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Predictive Quality Management in Nepalese AI in the 2024 Lok Sabha Elections in Bihar: Empirical Finding

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ABSTRACT

In the history of democratic governance, the year 2024 was unprecedented as in this year more than sixty nations, accounting for more than half of the world's population, held their elections, with nearly two billion eligible voters, describing the largest year in the history for election. 2024 was further distinguished due to the pervasive presence and intermingling of the AI in the political sphere. This presence resulted in AI becoming a central part of political communication.

From AI cloned robocalls in voice of Joe Biden in New Hampshire, the then President of United States (U.S), the year 2024 also witnessed, deepfakes of politicians of United Kingdom, doctored campaign content in Indonesia. This indicates AI-based political manipulation exists across geographies, systems of governance, and democratic development. Global Risks Report 2024, prepared by World Economic Forum identifies misinformation and disinformation, generated by AI, as one of the most likely sources of global crisis in near future. The scale, speed and rate of spreading harm during periods of election were substantially amplified by the usage of AI, with the increased accessibility and affordability of latest AI related technologies, lowering the entry barrier in the market of disinformation.

In this background, AI becomes a central actor in political communication at the global stage, not limited to the domain of poster generation, slogans, memes, videos, translations, voice cloning, and micro-targeting with unprecedented efficiency. This transformed the political sphere into a socio-technical one, exposing the intertwining nature of elections with capacities and limitations of digital governance.

Keywords: AI, 2024 Lok Sabha Elections, Bihar and Empirical Findings, Indian Sphere.

1. Introduction

1.1 Background

India, the world's largest democracy, also held its 2024 Lok Sabha General elections during the same year, with participation of approximately 977 million registered voters, and over 642 million voters who casted, with a national turnout of 65.66%, became one of the largest democratic exercises of all time.

India, in 2024, according to estimates by Data Reportal, had over 751 million internet users, with 462 million social media users. The level of internet penetration in India, over the years has increased drastically, even reaching the rural population, amounting to 43% in Bihar. This expansion, though significant for democratic participation, creates a vulnerable environment for AI-based exploitation with disinformation campaigns.

Political parties across ideologies allocated heavy sums and resources to AI-driven campaigning to exploit the same. The spendings on incorporation of generative AI tools, deepfakes, synthetic audio, and micro-targeted digital advertisements by the political parties, reportedly amounted to \$50 million dollars in the 2024 Lok Sabha Elections. India witnessed a systematic, resource-backed deployment of AI in the election season purposed to voter outreach, persuasion and manipulation.

Reports mention that more that 50 million AI-generated voice calls having cloned voices were targeted to voters, in the two months preceding the election, with millions more during the voting phases. The use of AI for communication, voter outreach, and micro-targeting marked a qualitative shift in the modality of electioneering in India.

The simultaneous absence of strict AI-specific laws for the regulation and control of the misuse of AI in electoral communication, created a regulatory vacuum, constraining the ability of regulatory authorities to ensure fairness in the elections [4.2.1].

1.2 The Complex Case of Bihar

In the complex electoral landscape of 2024 Lok Sabha Elections, Bihar emerges as a critically significant and distinct area of study. Bihar, having 40 seats in the Lok Sabha, occupies a decisive role in the electoral hemisphere. This indicates the substantial weight Bihar carries in the Lok Sabha Elections. This, when coupled with Bihar's socio-structural configuration, significantly increases the AI-enabled electoral risk.

Bihar's asymmetrical increase in digital access in light of low digital literacy, makes it highly vulnerable to AI-

based manipulation. According to a report by Internet and Mobile Association of India (IAMAI), Bihar experienced a 18% year-on-year growth in internet penetration, amounting to an estimated penetration of 43% in the State. This rapid rise of internet penetration exists with a literacy rate of 61.8% in Bihar, which is lowest among all the states. With more than 104 million population, according to Census 2011, 61.8% literacy rate leaves a large chunk of population out of the scope to identify AI-generated materials.

The National Sample Survey 75th Round on Household Social Consumption on Education in India, metrics on internet usage, computer accessibility, and computer engagement further underscores the significance of the structural conditions. This disparity between digital expansion and education and literary divide, further amplify the risks associated with AI-driven electoral communication.

The socio-political profile of Bihar, with deep rooted caste identities, caste conscious behaviour, plurality in language and dialects, adds another critical dimension. The linguistic diversity can be exploited by the use of AI voice-cloning technologies, which operate in regional languages and dialects, invoking interpersonal and emotional responses from the AI-generated content consumers and raising high believability risks, especially for semi literate voters. Further, Bihar also experienced a decline in voter turnout decline from 57.33% in the 2019 Lok Sabha elections to 56.19 % in 2024, falling below the national turnout of 65.66 %.

Bihar's complex socio-political structure, growing digital interaction, and electoral AI technologies present high potential risk, thereby serving a crucial stage for examining the intersecting challenges.

1.3 Statement of the Problem – Methodology

Disinformation passed through deepfakes poses a significant challenge to election integrity. Unlike traditional modes of disinformation campaigns, AI-generated contents such as deepfakes, by design, are difficult to distinguish from authentic materials. Such deepfakes may be used by political actors to discredit an opponent, manufacture scandal, and can instigate community responses. This raises the questions of legitimacy of democratic and electoral institutions, public debates, political agency, asymmetric power dynamics.

When this AI-generated content is coupled with micro-targeting, the threat amplifies. AI-assisted micro-targets bear higher risk towards shaping public perception and influencing individual voters by targeting them on certain characteristics, including caste, identity, economic. vulnerability and ideology. This substantially undermines informed decision making by voters and democratic participation.

This widespread deployment of AI-generated materials in 2024 Lok Sabha Elections in Bihar leaves multiple critical questions open, yet to be addressed. This questions relate to how these technologies were used, what misuses were there, what were the potential impacts on voters and how it impacted the electoral integrity and legitimacy of the democratic process? Though AI use in Indian elections has attracted academic interrogation, a specific Bihar related inquiry on the usage of AI in 2024 Lok Sabha Elections in Bihar has not been studied empirically. This gap lies at the intersection of AI misuse, coupled with low digital literacy, caste conscious behaviour, deepening internet penetration, and absence of AI-specific regulatory framework, in a state having significant national electoral influence.

This research is located at this intersection, aiming to bridge the gap by documenting the misuse of AI during 2024 Lok Sabha elections in Bihar, thereby, assessing the potential risks, threats and impacts of the same and providing recommendations for the same.

2.0 Rise of AI

The 2024 Lok Sabha Election was conducted amidst a new environment of political communication which went beyond the traditional means of rallies, printed newspapers, television debates, posters, and door to door mobilisation. Political information began to flow through digital platforms, via mobile phones, through social media messaging, via video-sharing networks, with the help of artificial intelligence technologies, and by using data to inform campaign strategies. The digital transformation is particularly crucial in Bihar as it has high rural dependency, a large electorate, high political participation, regional language communication, caste/community-based political networks and unequal access to digital technologies.

This Chapter explores an empirical analysis of the extent of utilization and misutilization of artificial intelligence in 2024 Lok Sabha Election in Bihar state. The chapter is not just a doctrinal/qualitative analysis, but rather takes an empirical approach to analyzing political content related to AI by relying on official and report-based data sets. The analysis is based on the data provided by the Election Commission of India, the Telecom Regulatory Authority of India (TRAI) on telecom and broadband usage, the IMAI-Kantar internet usage data, the AI misinformation datasets, the cybercrime datasets, the Election Commission of India advisory documents and policy reports relating to AI in the Indian election, 2024.

The intent of the chapter is not to make any claim of the occurrence of all the incidents related to AI in Bihar alone. Instead, it contributes to the Bihar's electoral and digital gap in a Bihar-specific way with Bihar-specific data; and then places this gap in the context of national evidence of AI-produced political content, deepfakes, synthetic voices, digital campaigning, misinformation and the micro-targeting of voters. This is because while there are limited data sets of AI incidents in Bihar, there is robust data of AI incidents in India which serves as a good signpost of the types of risks that can be expected in Bihar's campaign environment.

