addressing the influence of artificial intelligence on electoral integrity requires re-examining the premise—sometimes associated with rational choice theory that democracy operates best only by the presence of "truthful information" and rational agents. Ignoring the historical background of electoral actions moulded by complicated socioeconomic, political, and psychological forces, this model suggests that access to accurate information naturally promotes democratic stability. Long used to influence voter behaviour, political campaigns have relied on several techniques including organisational mobilisation, psychological persuasion, and rumour mongering, Therefore showing that manipulation is an ongoing feature of electoral systems.

Political behaviour, encompassing how individuals form political opinions, engage with political content, and participate in democratic processes, has always been shaped by the prevailing media and communication technologies of the time (Chadwick, 2017). The past decade has witnessed a dramatic shift, as AI, big data, and social media platforms have become central to the political process. These technologies enable unprecedented levels of data collection, real-time analysis, and targeted communication, fundamentally altering the dynamics of political engagement and participation (Tufekci, 2018).

AI in Political Campaigns:

AI technologies have become a cornerstone of modern political campaigning, enabling sophisticated data analysis and predictive modelling and personalized communication. Campaigns now use AI-driven tools to conduct sentiment analysis, forecast trends, and personalize outreach (Kreiss, 2016). For example, machine learning algorithms can process vast amounts of social media data to gauge public opinion in real time, allowing campaigns to adapt their messaging dynamically (Howard & Kollanyi, 2016).

A watershed moment in the integration of AI and big data electoral politics occurred during the 2016 U.S. Presidential election. Both major parties employed advanced analytics for voter targeting and digital marketing, and the Cambridge Analytical scandal revealed how psychological profiling, enabled by big data and AI, could be leveraged to influence voter behaviour on a massive scale (Isaak & Hanna, 2018).

Big Data Analytics:

Big data analytics refers to the collection, and analysis of large, diverse datasets to uncover patterns and insights. In politics, big data allows campaigns to build detailed voter profiles by combining information from social media, public records, and consumer data (Persily, 2017). This enables more efficient identification and mobilization of supporters, as well as the design of tailored campaign messages (Kreiss, 2016).

However, these practices raise significant concerns about privacy and the ethical use of personal data. The lack of transparency in data collection and algorithmic decision-making can undermine public trust and democratic legitimacy (Zuboff, 2019).

Social Media as a Political Arena:

Social Media Platforms and Political Communication-Social media platforms such as Facebook, Twitter, and TikTok have become the primary venues for political communication and engagement (Enli, 2017). These platforms enable direct interaction between politicians and voters, rapid dissemination of campaign messages, and the viral spread of both information and misinformation (Tufekci, 2018). AI-driven algorithms curate content feeds to maximize user engagement, often amplifying sensational or polarizing material (Bakshy et al., 2015). This can lead to the formation of echo chambers, where users are primarily exposed to views that reinforce their existing beliefs (Sunstein, 2018).

Political Bots and Automation :

AI-powered bots are widely used to automate the spread of political messages, amplify certain narratives, and manipulate trending topics (Ferrara et al., 2016). While bots can serve legitimate campaign purposes, they are also instrumental in spreading disinformation and sowing confusion among voters (Woolley & Howard, 2016).

Mechanisms of Influence on Political Behaviour:

Micro-targeting and Personalisation-Micro-targeting refers to the delivery of tailored political messages to individual voters or small segments based on detailed psychological and demographic profiles (Kreiss, 2016). AI and big data enable campaigns to identify voters' preferences, fears, and values, and craft messages that resonate on a personal level (Borgesius et al., 2018).

While micro-targeting increases the effectiveness of political advertising, it can also exploit individual psychological vulnerabilities, reduce exposure to diverse viewpoints, and undermine collective deliberation (Zuiderveen Borgesius et al., 2018).

Algorithmic Amplification and Echo Chambers:

Social media algorithms prioritise content that is likely to engage users, often amplifying sensational or polarising material (Bakshy et al., 2015). This contributes to the formation of ideological echo chambers and increases political polarization (Sunstein, 2018).

