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Digital Democracy and Political Inclusion: Assessing the Impact of Internet Penetration on People's Participation in Uttar Pradesh

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Abstract

Digital democracy is described as the application of internet-based and communication technologies to improve the process of democracy, citizen involvement, and political participation. This article focuses on the role of the growing internet penetration in influencing the political participation of people in Uttar Pradesh (UP), which is the most populous state in India, in the context of the past 10 years. It evaluates the data on internet access and use in UP, how much digital tools have promoted electoral participation and civic engagement, and whether or not the tools have increased inclusivity in politics. There is evidence that increased internet connectivity has allowed a large population of citizens, through political discussions online, political campaigning via social media and more quick redress of their grievances, but considerable digital differences still exist between urban and rural, gender and socioeconomic groups. The marginalised populations (rural population, women, poor) tend to be less connected to the internet, which may hinder their engagement in the digital environment and has the potential to increase the political disparities that exist. Other issues that have been discussed in the paper are misinformation, harassment on the web, and government-imposed Internet shutdowns, which can cripple the benefits of digital democracy. Based on comparisons with other Indian states and international experiences, the paper identifies the implications of policies of building digital infrastructure, digital literacy, and inclusive e-governance. It concludes that the internet penetration is a mandatory but not a sufficient requirement to have a broad-based political inclusion - proactive initiatives are required to make digital democracy reach out to all citizens in Uttar Pradesh.

Keywords: Digital democracy, Internet penetration, Mass mobilisation, Political inclusion, Uttar Pradesh, Digital divide, social media, E-governance, Electoral politics

Introduction

E-democracy (also known as digital democracy) has become a concept in the 21st century, indicating that information and communication technologies (ICTs) are used to aid in the process of democracy and make its citizens more engaged in the governance process (Simon et al., 2017). Digital democracy assumes that, through digital tools (internet, social media, e-government websites, and so on), it is possible to reduce obstacles to political information, allow a wider popular discourse, and provide new access to civic participation and deliberation. Experimentations in the digital platforms around the world have demonstrated how communities can be mobilised to be more substantively involved in political activities

and how decision-making processes can be more transparent and responsive (Nam et al., 2012). Simultaneously, researchers observe that digital democracy remains under development and has its difficulties - such as the digital divide (unequal access to technology), misinformation propagation, privacy, and security, and regulatory mechanisms that are necessary to address the problems (Thirupathi, 2025; Asimakopoulos et al., 2025). Differently put, although the internet age provides influential new tools to enhance democracy, the benefits of the internet are not equitably or evenly distributed. To make sure that the digitisation does not undermine, but, on the contrary, improves the political inclusion of all layers of society, and development of the equal ability to take part in the political life, it is crucial to consider social and policy implications.

The Indian context is a bright example of digital democracy and inclusion. Over the last ten years, the nation has been going through a digital revolution: both internet and mobile phone penetration have grown faster than ever before, and it has brought a radical change to communication, trade, and politics (Hussain, 2025). Over the last year, 2014 to early 2024, the internet subscribers in India have increased from more than 251 million to over 950 million (Ministry of Communications, 2024). Cheap data plans and mass adoption of smartphones due to the launch of the Digital India program by the government (in 2015) and market dynamics (the arrival of a low-cost provider of 4G Jio in 2016) resulted in the acquisition of millions of new users online (Sivaraman, 2025). This transformation is shown by providing internet penetration rates in some Indian states in Figure 1. In Kerala, Goa, and Maharashtra, which are fairly developed states, the proportion of the population accessing the internet has reached above 70 per cent, as compared to just 45-46 per cent in such states as Uttar Pradesh, which is much lower than the national average of approximately 62 per cent (Aggarwal, 2025). The state of Uttar Pradesh, where this research will be done, is the most populous state in India, which has experienced socio-economic problems in the past. The research question is as follows: how has the rapid increase in internet access in UP influenced the involvement of people in the political process, and to what degree has it made the democracy more inclusive?