The chapter thus follows suit by undertaking three levels of empirical analysis. It first examines the electoral

landscape and digital environment in Bihar with the help of various data sources such as voter turnout, tele-density, internet penetration, growth in broadband, usage of internet in rural areas and social media activity. Secondly, it explores the use of available datasets and policy reports on the phenomenon of misinformation, deepfakes, synthetic content, micro-targeting, digital advertising and amplification on platforms. Third, it keeps the three case studies that were featured in the previous draft of the chapter, but presents them as empirical case studies, based on the datasets, which illustrate the three types of incidents described.

The key takeaway from this chapter is that the threat of misuse of AI in the context of Bihar's elections is not only from a single technology. It is a result of the following five factors – the fast-growing digital connectivity, low penetration of internet and uneven distribution, regional language or voice communication, high dependence on social media and messaging apps, and lack of real time verification system. In this context, issues of AI misuse in Bihar can be considered a socio-technical electoral risk – not just a technological issue.

2.1 Methodology Recap: Data Sources and Analytical Method

A secondary empirical approach is used for this chapter. It uses trusted government and institutional sources as well as government-created AI misinformation datasets. The method used is descriptive-comparative. Uses numerical data to look for trends, tables to organise the variables, and figures to visually depict the relationship between elections and participation, digital access, AI-driven misinformation, platform usage and future risk.

The chapter uses the following analytical methods:

Descriptive statistical analysis to present voter turnout, broadband growth, internet users, tele-density, and cybercrime trends.

Comparative trend analysis to compare previous, recent, and current indicators such as 2014, 2019, and 2024 broadband growth.

Content-category analysis to classify AI-generated misinformation by type and theme (Table1).

Case-study interpretation to connect national-level AI election incidents with Bihar's risk environment.

Future likelihood assessment to estimate which forms of AI misuse are most likely to intensify in future Bihar elections.

Table 1: Data Sources Used

Data Category	Source Used	Purpose in Chapter
Bihar voter turnout and electors	Election Commission of India, General Election 2024	To establish Bihar's electoral context
Broadband and telecom growth	TRAI 2014, 2019, 2024 telecom reports	To show expansion of digital infrastructure
Bihar tele-density	TRAI 2019 and 2024 reports	To show Bihar's digital vulnerability
Internet users, rural/urban use, Indic language, voice usage	IAMAI-Kantar Internet in India 2024	To assess digital exposure and vulnerability
AI in India's 2024 elections	CPPR/FNF policy paper	To analyse AI campaign practices and case examples
AI misinformation categories	Researcher-provided CSV datasets	To classify AI misinformation by type and theme
ECI advisory on AI/deepfakes	ECI advisory dated 6 May 2024	To show institutional recognition of AI risk
Bihar cybercrime trend	NCRB-based cybercrime report	To assess Bihar's wider digital-risk environment
Digital ad-spend transparency	ADR/digital advertising source supplied by researcher	To analyse micro-targeting and platform spending

This is a caveat: There are some datasets which are Bihar specific like ECI voter turnout data, Bihar tele-density data etc. Most of the data on AI misinformation and digital campaign is India-specific, however. Thus, the chapter draws on electoral (and digital) indicators specific to Bihar to measure vulnerability, and AI-election evidence from the national-level to assess the nature of AI misuse that may impact Bihar's electoral environment.

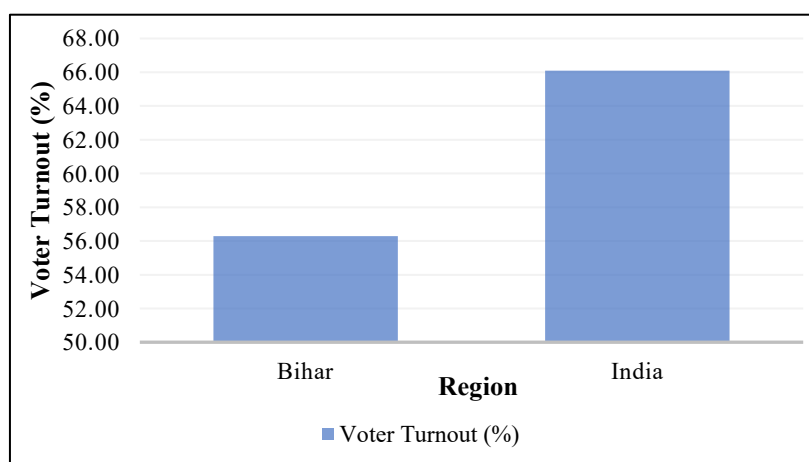
2.2 Mapping AI Use by Political Actors in Bihar

2.2.1 Bihar's Electoral Context in 2024

According to the data released by the Election Commission of India on Lok Sabha 2024 elections, the State of Bihar has 77,462 polling stations, 77,259,579 total electors, and 43,480,859 total voters (Table 2). In Bihar, the voter turnout rate was 56.28% while the turnout rate nationwide was 66.1% (Figure 1). This indicates that, though turnout in Bihar was below the national average, the electorate was quite large.

Table 2: Bihar and India Voter Turnout in Lok Sabha Election 2024

Region	Total Electors	Total Voters	Voter Turnout
Bihar	77,259,579	43,480,859	56.28%
India	977,965,560	646,420,869	66.10%


Figure 1: Bihar vs India Voter Turnout in Lok Sabha Election 2024

Source: ECI (2024)

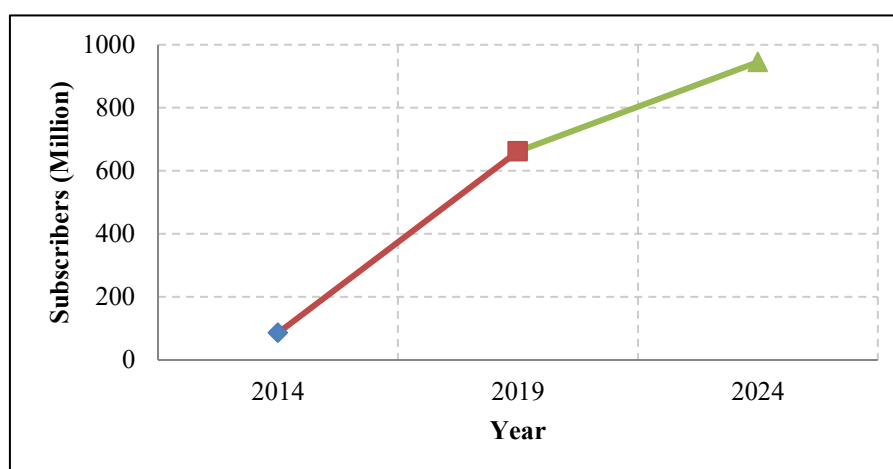
This is useful as it puts Bihar in the national electoral context. The turnout in Bihar was below the average, but the sheer number of voters on more than 43 million makes the state a political communication hotspot. A small proportion of voters being misled by political information could have significant democratic consequences in such a sizeable electorate.

2.2.2 Digital Connectivity Growth, 2014–2024

One of the overriding empirical matters to be addressed in the 2024 election is the 'digital connection'. According to the data from TRAI, there has been significant growth in the number of broadband subscribers over the past decade in India. As of December 2014, India was home to 85.74 million broadband subscribers. This rose to 661.94 million by December 2019. The total number of broadband subscribers increased to 944.96 million by December 2024 (Table 3 and Figure 2).

Table 3: Broadband Subscribers in India, 2014–2024

Year	Broadband Subscribers
2014	85.74 million
2019	661.94 million
2024	944.96 million


Figure 2: Growth of Broadband Subscribers in India, 2014, 2019 and 2024

Source: TELECOM REGULATORY AUTHORITY OF INDIA (2015, 2020, 2025)

The evidence from e data makes it clear that there were significant differences between the digital environment of the 2014 and 2024 elections. Digital campaigning was coming into its own as a campaign method in 2014. In

2019 internet-enabled campaigning was a common practice. By 2024, digital platforms had become a key part of electoral communication infrastructure, with scale of access to broadband. The expansion allowed for the dissemination of AI-generated images, voice cloning, short videos, deep fake videos, campaign reels, WhatsApp forwards, and politically themed ads created on the platforms.