Research has shown that algorithmic curation can lead to feedback loops, where parties become more extreme in response to their polarised bases (Tucker et al., 2018). The resulting fragmentation of the public sphere poses significant challenges for democratic deliberation and consensus-building (Barberá, 2020).

Disinformation and Deepfakes:

AI technologies have made it easier to create and distribute convincingly false content, including deepfake videos and audio that fabricate statements or actions by political figures (Chesney & Citron, 2019).

Disinformation campaigns, often orchestrated by state and non-state actors, use social media bots and fake accounts to manipulate public opinion and distort electoral outcomes (Bradshaw & Howard, 2018).

The proliferation of deepfakes and disinformation undermines trust in democratic institutions and complicates efforts to hold political actors accountable (Vaccari & Chadwick, 2020).

The Indian Context: AI, Big Data, and Social Media in Political Behaviour :

India's political landscape has been fundamentally reshaped by the integration of AI, big data, and social media, with leading figures such as Prime Minister Narendra Modi and political strategist Prashant Kishor at the forefront of this transformation.

Prashant Kishor and Data-Driven Campaigns :

Prashant Kishor, widely regarded as one of India's most influential political strategists, has pioneered the use of data analytics and digital outreach in Indian electoral politics. As the architect behind Narendra Modi's landmark 2014 Lok Sabha campaign, Kishor introduced a new era of political consultancy through his organisation, Citizens for Accountable Governance (CAG), later known as the Indian Political Action Committee (I-PAC). His approach involved embedding large teams within party structures, leveraging data-driven insights to craft targeted voter engagement strategies and campaign innovations such as "Chai Pe Charcha" (discussions over tea) and 3D Hologram rallies, which bridged the gap between leaders and millions of voters across India (BBC, 2021; IndraStra Global, 2025).

Kishor's methodology relied on harnessing vast datasets to identify voter preferences and optimise campaign messaging, setting a precedent for the use of big data in Indian elections. His work demonstrated how strategic foresight and technological adoption could redefine political communication and mobilisation at scale (BIIA, 2014).

Prime Minister Narendra Modi and the Digital Revolution:

Prime Minister Narendra Modi and the Bharatiya Janata Party (BJP) have been trailblazers in harnessing the power of social media, big data, and AI to connect with voters and shape public opinion. Modi's campaigns have featured extensive use of digital platforms, with dedicated teams creating and disseminating content across Instagram, Facebook, X (formerly Twitter), WhatsApp, and YouTube. This digital-first approach allowed the BJP to bypass traditional media and directly engage with India's vast, tech-savvy electorate, particularly the youth (Abbas & Singh, 2014; News18, 2024).

The 2014 and subsequent elections saw the BJP deploy sophisticated data analytics to micro-target voter segments and tailor messaging based on social media trends and user behaviour. Modi's digital events, such as "Chai pe Charcha," combined satellite, internet, and mobile technologies to facilitate real-time, interactive sessions with voters across the country. These innovations not only increased the reach and personalisation of campaign communication but also set new standards for digital political engagement in India (BIIA, 2014).

Modi's personal brand has been amplified through his massive social media following and direct communication style, which have helped establish a sense of authenticity and trust among supporters. According to campaign insiders, the BJP's backroom operations have relied on teams of tech professionals and consultants to analyse voter data, raise funds, and optimise advertisements, mirroring the data-driven campaign strategies seen in advanced democracies like the United States (News18, 2024).

AI and Big Data in Recent Indian Elections:

The influence of AI and big data became even more pronounced in the 2019 and 2024 elections. Political parties, especially the BJP, used algorithms and analytics to decode online activity and create customised campaigns, allowing for highly targeted outreach and mobilisation. AI-powered tools were employed to generate personalised videos, deepfakes messages, and multilingual content, further enhancing the ability to connect with diverse voter bases (Times of India, 2019; PBS, 2024).

For example, during the 2024 general election, BJP workers used AI start-ups to send personalised messages to voters via WhatsApp, including AI-generated calls from local representatives discussing

specific government benefits. These practices illustrate how AI and big data have become integral to political strategy, enabling parties to engage voters in new and innovative ways (PBS, 2024).