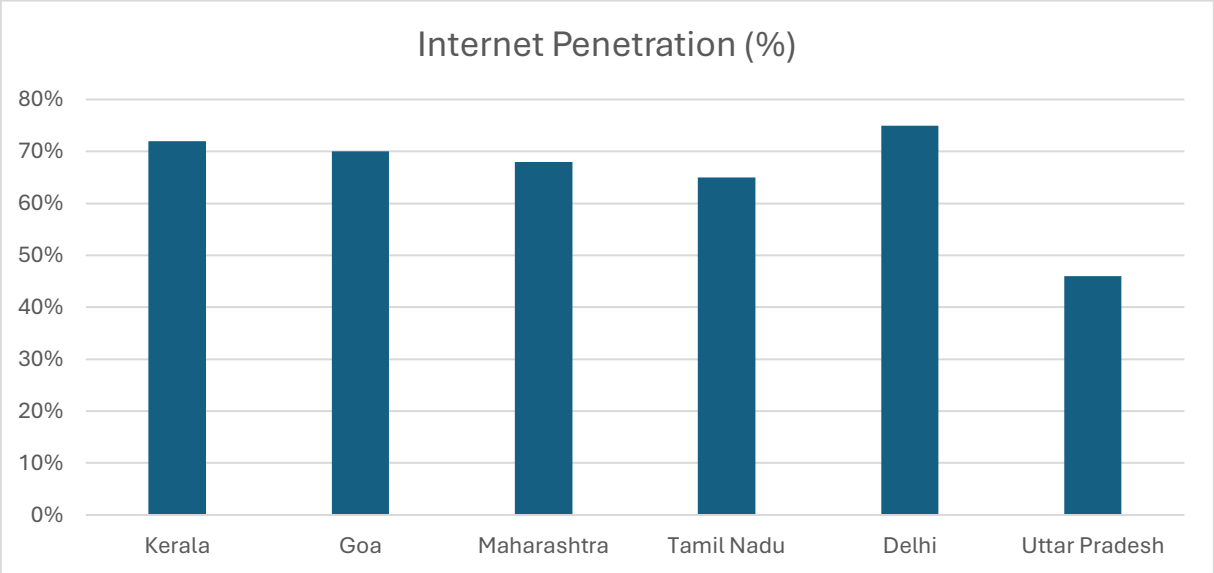

Figure 1. Internet penetration (% of population) in selected Indian states (2024). States like Kerala have much higher internet access rates compared to Uttar Pradesh, which, at ~46%, is among the lowest in India (data from IAMAI-Kantar report, 2024).

This paper summarises the evidence on digital democracy and political inclusion in Uttar Pradesh based on the government data, scholarly literature, and reports. It initially gives a summary of the internet penetration patterns in UP and the digital divide in access. It then looks at the effect on political participation and that of electoral participation (voting, campaigning), online political activities (social media, e-petitions, and so on) and civic activities such as making grievances or staging protests. It is compared with other states in India and other examples around the world to put the experience in the context of the United Province. Next, policy initiatives and issues - how governmental programs have attempted to use ICT to govern in UP, the problem of inequality, misinformation, and internet governance (shutdowns, censorship) that overlap with digital democracy are discussed in the paper. Lastly, the conclusion concludes and provides suggestions to the policymakers to make sure that increased internet penetration leads to increased democratic inclusion in Uttar Pradesh. The general purpose of the investigation is to evaluate whether the digital tools are indeed giving voice to the hitherto unrepresented in the political arena of UP or whether lack of access and digital literacy is recreating old social exclusions in new or different ways.

Internet Penetration in Uttar Pradesh: Growth and Digital Divide

Uttar Pradesh has experienced a tremendous increase in internet connectivity over the past decade, reflecting the general trend of the digital boom in India, but also pointing to the existing gaps. As of 2011, internet penetration in UP was low beyond urban centres; as of the first months of the 2020s, it is much more widespread even in rural regions. There are several sources of data that show a rush in internet penetration, particularly in the years after 2016-2017, which coincides with the countrywide trends. An example is that the Telecom Regulatory Authority of India registered overall internet subscriptions in UP (including both of its telecom zones) at approximately 107 million by the end of 2022, which is approximately 45-47 per cent of the state population being internet users (Aggarwal, 2025; Ministry of Communications, 2024). It is a significant increase compared to the mid-2010s, when, as one example, in 2015, Digital India was initially launched, approximately 19% of the Indian population had access to the internet (Smit, 2023), and UP would have been close to or even below the national average. Mobile internet has contributed to the growth in connectivity of UP. The introduction of cheap smartphones and cheap 4G data packages (especially with the introduction of Reliance Jio) resulted in a mass of first-time internet users in the towns and villages of UP (Hussain, 2025). Government initiatives have made an impact as well: one such initiative is the BharatNet project, which has provided broadband Internet access through optical fibre to approximately 45,000 Gram Panchayats (village councils) in the state of Uttar Pradesh, enhancing rural connectivity (Ministry of Communications, 2024). By April 2024, 3G/4G mobile signals were available in 95 per cent of Indian villages, and UP enjoyed this improvement of telecommunication infrastructure (Ministry of Communications, 2024).

Although these gains came with them, Uttar Pradesh still records one of the poorest internet penetrations in India (Aggarwal, 2025). It is important to note that the penetration of the state (approximately 46% in 2024) is below the level of the entire country (around 61-62) and much lower than in Kerala (72% in 2024) (Aggarwal, 2025). One of the significant factors is internal inequalities in UP - the urban-rural gap and the gender gap in access to the internet. Urban centres of UP are rather well-linked, almost to the point of saturation in certain ones; rural hinterlands are under-linked. An Oxfam India (2022) Inequality Report has found that in India, only 31 per cent of rural people used the internet, versus 67 per cent of the urban population, and the statistics of UP demonstrate the same disparity (Oxfam India, 2022).

The 2019-21 survey on the National Family Health Survey (NFHS-5) offers information on the digital divide in UP. Table 1 indicates the proportion of men and women (15-49 years) who had ever used the internet, in UP versus the all-India statistics. The woman's access to the internet in UP was only at 30.6 per cent compared to the 59.1 per cent of men, indicating a sharp gender disparity in access. Its national rates were marginally more (33.3 per cent of women and 57.1 per cent of men), suggesting that UP reflects the overall trend of women being out of the digital game (IIPS & ICF, 2021). It is interesting to note that in both UP and India in general, no single state or Union Territory had a situation where the number of women using the internet is more than that of men; men have a higher likelihood of using the internet across the board (McDougal, Raj, & Singh, 2022). The disparity is more so in the rural regions. In communities of rural UP, only twenty-four point five per cent of women had once used the internet, whereas men have more than fifty-four point five per cent (IIPS & ICF, 2021). This gap is attributed to such aspects as education, income, and social norms. This is the reason why a young woman in a rural Bihar village joked that her brother got a smartphone to study, although she is told it is a distraction (Hussain, 2025) - something which is probably also said in some areas of UP, and which is an indication of how normative, patriarchal pressures, and limited resources prevent women to have a smartphone.