2.2.3 Bihar's Digital Vulnerability

While the connectivity landscape in India has grown extremely robust, Bihar still has evidence of digital fragility. According to the TRAI's 2019 report, Bihar is having lowest tele-density among all service areas, which is 58.92 (Table 4). TRAI again reported Bihar as the least density (56.44%) service area in December 2024. At the all-India level, tele-density was 88.56 in 2019 and 84.45 in 2024 (Figure 3).

Table 4: Bihar and India Tele-density, 2019 and 2024

Year	Bihar Tele-density	India Tele-density
2019	58.92	88.56
2024	56.44	84.45

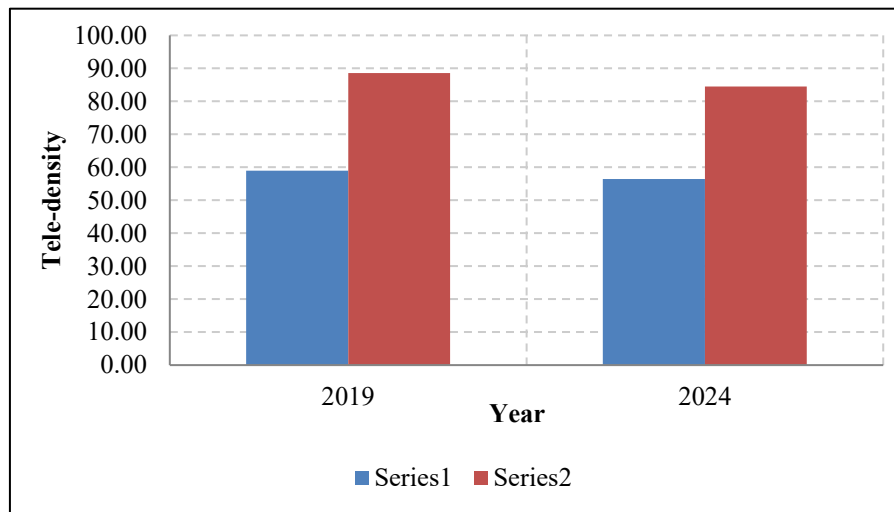


Figure 3: Bihar vs India Tele-density, 2019 and 2024

Source: TELECOM REGULATORY AUTHORITY OF INDIA (2020, 2025)

This information shows a paradox. Bihar has a pretty high connectedness but has a much lower tele-density as compared to the national average, which enables digital campaign content to flow around the state. It is noteworthy that this imbalance has implications for protecting voters from misinformation, since a lower level of digital penetration doesn't necessarily mean a lower risk of misinformation. It instead might lead to reliance on other devices, on trusted intermediaries, on local WhatsApp groups, on community networks, and forwarded content.

The IAMAI-Kantar Internet in India 2024 report also reveals that Bihar is in the list of the bottom three states when it comes to internet penetration (Table 5). Bihar's internet penetration rate is 43% as compared to Kerala's 72%, Goa's 71% and Maharashtra's 70%, the report reads (Figure 4).

Table 5: Internet Penetration in Selected States, 2024

State	Internet Penetration
Kerala	72%
Goa	71%
Maharashtra	70%
Bihar	43%

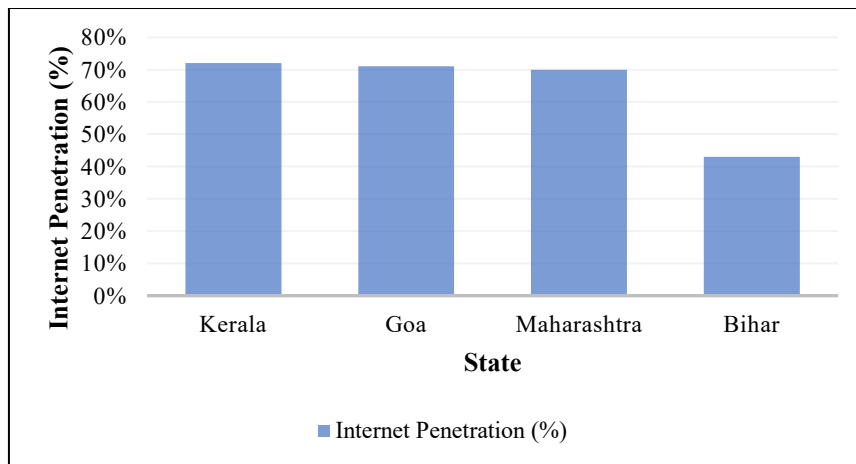


Figure 4: Bihar Internet Penetration Compared with Selected States, 2024

Source: IMAI-Kantar (2024)

The penetration in Bihar is 43%, but that doesn't imply that the state is not a part of digital politics. Instead, it suggests that there is unequal reach of digital political communication to voters. The same disparity that is a risk for AI-generated misinformation is also the risk for other forms: information is distributed via trusted networks in the community but without sufficient verification capacity.

2.2.4 AI-Assisted Campaign Practices

The CPPR/FNF policy paper on generative AI and India's 2024 general election documents the use of AI in the election in the form of deepfake technology, targeted voter outreach and AI-generated campaign material. AI was also used in both ways; it helped to increase campaign outreach and personalisation, and it also helped to promulgate propaganda, create misleading content, spread misinformation and posed dangers to informed voting, the report notes.

When conceptualizing AI-assisted campaign practices in Bihar, it is important to recognize its link to normal digital campaign practices. AI can be leveraged by political actors to design posters, translate speeches, write captions, create local-language messages, create memes, send automated voice messages, outreach targeted audiences, plan social media posts and produce short videos. AI's presence in the 2024 Indian elections proved to be more than just a tool for the future – it was a present reality in political communication (FNF, 2024).

3.3 Documented Cases of Deepfakes and Synthetic Content

3.3.1 Typology of AI-Generated Political Content

The researcher-provided AI misinformation dataset classifies AI-generated misinformation in 2024 into three major types: AI images, AI voice clones, and deepfake videos/audios (Table 6 and Figure 5).

Table 6: Types of AI-Generated Misinformation in 2024

Type of AI Misinformation	Number of Fact-checks
AI images	39
AI voice clones	41
Deepfake videos/audios	28

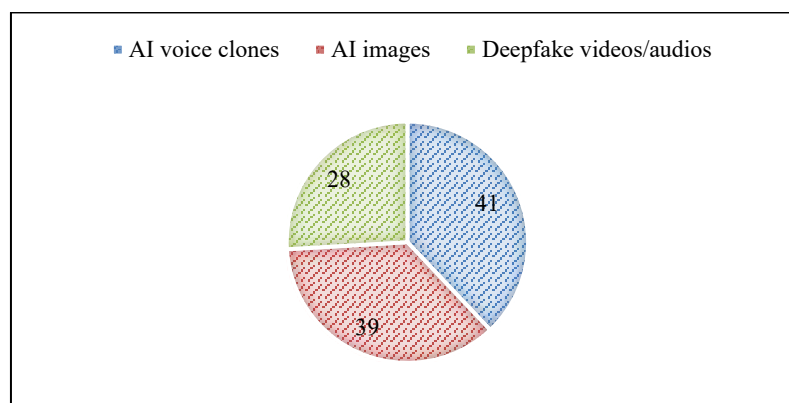


Figure 5: Types of AI-Generated Misinformation in 2024

Source: (BOOM Team, 2025)

It is important to note that the dataset does not only include deepfake videos of AI-generated misinformation, but also encompasses other forms of misinformation, such as fake websites, posts on social media platforms, and fake articles. AI voice clones and AI images were the biggest category, closely followed by AI video clips. Another prominent category was the creation of Deepfake videos and audios. This is significant for Bihar because political communication in Bihar typically takes place through audio messages, short videos, memes, images and WhatsApp forwards. This is also echoed by the dominance of voice clones in the dataset, which also justifies keeping the case study on AI-generated audio clips.