Impact and Ethical Considerations :

The Indian experience demonstrates both the opportunities and challenges associated with the digitalisation of politics. While the use of AI, big data, and social media has increased campaign efficiency and voter engagement, it has also raised concerns about privacy, the spread of disinformation, and the potential for increased polarisation. As Indian elections become ever more data-driven, the need for robust regulatory frameworks and ethical guidelines becomes increasingly urgent (Freedom House, 2024).

Global Case Studies and Empirical Evidence:

The 2016 US Presidential Election : The 2016 U.S. presidential election is widely regarded as a turning point in the use of AI, big data, and social media in politics. Political actors employed advanced analytics for voter targeting, and social media bots played a key role in spreading disinformation and polarising the electorate (Howard et al., 2018). The Cambridge Analytics scandal highlighted the risks of psychological profiling and data-driven manipulation (Isaak & Hanna, 2018).

Global Elections in 2024: In 2024, more than half the world's population participated in national elections, with AI-driven tools shaping campaign strategies and information flows on a global scale (Freedom House, 2024). Surveys indicate that a majority of voters are concerned about the impact of AI generated misinformation on election outcomes (Pew Research Centre, 2024).

Risks and Challenges:

Democratic Integrity and Trust : The use of AI and big data in politics challenges traditional democratic principles of transparency, accountability, and informed decision-making (Persily, 2017). The covert nature of algorithmic influence and the lack of regulatory oversight undermine public trust in electoral processes (Zuboff, 2019).

Polarization and Social Fragmentation : AI-powered social media platforms contribute to political polarization by reinforcing ideological divisions and incentivising parties to adopt more extreme positions (Tucker et al., 2018). The resulting fragmentation of the public sphere threatens the foundations of democratic deliberation (Sunstein, 2018).

Regulatory and Ethical Concerns : Key concerns include the ethical use of personal data for political purposes, the accountability of AI systems and their creators, and the need for effective regulation to mitigate the risks of disinformation and manipulation (Borgesius et al., 2018; Chesney & Citron, 2019).

Opportunities and Positive Impacts:

Despite the risks, AI and big data also offer opportunities to enhance the efficiency and responsiveness of political campaigns, enable more informed policymaking through data-driven insights, and foster greater citizen engagement and participation when used responsibly (Barberá, 2020; Tufekci, 2018). Policy Recommendations: To safeguard democratic processes, policymakers should….

- Develop regulations to combat disinformation, including the use of deepfakes (Chesney&Citron,

- Implement transparency requirements for political advertising and algorithmic decision-making (Persily, 2017).

- Promote digital literacy and critical thinking among voters (Pew-Research Centre 2024).

- Encourage platform accountability and ethical standards in AI development (Borgesius etal.2018). In the Indian context, establish clear guidelines for the ethical use of voter data and the deployment of AI tools in electioneering (Freedom House, 2024).

Conclusion

The impact of artificial, big data, and social media on political behaviour is profound and multifaceted. These technologies possess significant potential to enhance democratic participation, improve governance mechanisms, and strengthen citizen engagement. At the same time, they introduce serious challenges, including, misinformation, and social cohesion. The Indian experience, particularly under the leadership of Prime Minister Narendra Modi and the digital initiatives spearheaded by Prashant Kishor, illustrates both the promise and the perils of digital politics. While data-driven strategies and AI-enabled communication have transformed political mobilisation and outreach, they have also raised critical concerns regarding and outreach, they have also raised critical concerns regarding ethical governance, algorithmic bias and the manipulation of voter behaviour. Addressing these challenges requires a coordinated and multi-stakeholder approach involving policymakers, technology companies, regulatory institutions, and civil society organisation. Establishing robust ethical frameworks, ensuring transparency in algorithmic decision-making, protecting voter data, and promoting digital literacy are essential to safeguard democratic values. Ultimately, technological innovation must be guided by democratic principles to ensure that AI and big data serve the public interest and strengthen, rather than undermine, the foundation of democracy.

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