Table 1. Internet use by gender in Uttar Pradesh vs. India (NFHS-5, 2019–21)

Population group (15–49 years) who have ever used the Internet	Uttar Pradesh (%)	India overall (%)
Women (total)	30.6	33.3
Women (urban)	50.2	51.8
Women (rural)	24.5	24.6
Men (total)	59.1	57.1
Men (urban)	72.4	72.5
Men (rural)	54.2	48.7

Source: NFHS-5 data (International Institute for Population Sciences & ICF, 2021).

Table 1 underscores that *UP's digital gender gap* is broadly in line with India's overall gap – urban women in UP use the internet at about the same rate as urban women nationally (~50%), but rural women are much less likely, around 24–25%. Meanwhile, UP's men have slightly higher usage rates than the national average in rural areas, suggesting that the state's overall low penetration is driven more by female and rural shortfalls. The digital divide in UP is not limited to gender; it also correlates with factors like literacy, income, caste, and age. Poorer households and marginalised communities tend to have less access to smartphones and the internet, which can translate into political information inequality. Oxfam (2022) pointed out that the digital divide "mirrors existing socioeconomic inequalities" and risks exacerbating them by hindering marginalised groups' access to essential services and opportunities for civic participation (Oxfam India, 2022). In UP, which has a large rural, agrarian population and significant poverty in some regions, these concerns are acute. Without targeted interventions (such as affordable data, digital literacy programs, and content in local languages), there is a danger that increased reliance on digital platforms for governance and political engagement could exclude those who are offline or less tech-savvy.

Uttar Pradesh has made rapid strides in internet connectivity – tens of millions are now online, and initiatives aim to achieve universal access in the coming years. However, the state's digital divide remains wide. Large segments of the populace, especially rural women and the poor, still lack effective internet access or skills, which in turn can limit their participation in the new digital avenues of democracy. The next sections will examine how the growth in connectivity has impacted various forms of political participation in UP, while keeping in mind these inequities in who is connected.

Impact of Internet Penetration on Political Participation in UP

Internet penetration can influence political participation in multiple ways. Broadly, greater access to the internet and digital media can *inform and empower citizens*, potentially leading to higher engagement in politics – through voting, campaigning, public discourse, and advocacy. However, the relationship is complex: some research suggests that while internet access can mobilise people (for instance, facilitating protests or discussions), it might also substitute or reshape traditional participation. This section examines how the expanding digital sphere has affected different dimensions of political participation in Uttar Pradesh.

1. Voter turnout and Electoral Process.

The major question is whether increased internet access increases the rates of voting or electoral behaviour in UP. The elections in the state of Uttar Pradesh have, in the past, had moderate voter turnout (in the fifty to sixty per cent range). The past decade records do not indicate that turnout increased dramatically in the same time as the digital explosion, for example, the 2017 UP state assembly election and the 2022 assembly election both recorded just under 60 per cent turnout with no massive increase making a difference of millions of new internet users over that time span. This implies that the presence of a larger number of people on the internet does not necessarily translate into an increase in the number of people who vote. Such a subtle point is made by one study by Mishra (2023): using a natural experiment of 4G rollout in India, Mishra discovered that in those districts, where people were more exposed to cheap internet, voter turnout fell (by approximately 3%), although other types of civic engagement, such as protests, increased. It was interpreted that discontented citizens are finding a way to express their political voices online and informally, rather than voting or that the time they spend on the internet is replacing certain political behaviour (Mishra, 2023). This could translate in the case of UP to mean that the internet will enable individuals to express their complaints on social media or organise protests, yet it does not always resolve the problem of apathy or loss of interest in traditional electoral procedures by certain groups.

With this said, the internet has definitely altered the way election campaigns and voter outreach in UP take place. Social media, WhatsApp and other internet platforms are increasingly becoming important tools that political parties and candidates use to reach out to voters, particularly the younger and urban voters. By the 2019 general elections, it was dubbed by commentators as the WhatsApp election in India, with the heavy use of the messaging platform by parties to communicate their messages (Sheikh, 2024). In UP, that is the state that has the highest number of elected members in Parliament, parties such as the BJP have invested a lot in their IT cells and social media teams, even as far as the district level. In the 2022 Uttar Pradesh Assembly elections, as the Election Commission once more limited physical rallies because of COVID-19, campaigning became much more online. According to research by Rai (2022), although the internet penetration of the country is quite low in UP, large parties already have strong Facebook and Twitter accounts of their participants and local branches. Almost all candidates put forward by the

Bharatiya Janata Party (BJP) and the Indian National Congress (INC) had active social media profiles, but a more traditional grassroots party, such as the Bahujan Samaj Party (BSP), had many fewer representatives on the internet (Rai, 2022). In particular, in 2022, more than 50% of BJP candidates had an active Twitter profile, while only 11% of BSP candidates did (Rai, 2022). This means there can be an advantage for the digitally savvy parties in terms of outreach, but it also reflects on their voter base (BJP and Congress may focus on urban middle-class voters online, and the BSP focuses on rural and Dalit voters, who may be less online).