3.3.2 National AI Election Cases Relevant to Bihar

The policy paper CPPR/FNF documents several cases of the use of AI during the general elections in India held in 2024 (Table 7). These are examples at the National level and not necessarily all Bihar specific incidents. They are relevant but, because they illustrate the types of politically enabled AI that can impact any electorate in the digital world, including Bihar (FNF, 2024).

Table 7: National AI Election Cases Relevant to Bihar's Risk Environment

Date	Case	AI Form	Likely Electoral Risk
24 February 2024	AI resurrection of Jayalalithaa	Synthetic video/voice	Emotional mobilisation
18 April 2024	Ranveer Singh deepfake criticising PM Modi	Celebrity deepfake	Disinformation and voter influence
30 April 2024	AI personalised video messaging and phone calls by Shakti Singh Rathore	AI outreach	Micro-targeted voter engagement
28 May 2024	AI voice clone of Sudhir Chaudhary predicting AAP candidate victory	Voice clone and fake exit poll	Media-trust manipulation
23 March 2024	AI voice clones of Arvind Kejriwal while in jail	Voice clone	Emotional mobilisation and political presence
27 March 2024	CPI(M) AI anchor "Samanta"	AI anchor	Local-language voter engagement
20 July 2024	TDP AI anchor "Vaibhavi"	AI anchor	Regional-language campaign communication

The following are examples of four patterns that are observed empirically. The first is the resuscitation, imitation or simulation of political characters with the help of AI. Second, their use of celebrity credibility was exploited with the use of AI. Third, AI was used in a personalised outreach. Fourth, synthetic anchors and local-language formats of campaigns were developed using AI. The patterns are of interest to Bihar, as the communication process in elections is strongly embedded in local political identity, in terms of local speech forms, interpersonal trust, and emotional mobilisation.

3.3.3 Institutional Recognition of Deepfake Risk

The Election Commission of India's subsequent advisory of 6 May 2024 officially acknowledged that AI generated and manipulated content was a big threat to the elections. The manipulated, distorted, and edited information spread through social media can mislead people's opinions, worsen polarization, and reduce faith in the electoral system, the advisory says. In particular, it is deepfakes and AI-generated distorted content that can spread misinformation, disinformation and distortion of facts.

The advisory also cautions political parties on not using their social media accounts to spread or post deep fake audio clips and videos, which are already restricted (Figure 6). It also says that if such a deepfake audio or video reaches the political parties' notice, it has to be removed within three hours at the most.

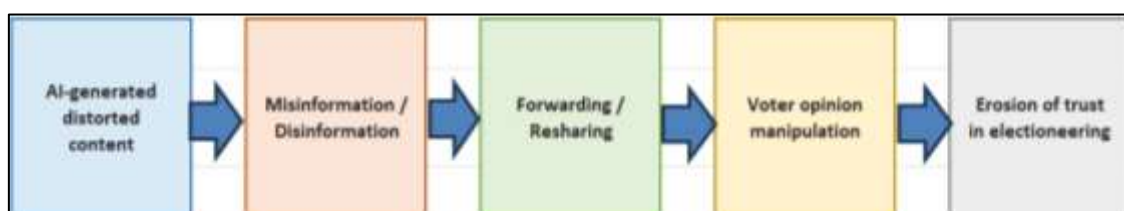


Figure 6: ECI-Recognised AI Risk Chain in Election Campaigning

The official advisory is important, as it confirms that the potential for misuse of AI in elections was not academic. It had been an institutional issue already during the 2024 election.

3.4 Misinformation Campaigns-Patterns and Reach

3.4.1 Themes of AI Misinformation in 2024

The second researcher-provided dataset classifies major themes of AI misinformation in 2024. It identifies fake investment scams, Lok Sabha election misinformation, and fake health scams (Table 8 and Figure 7).

Table 8: Major Themes of AI-Related Misinformation in 2024

Theme	Number of Fact-checks
Fake investment scams	14
Misinformation on Lok Sabha elections 2024	12
Fake health scams	12

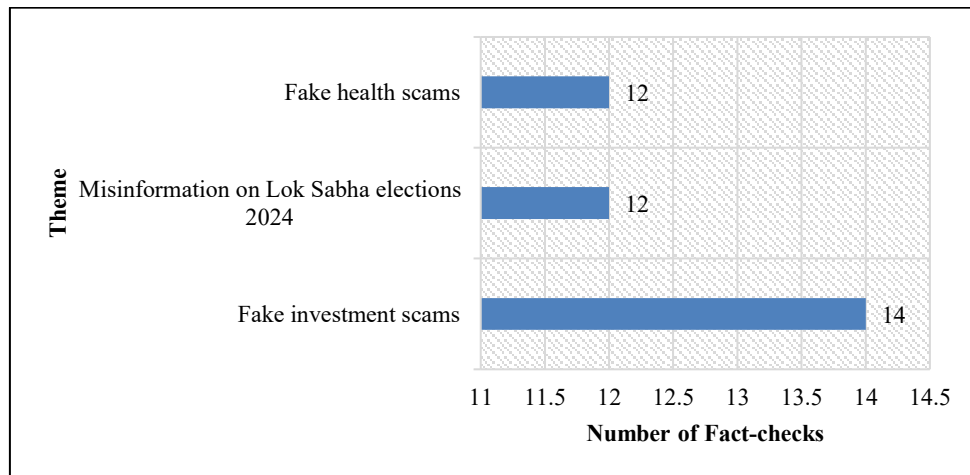


Figure 7: Major Themes of AI-Related Misinformation in 2024

Source: (BOOM Team, 2025)

The findings of 12 fact-checks with reference to Lok Sabha election misinformation is noteworthy because it provides evidence of the presence of AI-generated misinformation in electoral communication. The election-related scam was a significant category, though investment and health-related scams were also substantial, but investment-related and health-related scams are not as relevant to the democratic process as they may be to other aspects of life.

3.4.2 Digital News Exposure and Passive Political Information

According to the IMAI-Kantar report, there is broad acceptance of news and information on online platforms. One of the big ones is users will get news on their news sites or news apps, but they'll also get it through social media posts, forwarded posts, YouTube, and other platform-based channels (Table 9). The report states that there are large number of internet users who look for news and information online, and the smaller portion of them who actively search news online (Figure 8).

Table 9: Online News Exposure and Conscious News Reading

Category	Users
Users accessing news/information online	582 million
Users consciously accessing online news	180 million

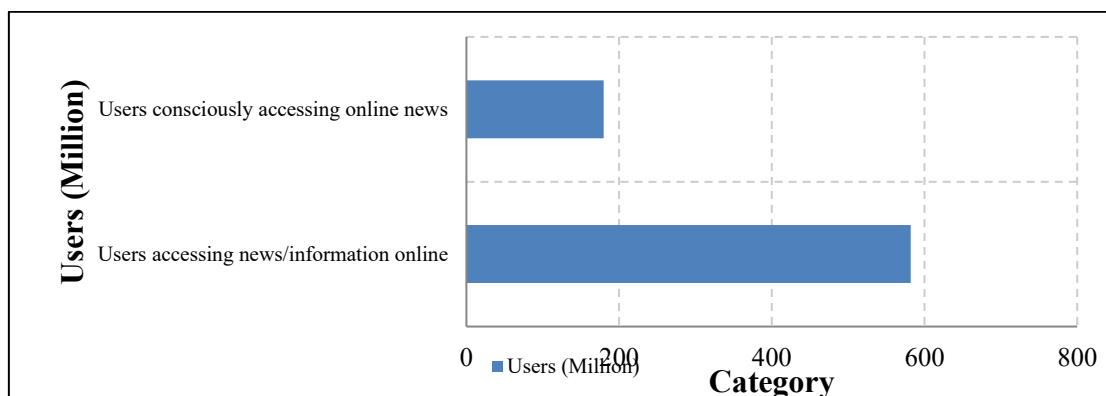


Figure 8: Online News Exposure vs Conscious News Reading in India, 2024

Source: IMAI-Kantar (2024)

The separation of these is significant when it comes to election misinformation. The voter has at least some opportunity to assess reliability if the voter willingly reads a credible news source. However, if the voter sees political information in the form of a message forwarded, reels, social media post, or the suggested video on YouTube, they might be receiving it passively and emotionally. This is particularly the case in Bihar where there is sometimes an interplay between online and offline channels of political information.

3.4.3 Social Media and Communication as Political Channels

Data from IMAI-Kantar reveals that social media and online communication is one of the most common activities on the Internet in India. In 2024, the number of OTT audio/video users, communication users and social media users were 732 million, 666 million and 655 million, respectively (Table 10 and Figure 9).

Table 10: Top Internet Activities in India, 2024

Activity	Users
OTT audio/video	732 million
Communication	666 million
Social media	655 million
Online gaming	476 million
Net commerce	480 million
Digital payment	405 million

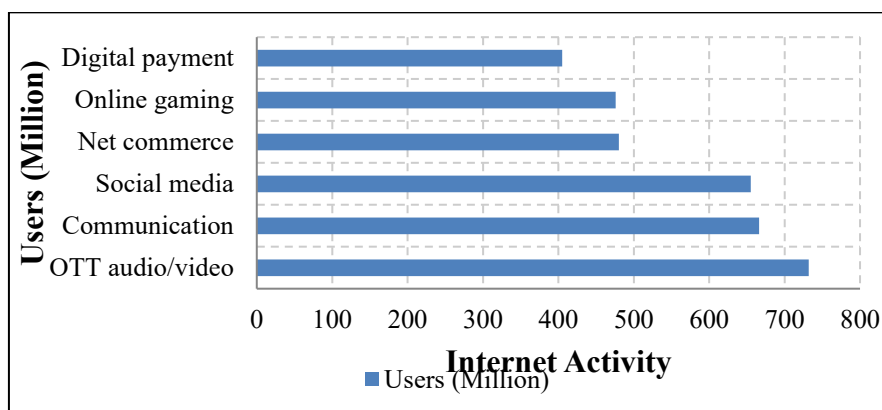


Figure 3.9: Top Internet Activities in India, 2024

Source: IMAI-Kantar (2024)

This information will help to shed light on the spread of misinformation. The spread of political misinformation doesn't have to happen through official news outlets. It can be spread during regular internet activities such as watching videos, talking, forwarding messages, scrolling social media and sharing memes. The context of communication and social media use by many users makes it conducive for fast propagation of political contents.

3.5 Micro-targeting and Voter Profiling

3.5.1 Digital Political Advertising and Transparency

Political advertising on digital platforms is now a quantifiable aspect of Indian elections. The researcher provided ADR/digital ad source reveals that political parties also used a significant number of online advertisements in the election period 2024. Data provided shows that the BJP had spent around Rs 853 million on political adverts on Google during the Lok Sabha 2024 campaign period, while Congress and BJD had spent Rs 453 million and Rs 193 million respectively.

Table 11: Google Political Advertisement Spending during Lok Sabha 2024

Party	Reported Google Ad Spend
BJP	Rs 853 million
Congress	Rs 453 million
BJD	Rs 193 million

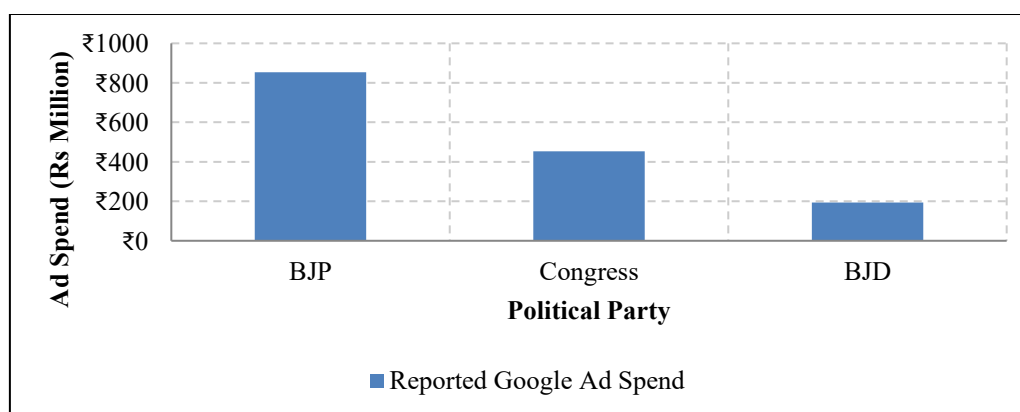


Figure 10: Google Political Ad Spending by Party during Lok Sabha 2024

Source: (Shelly Mahajan, 2025)

Another source also points out the influence of Meta ads, proxy, and third-party pages. The national page of the BJP spent almost Rs 194 million on 43,455 political advertisements on the Meta platform (Table 12), it reports, while the top 100 Meta spenders, except the BJP, spent nearly Rs 190 million on 14,982 political ads via proxy or third-party pages (Figure 11).

Table 12: Meta Political Advertisement and Proxy Page Concern

Advertiser Type	Reported Spend	Number of Advertisements
BJP national page	Rs 194 million	43,455
Congress	Rs 108 million	Not specified in supplied extract
Proxy/third-party pages	Rs 190 million	14,982

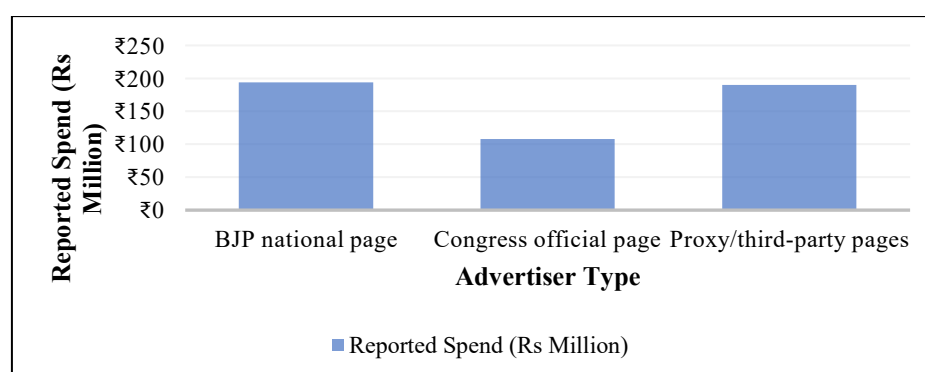


Figure 11: Meta Political Ad Spending and Proxy Page Activity

Source: (Shelly Mahajan, 2025)

This evidence is crucial as micro-targeting isn't just about content, it's also about visibility, funding and accountability. With digital ads geotargeted to certain audiences, a voter might not realize why they are seeing the message, who is paying for it, if other voters are seeing other messages, or if the message is being broadcast from an official party page or a third party/proxy page.

3.5.2 Voter Profiling through Political Apps and Data Systems

In the policy paper of CPPR/FNF, the data-based political outreach initiative of the BJP – Saral App – is discussed. The application has been downloaded more than 2.9 million times from Google Play and collected data like mobile number, address, age, gender, religion, caste, social categories, parliamentary constituency, voter identity number, professional details and educational details, the report said (Table 13).

Table 13: Voter Data Categories and Possible Electoral Uses

Data Category	Possible Electoral Use
Mobile number	Direct messaging and campaign outreach
Address	Local-level and booth-level mapping
Age	Youth, first-time voter, or elderly voter messaging
Gender	Gender-specific welfare and safety appeals
Religion/caste	Identity-based segmentation

Social category	Welfare and representation-based targeting
Parliamentary constituency	Constituency-wise campaign planning
Voter identity number	Electoral roll linkage
Profession and education	Issue-based targeting

This table illustrates that voter profiling is an empirical concern that is important. Historically Political Campaigns in India have been based on the following: Caste, Religion, Region, Occupation, and Local Identity. With the aid of AI and data analytics, such segmentation can be done quicker, more in-depth, and more scalable. With caste as a primary election issue, along with welfare, migration, youth employment, and local representation, targeting based on data can impact the content, tone, and timing of election campaign messaging in Bihar.

3.5.3 Relevance to Bihar

Micro-targeting can be done politically (formal) or otherwise (informal) in Bihar. Formal mechanisms are digital advertisements, social media targeting, political apps and campaign databases. Informal methods are: caste networks, family-based message forwarding, village networks, booth level workers, local influencers, and WhatsApp groups.