On the part of the voters, what is the strength of online campaigning? Polls indicate that even though social media is becoming an increasingly important source of political information, it has not yet supplanted the conventional in UP. Another indication that voters still value face-to-face campaigning (door-to-door canvassing and rallies) as an important factor in their voting choice more than social media campaigns is a 2022 voter survey in UP (Sheikh, 2024). Some of them are sceptical about online political advertisements or posts, even among young voters, as there is too much fake information. Therefore, although penetration of the internet provides a new dimension to electoral politics (one that may enhance outreach and possibly influence some undecided voters, particularly in urban areas), it functions concurrently with, but not instead of, offline interaction in the electoral process of the UAE (Sheikh, 2024).

Regarding political awareness and debate, the greater the internet penetration has probably been beneficial. Even poor connectivity enables individuals to open news applications or YouTube footage of political debates or WhatsApp forwards about political candidates. Out of every five Indian internet users, three indicate that they can access news and information online in one way or another (Aggarwal, 2025). The internet (even over a simple smartphone) can also expose rural UP to political content, which the traditional media may not reach, particularly when it is its limitation. This will be inclusionary and will at least introduce some information to first-time voters or remote citizens. Nonetheless, it is the quality of information that can be questioned: online spaces are full of misinformation, propaganda, and content that is highly partisan in nature. There have been many cases of rumours on WhatsApp spreading in UP, which increase communal or caste tensions amid elections. Since digital illiteracy among new users is high, we may find that most of them struggle to distinguish between fake news and trustworthy news, which may influence their political views in the wrong way. Thus, even though the internet has made more people interested in political dialogue, it has also brought its own set of challenges in acquiring knowledge. Internet penetration seems to be having a dual effect on the state of voting in UP, on the one hand it has brought modernity to campaigning but on the other hand it has not yet had a significant impact on increasing the voter turnout or even raising the standard of democratic choice given the opposing influences such as misinformation and the overall cling to the old methods of campaigning.

2. Civic Engagement, Protest, and New Participation.

In addition to voting, digital connectivity in UP has also provided the citizens with a way to engage in politics and governance more directly. The social media (Facebook, Twitter, YouTube) and messaging apps have turned out to be the areas where social opinion is expressed, and movements might come together. The internet has had one of the most evident impacts in India, and this is seen in the fact that it has reduced the cost of mobilising people since a message can go viral and reach thousands of people in a very short period. The state of Uttar Pradesh has, in recent years, had a number of occasions where social media contributed towards mobilising protests or public movements. Indicatively, the demonstrations against the anti-CAA (Citizenship Amendment Act) that shook the country in 2019-20 were marked by a large presence of the city of UP, including in such cities as Aligarh and Lucknow, organised to some

extent by WhatsApp groups and Twitter calls to action. On the same note, in the 2020-21 farmers' protest (where most farmers in Western UP participated), the protesters used social media to organise tractor rallies and provide live updates that made them aware and compelled officials to negotiate. This trend is measured by the study of Mishra (2023): when the number of districts with higher internet access increased, the number of protests in these districts increased by an average of 20 per cent, which means that the internet does make a citizen mobilize and express grievances (Mishra, 2023). With a hierarchical traditional power structure, the digital space has offered a less centralised avenue of civic involvement to the state, such as UP: people can create an online petition, tweet a minister about a matter, or voice their dissatisfaction collectively without the formal organisational support of any organisation.

Government accountability and feedback are another aspect of civic engagement that digital tools have enhanced. Even the Uppsala government has begun to appreciate the power of online interactions: in 2025, the state created new online citizen feedback environments that were to allow real-time feedback on publicly available services (Singh, 2025). Using these portals and other related mobile applications, residents will be able to place complaints or recommendations regarding their concerns, such as road conditions, water supply, health services, and so forth. During the initial two weeks of the launch, more than 120,000 citizens got registered, and approximately 45,000 feedbacks were registered (Gupta et al., 2016). It was reported that common complaints (e.g., potholes broken streetlights) were automatically forwarded to the corresponding local authorities, and in some cases, some tangible results were obtained, e.g. in Varanasi district, some kilometers of roads were fixed within a month, and in Kanpur, complaints about water supply were a direct step towards getting more water tankers on the streets (Singh, 2025). This is one of the examples where internet penetration, using political will, can establish new mechanisms of participation in governance. Digital communication may help in making the government more transparent and trusted by the citizens, including in minor towns of UP, who can communicate directly with the government. The fact that the UP-feedback portals were made available in Hindi and the local dialects, and also included offline kiosks due to the unavailability of the internet to some people, is worth noting since it was an acknowledgement that it would only be inclusive through the inclusion of multimodal access (Singh, 2025). This type of activity could stabilise democratic inclusion, as those with low digital skills and access can be able to express their opinion.