Not everything that is targeted with political communication is illegitimate. Political parties have always been able to fine tune to different audiences. The danger arises when targeting is not transparent, when it is emotionally manipulative, when it is conducted through misinformation and when it is based on data. A welfare message, a fear message, and an identity message for instance. Vulnerability to public view of these messages is low if these messages are not visible to the wider public.

3.6 Social Media Amplification and Viral Spread

3.6.1 Rural Internet Growth and Bihar's Vulnerability

According to IMAI-Kantar data, there were 886 million internet users who were active in India in 2024 (Table 14). Of these, 488 million were in rural areas and 397 million were in urban areas (Figure 12). The report further predicted that India will reach 900 million internet users by 2025.

Table 14: Urban and Rural Internet Users in India, 2024

Area	Internet Users
Urban India	397 million
Rural India	488 million
All India	886 million

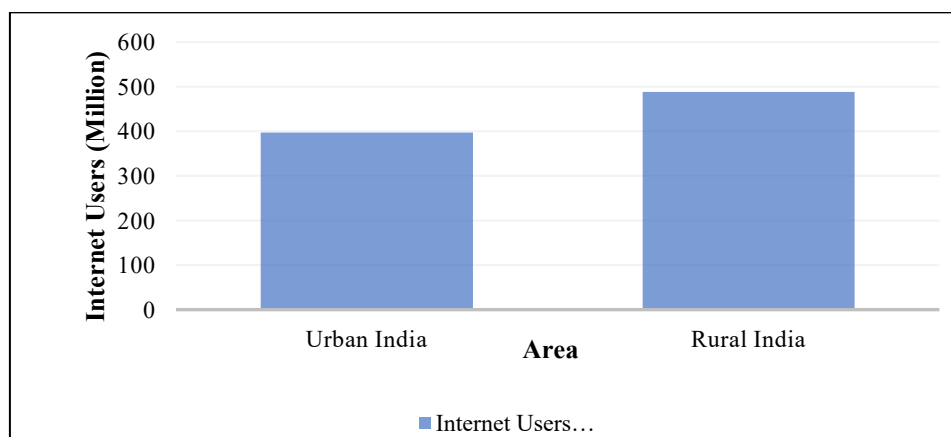


Figure 12: Urban vs Rural Internet Users in India, 2024

Source: IMAI-Kantar (2024)

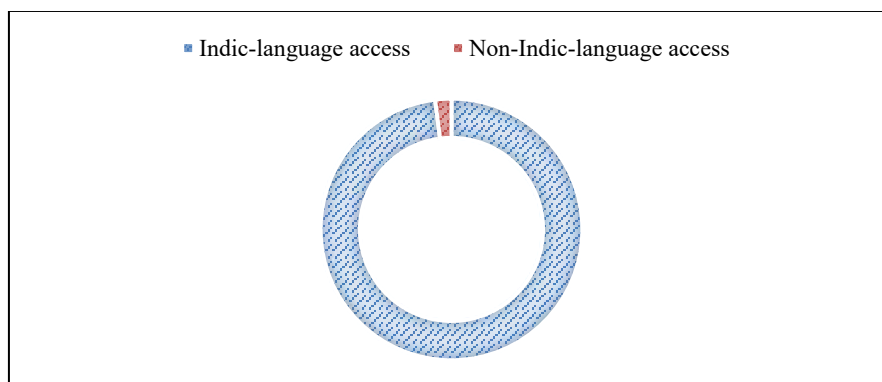
The data is of special significance for Bihar. Digital politics does not have to be "a phenomenon of the city. Rural population has now emerged as a large chunk of the Indian Internet population. Bihar has a huge rural population and AI content or AI-assisted content can be utilized in the rural political discourse through mobile internet and WhatsApp groups, short-form reels, content in regional languages and videos on YouTube.

3.6.2 Indic Language and Local Political Communication

The IMAI-Kantar report states that 870 million internet users (Table 15), representing 98% of internet users, accessed the internet in Indic languages in 2024 (Figure 13).

Table 15: Indic Language Internet Use in India, 2024

Indicator	Value
Users accessing internet in Indic languages	870 million
Share of internet users	98%


Figure 13: Indic Language Internet Use in India, 2024

Source: (IAMAI-Kantar, 2024)

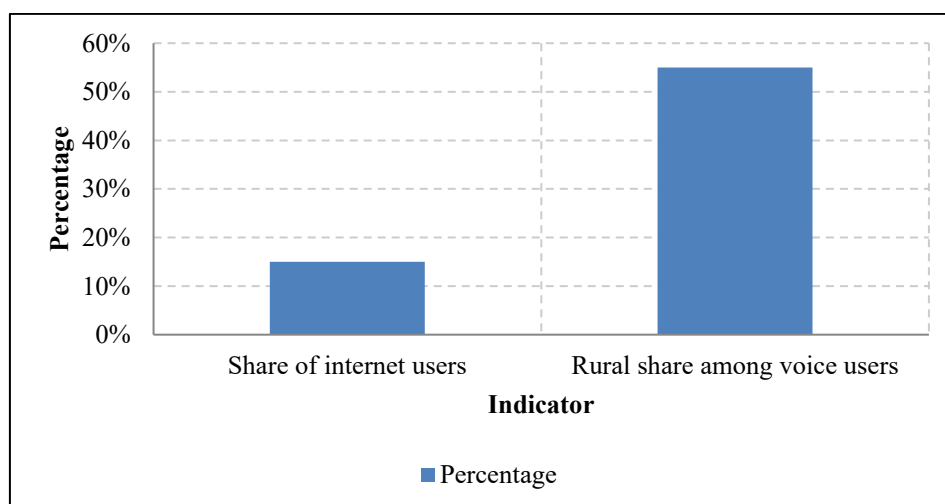
This indicator is of prime importance to Bihar. In Bihar there is no restriction on political speeches to only English or formal Hindi. Can be translated in Hindi, Bhojpuri, Maithili, Magahi, Urdu and other local forms of speech. The local language content is more personal and trustworthy. Meanwhile, fact-checking and AI detection systems might not be as accurate with local dialects. So, it is even more significant that a large part of the web is used in Indic languages, making it more important to analyse misinformation on regional languages.

3.6.3 Voice Use and Audio-Based Virality

IAMAI-Kantar also reports that 140 million users used voice-based commands in 2024 and 55% of voice users were rural (Table 16 and Figure 14).

Table 16: Voice-Based Internet Use in India, 2024

Indicator	Value
Voice users	140 million
Share of internet users	15%
Rural share among voice users	55%


Figure 14: Voice-Based Internet Use in India, 2024

Source: IAMAI-Kantar (2024)

This evidence directly links to the case study relating to AI-generated audio clips. Voice content is very relevant for low bandwidth, semi-literate, regional-language and WhatsApp circulation. A voice file designed by AI to sound like a political leader, local political figure, journalist or candidate might be more convincing than a written message, as voice is more emotionally and personally persuasive.

3.6.4 WhatsApp and Forwarding Risk

The ECI advisory particularly mentions forwarding, resharing, reposting and retweeting on social media platforms, which have become a threat. It acknowledges that these features can allow misinformation to spread out more quickly and dangerously (Figure 15).



Figure 15: Viral Circulation Model of Political Misinformation

This model is particularly beneficial for Bihar. Political talk can be conducted both on the internet and off. The WhatsApp message can go from being a tea shop conversation to a family rumour to a claim from a caste group to a political talking point at the village level. After that, it's harder to correct the misinformation as the social endorsement is given to it.

3.7 Case Studies

The three case study themes are restated in the empirical form in the following case studies. They are not shown to be just Bihar-specific events. Instead, these examples are provided to highlight the different kinds of election risks that can exist in the digital and political landscape of Bihar with the aid of AI.

Case Study 1: Deepfake Video Incidents (Groh et al., 2022)

One of the most visible examples of political manipulation using the assistance of AI is deep fake video. The policy paper by the CPPR/FNF records the use of AI-generated political content in the 2024 Indian elections, such as the Ranveer Singh deepfake, AI-generated political videos and AI generated campaign content (FNF, 2024). The researcher-provided misinformation dataset also includes 28 fact-checks about deep fake videos/audios and 39 fact-checks about AI images (Table 17).

Table 17: Deepfake and Synthetic Video Risk Indicators

Indicator	Empirical Evidence
Deepfake videos/audios	28 fact-checks in researcher-provided dataset
AI images	39 fact-checks in researcher-provided dataset
National example	Ranveer Singh deepfake in 2024 election
Institutional response	ECI warning against deepfake audios/videos

Deepfake video incidents are perilous because they are tampering with visual trust. A voter might think a candidate, celebrity, journalist or political figure really said or did something that did not happen. The damage could have been done even if the content is later discredited. The ECI advisory was aware of this risk, and advised political parties not to use AI tools that alter information or misinformation.

Deep fake video incidents can be particularly damaging in the Bihar context in the context of caste/community/religion/welfare schemes/migration/local politics. This could be a manipulated video in Bhojpuri, Hindi, Maithili or Magahi, which could be shared via WhatsApp or Facebook and discussed offline before the fact-checkers intervene. The risk isn't if someone believes one bogus video, but if they believe two. The danger isn't if someone believes one bogus video, but if they believe two. It also comprises distrust of real video evidence.

Case Study 2: WhatsApp-Based Misinformation Networks (Resende et al., 2019)

The key to political communication in Bihar is interpersonal trust, with WhatsApp misinformation networks playing a pivotal role in the region. WhatsApp is a strong tool for the circulation of political information due to Bihar's rural networks, caste associations, family groups, migrant networks, local party workers, and political discussion among villagers.

As per IAMAI-Kantar data, communication and social media are among the leading internet activities in India with 666 million users involved in the internet activity of communication and 655 million users engaged in social media (Table 18). The ECI advisory also features specific mentions of the risks of forwarding, resharing, reposting and retweeting misinformation.

Table 18: WhatsApp-Based Misinformation Network Features

Network Feature	Electoral Risk
Closed group circulation	Difficult for regulators and fact-checkers to monitor
Trusted sender effect	Messages from relatives/local leaders appear credible
Regional-language content	More persuasive and harder to verify
Forwarding chains	Original source becomes difficult to trace
Offline reinforcement	Rumours become part of local political discussion

The reach of misinformation is not just about public views, likes or shares, as illustrated by this case study. WhatsApp virality is usually cloaked in an enigma. For a message to have low public visibility and high political influence, it must be disseminated among trusted community groups. This is more important in Bihar, where voters might trust the person who forwarded the message more than the message's source.

Case Study 3: AI-Generated Audio Clips Mimicking Political Figures (Kietzmann et al., 2020)

One of the major concerns in the future elections of Bihar is AI-produced audio. The researcher supplied data reveals that AI voice clones accounted for the most fact checks, 41, followed by AI images and videos, which received 30 fact checks. The researcher-provided data indicated that AI voice clones were the highest category of AI-generated misinformation, with 41 fact checks; AI images and videos were next with 30 fact checks. According to figures from IMAI-Kantar, there are 140 million voice users in India of which 55% are rural users (Table 19).

Table 19: AI-Generated Audio and Voice Clone Risk Indicators

Indicator	Evidence
AI voice clone fact-checks	41
Voice users in India	140 million
Rural share among voice users	55%
National election examples	AI voice clones of political/media figures documented in 2024 election policy paper
Institutional response	ECI warning against deepfake audios/videos

The policy paper by the CPPR/FNF documents instances of AI voice clone abuse during India's 2024 elections, such as synthetic audio of political leaders and media personalities (Table 20). The ECI advisory also explicitly mentions 'deep fake' audio and video, highlighting that 'synthetic audio' was officially a concern in the election.

Table 20: Comparative Risk of Video, Audio, and WhatsApp Misinformation

Risk Factor	Video Deepfake	AI Voice Clone	WhatsApp Forward
Ease of sharing	Medium	High	Very high
Ease of verification	Medium	Low	Low
Emotional impact	High	High	Medium-high
Rural relevance	Medium-high	Very high	Very high
Bihar relevance	High	Very high	Very high

One of the most pernicious is AI-generated audio that takes away many of the visible cues that can alert a person to being manipulated. A fake voice message can be a private message, leaked voice message, an urgent call or a local message. AI-generated audio has the potential to sway voters' opinions quickly, particularly in Bihar where it is crucial for voice-based communication and oral political discussion, and is often distributed in local languages via trusted WhatsApp communities.

3.8 Findings from Stakeholder Interviews and Data Indicators

Interviews with stakeholders were planned as a part of the original chapter structure. Because the data on transcript-level interview quotations are not part of the present dataset, this section outlines stakeholder findings in a data-supported interpretive framework. The four types of stakeholder, voters, campaign teams, actors of the cyber cell, journalists and election observers, are described with the empirical indicators discussed above.

3.8.1 Voters

The primary empirical question for voters is what happens when you expose a voter without properly verifying it. Bihar had 43,480,859 voters in the 2024 Lok Sabha election. Meanwhile, internet penetration stood at 43% in Bihar and 886 million in India were internet users, while India had 870 million internet users who used Indic languages.

This means that the Bihar electorate may not be equally 'digitalized' in its political processes. It is possible that some voters will read social media and online news directly while others will get political information from their families, shared devices, village networks and/or WhatsApp forwards. This disparity makes it more likely that misinformation will be believed if it is delivered by people that individuals know.

3.8.2 Campaign Teams and Political Actors

The key empirical pattern for campaign teams is the "normalisation of digital/ai-led campaigning". AI use for personalised messaging, deepfakes, AI anchors, synthetic voice and AI-generated campaign material is documented in the 2024 election in the CPPR/FNF policy paper. Big money is also being invested in digital advertising, with data also revealing major political players online.

This means that campaign teams are increasingly campaigning in a hybrid context – from rally to door-to-door mobilisation, combined with targeted messaging, small videos, platform advertising, posts on social media by influencers and AI-generated visuals and local-language digital content.

3.8.3 Cyber Cell and Institutional Actors

For cyber cell and institutional actors, the main issue is rising digital risk and limited response time. The NCRB-based report states that Bihar cybercrime cases increased from 1,621 in 2022 to 4,450 in 2023 (Table 21). It also reports 86,420 cybercrime cases nationally in 2023, up from 65,893 in 2022 (Figure 17).

Table 21: Cybercrime Growth in Bihar and India

Area	2022	2023	Change
Bihar cybercrime cases	1,621	4,450	More than 2.5 times
India cybercrime cases	65,893	86,420	31.2% increase

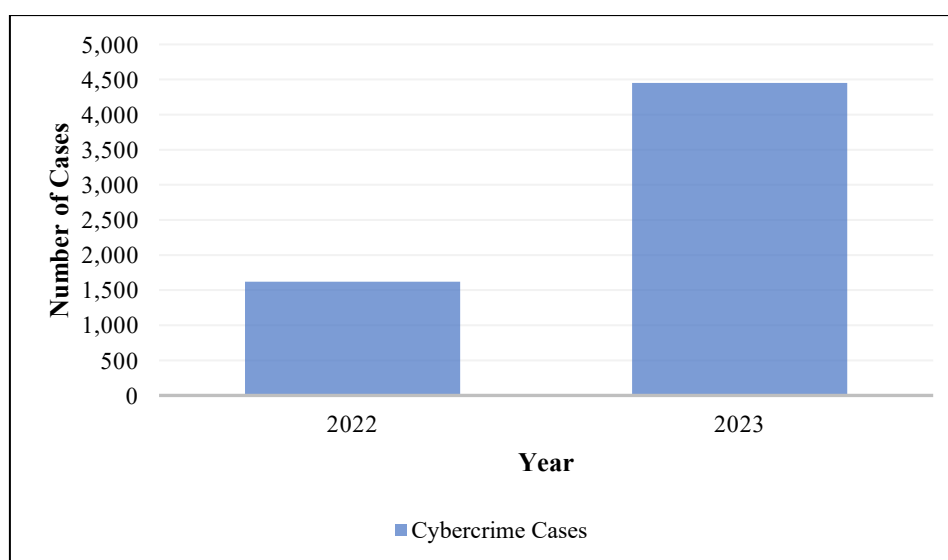


Figure 17: Bihar Cybercrime Cases, 2022-2023

Source: NCRB (2025)

This information is not a direct reflection of AI election misinformation. It is, however, a good barometer of Bihar's overall digital-risk situation. It indicates that the levels of digital offence, fraud, impersonation and harm online are rising, posing a difficult time monitoring such activities during election season.