Social media, too, has seen the emergence of a generation of politically minded young people in UP who do not necessarily belong to regular party systems. Twitter, Instagram, or local language forums are the places where many youths are able to argue about the policies, mock politicians, or socialise about social problems (Thirupathi, 2025). Campaigns on such issues as female safety or corruption tend to go viral. Although these online modes of participation do not necessarily result in formal political action, they are a part of the public sphere. Digital democracy scholars consider such online activism as a type of e-participation that is able to supplement democratic participation (Asimakopoulos et al., 2025). The upside is speed and size; a message can gain adherents more easily across caste or geographical lines online. The downsides are that activism based on clicking (so-called slacktivism) is superficial and that there is a danger of echo chambers. The internet has partially allowed people in the context of UP, where caste and community identities play a decisive role in politics, to be exposed to other points of view, but it has also led to the creation of polarising groupings (such as Facebook pages or WhatsApp groups that sort by political identification tend to propagate their own narratives).

Mention should be made of inclusion in civic tech application: Are these new forms of participation reaching the hitherto sidelined? Yes, to a certain degree, as an example, it is women who may not turn up

at a town hall meeting physically, but they could express their views in a WhatsApp family group or a Facebook comment in the presence of the Internet. In remote regions of UP, poor communities with access to a smartphone (assuming they have such) can seek attention to local issues (villagers tweeting about a flooded drain or school teacher shortage has been known to receive media coverage). Nevertheless, the un-networked stay silent in such platforms, and this creates a question of whether, when the government or society overuses digital feedback, the offline disfavored may get neglected. The strategy that policymakers in UP have used until now has been a hybrid one; to carry on with traditional outreach (such as Janta Darbar public hearings by officials) and introduce new digital interfaces.

In short, the internet penetration has, in numerous ways, promoted the civic life of people in UP. The accessibility of setting up and voicing dissent online has resulted in the increased frequency and spread of mobilisations on issues, which denotes a stronger citizenry. Direct citizen government interaction that bypasses bureaucracy has also been made possible by digital tools, which have been adopted by the implementation of e-governance platforms to provide feedback and offer services. Such advancements are moving in line with the principles of digital democracy, which are empowerment of people and participation in governance (Simon et al., 2017). Nevertheless, the quality of involvement and its inclusiveness have been questionable. Digital activism is also often shallow or ignorant in nature, and those who are not able to access it (because of poverty, illiteracy, or even lack of internet connectivity) may not be able to enjoy these new possibilities. In this way, the internet has made a positive contribution to political participation in UP, but it is qualified; up to now, the internet has given a boost to civic participation, but it is a challenge to make such participation representative and constructive.

3. Political Representation and Inclusion.

Political inclusion is the level to which various groups (by gender, class, caste, religion, etc.) can be engaged in political processes and influence them. The politics in Uttar Pradesh was generally traditional, and some groups were not represented in the political arena, such as women, lower castes, and the poorest. The relevant question is whether digital democracy is closing these gaps or rendering them stronger. On the one hand, the digital platforms have provided a voice to most individuals who never had one. Women in the state are also using social media to discuss some of the problems, such as gender-based violence or to help one another in their political ambitions. One such highlight is the ability of grassroots women leaders (village Pradhan, social activist and others) to create WhatsApp groups to exchange experiences and mobilise around the issue of local governance. Youths belonging to the Scheduled Castes or minority groups have also resorted to YouTube or Twitter to speak or demand some policy action by circumventing mainstream media that, in some cases, overlooked those voices. Access to Indic language materials (Hindi and others) on the Internet has increased, and non-English speakers in UP can now participate in the digital discourse more easily (Aggarwal, 2025 mentioned 98% of Indian internet users now consume content in local languages). These tendencies imply democratizing voice- any person with simple internet access can express his or her opinion or gain followers, without relying on high authorities. In terms of political representation, this would translate to a slow transformation of the narrative whereby leaders are compelled to address issues that are blown out of proportion at the grassroots through the online platforms.

The inclusion with ICT, however, is a two-sided reality. The digital divide implies that the most marginalised (poor, rural women, elderly, differently-abled) are not adequately represented in the online publicity. As has been pointed out above, there is a lack of women and villagers online in UP, so the online debate will be biased towards the interests of the more connected segments of the population (the men in the city). As an example, a Twitter trend may fail to get the voice of an isolated rural woman with a local

governance problem. Moreover, the outreach of political parties made via the internet may be aimed at the already influential demographics (youth, urban middle classes) as opposed to the outreach to other demographics. This would unwillingly result in a situation where the digital vocal segments would have more influence on the policies, which would further intensify the biases. Oxfam India (2022) cautioned that the digital revolution would only make inequality more profound when it is not inclusive and that more privileged people who have already had access to these tools would benefit more (Oxfam India, 2022).

That notwithstanding, there are policy initiatives to counter this. The Government of India and the Government of UP have been introducing numerous digital literacy and inclusion programs, such as rural digital literacy training, free or subsidised smartphones to women and students through special programmes. The PM-WANI scheme (Public Wi-Fi Access Network Interface) consists of the establishment of free Wi-Fi hotspots in rural settings, which may be useful in the villages of UP (Hussain, 2025). Hopefully, with proper infrastructure and affordability concerns, more marginalised citizens will move to the online world, and once trained, they will be able to utilise digital tools and assert their rights and be equal participants. The most important thing will, however, be the need to keep the non-digital alternatives until then. To illustrate, despite the services being made online, UP has maintained offline channels (such as common service centres or help desks) to allow people without internet access to government schemes, which is a critical move to ensure that people are not left behind during the transition period (Hussain, 2025).

Representation in decision-making is another aspect of political inclusion. In this case, the penetration of the internet would be of help indirectly, as it would lead to a knowledgeable citizenry requiring a variety of representation. Indian social media campaigns have occasionally brought into the limelight the necessity of more women in legislatures or the appointment of members of underrepresented communities. During the 2022 assembly election of UP, there was criticism on the internet where major parties were accused of not providing enough tickets to women. Even though the results take a long time to transform (the percentage of women MLAs in the UP Legislative Assembly remains lower), this is the new element that the digital era allows, facilitating. Digital transparency devices can also reveal biases, e.g., information on candidate backgrounds is posted on websites (such as affidavits of the criminal records and assets of candidates are now readily available on the internet), giving the voters more information to make better decisions and probably pick a representative who represents the interests of their community.

To sum up, the internet has brought both opportunities and gaps in the experience of the internet in political inclusion in Uttar Pradesh. The growth in the spread of the internet has indeed helped to increase the number of voices in the political discourse, allowing historically disadvantaged groups to be heard. However, the same segments are the ones who are at risk of being left behind with poor access. The overall impact up to this point is that digital democracy in UP has enhanced inclusion to a level - we observe a greater mobilisation of issues-based citizens crossing old hierarchies - but it needs long-term work in digital inclusion (overcoming access, literacy, and content barriers) to actually level the playing field. In the absence of such efforts, there is the risk that the political agenda on the internet could be based largely on the comparatively empowered and thus not achieve the ideal of inclusive online democracy.

Policy Initiatives and Challenges in Fostering Digital Democracy in UP

The rise of digital democracy in Uttar Pradesh has not gone unnoticed by policymakers. Both state and central governments have introduced initiatives aimed at leveraging technology for better governance and

fostering inclusion. At the same time, there have been policy and regulatory challenges – some emanating from the government's own controls and others from the need to manage the downsides of the digital sphere. This section discusses key policy measures and the challenges that need to be addressed to ensure the internet's impact on democracy remains positive.

E-Government and Digital Inclusion Policy.

The Digital India program, initiated in 2015, is one of the initiatives that influences UP (as an all-India policy). Digital India has a very broad scope of projects aimed at developing digital infrastructure, providing services in digital form and enhancing digital literacy. In the case of UP, there have been concrete deliverables that include ubiquitous broadband connectivity via the BharatNet (linking all the villages as mentioned above), the proliferation of Common Service Centres (CSCs) in nearly every panchayat to access e-services, and the introduction of an assortment of mobile apps and portals to access the services of the government (land records to health appointments). The state portals and mobile apps (e.g., the e-Sathi app that offers citizen services, the Jan Sunwai (public hearing) portal where complaints can be registered online, etc.) of the UP government should become more accessible. These initiatives fall under the larger term of e-governance, which in theory, complements digital democracy by offering a means of responding to government easily. Research has revealed that proper e-governance has the capability of amplifying citizen engagement because it reduces operation and improves transparency (Asimakopoulos et al., 2025). As an illustration, the Jan Sunwai grievance portal of UP (which has been in operation for several years) has been processing millions of complaints, and a study discovered that in most instances, it has led to making the process of handling complaints timelier and more responsible (Allam & Kumar, 2018). With the institutionalisation of such digital platforms, the state sends out the message that citizens have the right to be heard quickly and efficiently, which is one of the fundamental principles of democracy.

Digital outreach and digital literacy have also been in the spotlight of the government. The Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA) is a national initiative whereby tens of lakhs of individuals in UP have been imparted in fundamental digital skills with rural adults and the marginalised being the primary target population. Further, language barriers are also identified by offering more content and government interfaces in Hindi (lingua franca in UP) and even local dialects to audio/video content. In recent years, the IT policy of UP has focused on local language computing development and promotion of local solutions to local problems, which indirectly promotes digital democracy by creating local solutions (such as applications that can help villagers report issues without the need to speak English fluently).

The other policy area is empowering digital elections. Although India has not shifted to internet voting (it is feared that it will lead to insecurity and inclusiveness), technology has been discussed to be used in facilitating voting, say to assist migrant workers to vote back home. Since there is a large number of migrants in UP, the latter would gain access in case such a system is applied safely (Smit, 2023), which refers to the idea of a remote e-voting system via migrants. Voter education by the Election Commission has also been conducted digitally in UP (such as the cVIGIL application for reporting electoral code violations during campaigns, and social media campaigns to vote). They are small, yet significant measures of governance and electoral institutions becoming digital.

Notably, digital inclusion has been a policy agenda. The concept of technology has often been used by the government to speak of antyodaya (benefit to the last) - such as with the JAM trinity (Jan Dhan bank accounts, Aadhaar ID, Mobile) to directly deliver subsidies to the poor. Millions of people were benefiting

in UP through digital payment systems in the form of Direct Benefit Transfers (DBT) during the COVID-19 lockdowns, which arguably could avoid exclusion compared with the previous distribution systems. Yet, as other commentators mention (360info, 2023), when the least privileged have no access to the digital world or authentication issues, they may even be disadvantaged (e.g., an elderly villager who cannot operate a form online may not get an entitlement). As an answer to this, policies need to provide substitute support and redress of grievances in case the digital systems do not work or are left out, which activists demand (Smit, 2023; Oxfam India, 2022). Positively, the fact that the UP government is considering the new citizen feedback portals by providing additional offline kiosks indicates that they understand the need to do so (Singh, 2025).