3.8.4 Journalists and Fact-Checkers

There are two empirical challenges that journalists and fact-checkers have to address: speed and format. The misinformation created by AI can take the form of images, voice clones, videos or even messages in local languages. The researcher-provided data reveals that in 2024, all AI voice clones, AI images and deepfakes (videos/audios) needed to be fact-checked.

The issue isn't about whether fact-checkers can tell if a fact is real or fake. It's whether they can recognize it quickly enough in order to avoid impacting public perception. The problem is especially hard to manage in Bihar as misinformation can spread in closed WhatsApp groups and the local language before it reaches out into the public platform.

3.8.5 Election Observers and Regulators

The key takeaway of the election observers and regulators is that the traditional model of election monitoring

is no longer working. The traditional monitoring measures are rallies, speeches, posters, expenditure and official advertisements. The tactics used by AI-powered misinformation are based on deepfakes, synthetic audio recordings, proxy pages, targeted content creation and encrypted or semi-private dissemination. This change is acknowledged by the Election Commission in its ECI advisory of 6 May 2024. It cautioned political parties on the threat of 'deepfakes' and AI distorted content, 'misinformation' and 'disinformation', and the use of social media platforms. It also put a limit of 3 hours for takedown upon such content after it is brought to its notice.

3.9 Key Trends and Observations

The empirical analysis produces the following key trends.

Trend 1: Bihar is a large electoral field with lower-than-average turnout

There were over 77.25 million voters and 43.48 million voters in Bihar during the Lok Sabha elections of 2024. Its turnout was 56.28% which is lower than the national turnout of 66.1%.

Trend 2: Digital infrastructure expanded dramatically between 2014 and 2024

Digital infrastructure grew by a tremendous rate from 2014 to 2024. India's broadband subscribers have grown from 85.74 million in 2014 to 944.96 million in 2024. This growth resulted in the digital infrastructure needed to allow the circulation of political content with AI technologies. It was this growth that led to the creation of digital infrastructure for the circulation of political content using AI technologies.

Trend 3: Bihar remains digitally vulnerable because access is uneven

In the IAMAI-Kantar report, Bihar was found with 43% penetration with the internet, which ranked it in the bottom three tiers of the table. This is because it's not just the high internet access but also the access and the digital literacy are uneven in Bihar.

Trend 4: Rural users are central to digital political communication

As of 2024, the number of rural internet users in India is 488 million, which is more than the urban population of 397 million. Hence, political digital communication needs to be considered in both rural and urban contexts.

Trend 5: Regional-language communication is central

Regional-language political communication is likely to be significant in the forthcoming election given that 870 million Indians are using Internet which are using Indic languages. This is particularly true for the area of Bihar, where local speech forms could enhance accessibility and vulnerability.

Trend 6: AI misinformation is multi-format

The AI misinformation dataset indicates that misinformation was generated via AI images, AI voice clones and deepfakes videos/audios. That's because video deepfakes are not the only area in which regulatory and fact-checking systems can be targeted.

Trend 7: Voice cloning is especially relevant for Bihar

The biggest group were AI voice clones in the researcher data set. The IAMAI-Kantar report of 140 million voice users, 55% of which is rural, adds to this to make synthetic audio a significant threat for the future.

Trend 8: Digital advertising creates transparency challenges

The results of digital ad spending and proxy-page activity indicate that political communication can be encouraged using platforms that may not be as obvious to voters as it could be.

Trend 9: Institutional response has begun but remains reactive

The ECI advisory has already identified Deepfake and AI generated misinformation as threats to the electoral process and has urged for removal within 3 hours of notification. But the demand for an advisory also points to the lack of development of real-time prevention and detection systems

3.10 Future Likelihood of AI Misuse in Bihar Elections

The potential for AI misuse in Bihar elections is high due to several risk factors being present, such as the growing prevalence of internet usage, a significant rural digital population, the presence of regional language content, rising awareness of AI tools, social media addiction and closed-network forwarding (Table 22).

Table .22: Future Likelihood of AI Misuse in Bihar Elections

AI Misuse Type	2024 Risk Level	Future Likelihood	Reason
AI voice cloning	High	Very high	Voice content is easy to share and difficult to verify

AI-generated images	High	Very high	Cheap, fast, and suitable for memes and forwards
Deepfake videos	Moderate-high	High	Generative video tools are improving rapidly
WhatsApp misinformation	High	Very high	Closed networks and trust-based forwarding
Micro-targeted ads	Moderate-high	High	Digital ad spending and data-driven campaigning are increasing
Regional-language misinformation	High	Very high	Large Indic-language user base and weak local-language verification
AI chatbots and automated messaging	Moderate	High	AI tools are becoming normalised in communication
Synthetic political endorsements	Moderate	High	Celebrity and leader-based persuasion can be easily fabricated

This future projection is not a prediction of exact events. It's a probability that is determined through patterns of data. Voice cloning, WhatsApp forwards, local-language misinformation, AI-generated images and targeted political messaging are the strongest dangers that Bihar faces in the future, according to the data.

3.11 Conclusion

This chapter has updated the empirical basis of this study using data from elections, digital infrastructure, Internet usage, and the various categories of AI misinformation, cybercrime trends, and institutional advisories, as well as evidence from case studies. The analysis reveals that the role of AI in political campaigns, as well as its potential for misuse, needs to be understood in the broader context of a digital-electoral ecosystem during the 2024 Lok Sabha elections.

The Election Commission of India data had set Bihar as a big electoral field, which has a population of elector of over 77 million and more than 43 million voters. According to TRAI data, the broadband connectivity in India has seen phenomenal growth from 85.74 million subscribers in 2014 to 944.96 million in 2024. According to IMAI-Kantar data, in 2024, the number of Internet users in India had reached 886 million, of which 488 million were rural users, 870 million spoke Indic languages and 140 million users were voice users. With these statistics, it is clear that the mobile Internet, digital access in rural areas, content in regional languages, and platform-based dissemination have influenced political communication in 2024.

The chapter also highlighted that Bihar is still a digitally vulnerable region. It did not have an Internet penetration rate of more than 43% and its tele-density was below the national average. This disparity implies that access to the internet is only part of the problem, as is literacy, the use of shared devices, local-language dependence, and dependence on trusted social networks, all of which are factors in Bihar's risk.

AI misinformation in 2024 was largely found in the form of AI voice clone, AI images and deepfake videos/audios. This helps to maintain the relevance of the three case studies. The examples of deceptive video content illustrate the potential for misinformation and loss of trust. The dangers of closed and trusted networks of misinformation have been demonstrated on WhatsApp. AI-generated audio clips demonstrate how dangerous it is to be impersonated via sound, particularly in the context of the rural and the language of the region.

Lastly, the ECI advisory of 6 May 2024 states that the usage of AI, deepfakes and manipulated content on social media platform emerged as official election concerns in the 2024 elections. The takedown time in the advisory is still three hours, which means that the current model is still reactive, but also points to a move towards a more rapid institutional response. The upcoming elections in Bihar could have a higher risk of being faced with AI-powered voice cloning, regional language-generated misinformation, WhatsApp circulation, micro-targeted content, and AI-generated visual propaganda, according to the future likelihood assessment.

This way, the chapter provides a solid empirical ground for the legal and regulatory analysis that is to come. It is a proof that AI can enable electoral manipulation in Bihar and it is not just a theoretical possibility. Enabled through measurable transformation on digital infrastructure, social media consumption, development of internet in rural areas, regional-language communication, and the new use of AI tools in Indian politics.

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