Overall, policy efforts in UP and India have aggressively stretched the limit in developing a digital form of democracy, be it the expansion of infrastructure or service provision being offered online, as well as education provision to citizens to follow the digital divide. These are the backbones upon which the digital democracy would be able to thrive as long as they maintain inclusion and accessibility as part of their core values.

Difficulties: Counter-checking the Information, Internet Security, and Internet Governance.

Although the spread of the internet in UP has resulted in opportunities to practice democracy, it has also been associated with huge challenges that must be overcome by policymakers and society. Among the difficulties is spreading fake news and hate speech on the internet. On a handful of occasions, rumours generated on social media in UP (as in any other place) have actually triggered violence in reality. In 2018, mob lynchings in some parts of India occurred because of false WhatsApp messages about child kidnappers. Within the communally sensitive location of UP, incendiary fake news is likely to increase tensions. The use of propaganda and increasing polarisation with the help of digital content has become a widespread issue during elections (Thirupathi, 2025). The solution to this is media literacy among citizens and technological responsibility. The state has attempted to address the problem of fake news by establishing fact-checking departments and cyber police, yet the amount of content makes it difficult. The civil society has intervened as well, such as projects such as Alt News (a fact-checking site), which often busts the viral myths in Hindi circulating in UP. Nevertheless, the credibility of online news is a burning question: as long as citizens do not trust what they watch on the internet, the internet becomes of little use to democracy. According to Asimakopoulos et al. (2025), two of the threats that should be addressed are misinformation and polarisation caused by algorithms, which should be mitigated both in policy (i.e. by exercising greater control of social platforms) and education (i.e. by educating users on how to check information).

The other issue is data privacy and security of those citizens who will be involved digitally. The people of UP who access the services provided by e-governance or even through social media should be assured that their personal information remains secure and that they do not face the danger of being harmed due to the online activity. India has been developing a data protection law (the Digital Personal Data Protection Bill enacted in 2023), but critics say it has extensive exemptions on government and no independent regulator (Smit, 2023). Cases such as the Pegasus spyware leak (despite claims of surveillance of activists via phone) have made people fearful that online engagement may result in the loss of privacy or even safety for the opponents of the government. Citizens might be intimidated by the possibility that being outspoken on the Internet may result in either an act of surveillance or criminal prosecution, which would cause a chilling effect on digital democracy. Regrettably, within the last several years, instances of people facing arrest due to social media posts that criticised the government have occurred in UP, which is why the rights of

users are violated (Freedom House, 2024). Freedom House (2024) describes the internet in India as partially free, with regular internet restrictions and online speech arrests. Internet shutdowns, especially in Uttar Pradesh, have been employed as a law-and-order measure - e.g. in response to a protest or riot, the state has blocked mobile internet in some of its districts. UP had more than 28 recorded internet shutdowns between 2012 and 2020, such that only two regions in India had more (Manchanda, 2020). Whereas government officials claim that this is done in an attempt to curb rumour-mongering and violence, this act of shutdowns blindly blocks the access of citizens to information and communication, which is tantamount to silencing digital democratic expression in the short term. The greatest challenge in governance is striking a balance between the security issue and the digital rights of citizens. Courts have spoken - the Allahabad High Court in 2020 asked questions about the blanket shutdowns in UP and emphasised that the freedom of expression heavily depends on access to the internet (Chauhan, 2020). In the future, it will be significant to create protocols that can aim at particular threats (such as the elimination of incendiary material) without causing any significant disruptions.

Another issue is cybersecurity. Since UP is going online with services, confidence can be compromised by the risk of cyber-attack (on the election system, government databases or digital infrastructure). An e-governance portal that has been hacked into or that contains a database of voters that has been leaked can be used maliciously. Thus, the deployment of effective security protocols and prompt reaction to incidents should be invested in to ensure that people still trust digital spaces to be democratic.

Lastly, the issue of maintaining sustainability and equity of digital participation exists. This covers all aspects, such as maintaining the cost of the internet low (further competition in the telecommunication market to maintain the low price of data is essential, especially in states such as UP, because the income level of the citizens is low), as well as reforming the school curriculum to generate a digitally minded new generation of citizenry. The digital divide is not going to disappear automatically - it requires unremitting policymaking. As an example, although physical connectivity is almost everywhere, if women are not encouraged to use the internet, the voice of half the population is silenced. Normal changes could be brought about through social interventions, awareness campaigns (on the benefits of the internet to women's education, etc.) and perhaps community programs (such as women-only digital centres). Equally, the internet can be more useful to underserved communities by making local content and addressing local concerns in UP (such as agricultural market information applications, local governance discussions), attracting them to its use.

To sum up, even though Uttar Pradesh is at the edge of a more digitised democracy, it has to face these compound issues. The internet is not only something that policymakers can use to govern and exercise power, but a place that should be governed by them by upholding rights, preventing abuses, and making it a place of inclusiveness. These obstacles will be the determining factor in the success of digital democracy in UP. It is critical to deal with misinformation, safeguard user rights, eliminate digital divides, and retain the openness of the internet in order to transform the high level of internet penetration into a truly participatory and inclusive political culture.

Conclusion

With the growth of internet penetration in Uttar Pradesh, the political participation and inclusion in the state have certainly taken a different dimension. Within the last decade, UP has shifted towards a more digitalised space, with a nearly fifty per cent adoption rate of the internet by its population. This is a digital change that forms a part of Indian wide internet boom and has pushed the boundaries of democracy:

citizens can find information much more easily, express themselves through social media, mobilise around causes, and directly engage with the government through various platforms which were not practical or even possible in the past. Digital democracy in UP has proved to be empowering in the hands of ordinary people, through cases of online activism being able to lead to policies responding, through the use of e-governance tools to deliver better services and through a greater voice of youth and other voices in the political elections. The internet is, in a way, serving as a catalyst to the increasingly participatory democracy, which is making politics more instant and accessible (Thirupathi, 2025).

Nevertheless, the internet penetration has not universally positive effects on political inclusion and has its reservations. One of the key results of this review is that the social inequalities that exist strongly mediate digital inclusion. Digital democracy has been biased to favour the people who are connected, own devices and are literate. In UP, it is mostly urban residents, men, and the educated classes who do not reflect rural communities, women, and the poor on the Internet (IIPS & ICF, 2021; Oxfam India, 2022). It is suggested that unless there is a concerted effort to bridge the digital divide, there will be the danger of a new form of disenfranchisement - that political discussion and service may transfer to the internet, but a large population will not be heard because they cannot or do not have access. It should then be the duty of the government and the civil society to regard internet access as a right and need (as it has been argued in the courts and by the UN) and make it universal and fair. Positively, initiatives within UP have been moving in this direction (e.g., BharatNet, PMGDISHA), but questions of affordability, gender norms and localised content must be addressed.

Another is that internet penetration does not necessarily mean more formal political involvement, such as voting, but it has a more subtle effect. Online engagement has increased, but in other cases, the online engagements have replaced or transformed the offline engagements instead of boosting them directly. As an illustration, digital connectivity has increased the frequency of protest and issue-based mobilisation (a type of participation), but it has not significantly raised the voter turnout and may be associated with slight decreases in votes in certain regions (Mishra, 2023). This implies that political inclusion must be assessed not only by the metrics of election but also by the concept of inclusion or the possibility to engage in a conversation and affect the rules between the elections. At that, the internet penetration increases the chances of inclusion (via social media discussions, petition websites, and feedback links). The important thing is, however, that these channels are effective and taken into account. Being responsive by the government is essential - the availability of a digital channel will not suffice without the authority's paying attention and responding to the citizens. Recently, the adoption of citizen feedback portals at UP is a step in the right direction since it shows institutional readiness to incorporate the voices of citizens (Singh, 2025).

Another truth that is raised by the review is that digital democracy exists in an environment where rights and regulations continue to develop in India. Such problems as internet blocking in UP and suppression of online speech suggest that the state control and digital rights of citizens collide (Freedom House, 2024; Manchanda, 2020). To ensure the success of digital political participation, it must be supported by a favourable environment where freedom of expression on the internet is preserved, privacy is secured, and security is ensured. When people are afraid that the activities they are engaging in online in politics may cause retaliation or monitoring, they are likely to self-censor, and the internet may have reduced the democratic aspect. Therefore, maintaining the rule of law and constitutional rights in cyberspace is no less important than the provision of the infrastructure.

The development trends of Uttar Pradesh can be viewed as part of a bigger trend that can be observed globally: the digital tools are capable of making democracy more profound, yet they must be made accessible to everyone and governed wisely. Comparisons against other states and countries reveal that in states and countries where the internet is widespread and distributed at high rates (Kerala or in some Western democracies), the internet has been used to increase transparency (e.g., open data portals, online budget consultations) and convenience (e.g., e-voting in Estonia), with overall positive results of participation. Elsewhere, where there are sharp digital divides or authoritarian regimes, there can be the reverse effect, and sometimes digital technologies can entrench power imbalances. UP is in the middle of these extremities and is making a gradual advance. Ongoing comparisons - experience in other places (for example, how some states have gotten more female internet use or how some countries have done it through media literacy campaigns) can inform the strategies of UP.

To conclude, people have been able to participate in political processes in Uttar Pradesh through internet penetration, which is not a panacea. It has also offered new channels and tools that could enhance democratic inclusion; it should become available to everyone through enriching the voice of the citizen and simplifying governance. In order to achieve this potential to the fullest, stakeholders in UP need to lay emphasis on the concept of making digital democracy universal: all citizens should be able to go online, should be taught digital literacy, and should know how to navigate online space safely and constructively. At the same time, the integrity of the democratic processes needs to be ensured online, both by working against the harms such as fake news and by preventing the misuse of the digital platforms for anti-democratic purposes. Through prudent policies and participative practices, Uttar Pradesh can use its increasing internet penetration to develop a more participatory, responsive and inclusive democracy - one that comes more out of the dreams of all its people in the digital era.

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