

INFORMATION DISSEMINATION AS A MEDIATING FACTOR BETWEEN DIGITAL PUBLIC INFRASTRUCTURE AND DEMOCRATIC ENGAGEMENT IN INDIA

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ABSTRACT

Digital Public Infrastructure (DPI) has transformed governance in India by expanding digital service delivery and citizen access to public information. However, limited attention has been given to how information dissemination mediates its relationship with democratic engagement. This study investigates the potential role of information dissemination in bridging the gap between DPI and civic engagement. This qualitative study is based on secondary data drawn from peer-reviewed journal articles, government reports, policy documents, and international publications. In it, we examine how Aadhaar, DigiLocker, UMANG, MyGov, and CPGRAMS facilitate communication between the state and its inhabitants using digital platforms. By increasing civic awareness, facilitating citizen engagement, providing more opportunities for public discussion, and making it simpler for people to access up-to-date and correct information, the results demonstrate that DPI indirectly increases political involvement. There are still issues with data governance, the digital divide, inaccurate information, algorithmic effects, and privacy that reduce the effectiveness of this relationship. The findings indicate that information dissemination functions as the principal mediating mechanism through which Digital Public Infrastructure enhances informed citizenship and democratic engagement in India.

KEYWORDS: Information, Dissemination, Mediating, Factor, Digital Public Infrastructure, Democratic Engagement

INTRODUCTION

The rapid advancement of digital technologies has transformed the relationship between governments and citizens, reshaping public administration and democratic governance worldwide. Governments increasingly utilize digital platforms to improve the efficiency, transparency, and accessibility of public services while promoting citizen participation. In India, Digital Public Infrastructure (DPI) has emerged as a comprehensive digital ecosystem that supports digital identity, financial inclusion, public service delivery, and citizen engagement through platforms such as Aadhaar, UPI, DigiLocker, UMANG, MyGov, and the Centralized Public Grievance Redress and Monitoring System (CPGRAMS). These initiatives have significantly improved citizens' access to government services and public information, creating new opportunities for participatory, transparent, and responsive governance (Klingebiel, 2025; Coyle, 2024). Beyond service delivery, the democratic value of DPI depends on its ability to facilitate timely, accurate, and accessible dissemination of public information, thereby enhancing citizen awareness, political knowledge, transparency, and participation in democratic processes (Masiero, 2024). Access to timely, reliable, and

accessible public information is widely recognized as a prerequisite for effective democratic governance. Digital platforms enable continuous interaction between governments and citizens through policy communication, public consultations, and grievance redressal mechanisms, reducing information asymmetry and encouraging informed civic participation (Vaccari & Valeriani, 2021; Simon, 2023). However, the democratic potential of DPI is constrained by persistent challenges, including the digital divide, limited digital literacy, misinformation, privacy concerns, algorithmic influence, and unequal access to communication technologies. These factors affect the quality, accessibility, and credibility of information, thereby limiting meaningful citizen engagement and public trust in digital governance systems (Couldry, 2024).

Although existing studies have examined Digital Public Infrastructure in relation to digital governance, public service delivery, and digital inclusion, limited attention has been given to the mediating role of information dissemination in strengthening democratic engagement. Most studies emphasize the direct effects of digital infrastructure while overlooking how the dissemination of timely, accurate, and accessible information connects technological infrastructure with

democratic outcomes. Addressing this gap, the present study conceptualizes information dissemination as the key mediating mechanism between Digital Public Infrastructure and democratic engagement in India. By examining this relationship, the study contributes to the growing literature on digital governance by proposing a conceptual explanation of how information dissemination transforms Digital Public Infrastructure into a catalyst for informed, inclusive, and participatory democratic engagement in India. Accordingly, the study argues that the democratic impact of Digital Public Infrastructure is realized not merely through technological access but through the effective dissemination of public information that enables informed citizen participation.

PUBLIC SPHERE AND DIGITAL DEMOCRACY

The concept of the public sphere provides an important theoretical foundation for understanding the relationship between communication, citizenship, and democracy. It refers to a space where citizens engage in informed and rational discussion on issues of public concern, thereby facilitating public opinion formation and democratic participation (Habermas, 1991). However, the traditional public sphere has been criticized for excluding marginalized voices and overlooking inequalities in access to public discourse (Fraser, 2014; Dahlgren, 2005). With the advancement of digital technologies, the public sphere has increasingly shifted to digital platforms that enable broader communication and citizen participation. The emergence of the digital public sphere has created new opportunities for information exchange while also introducing challenges related to platform governance, algorithmic influence, surveillance, and unequal access to information. Digital platforms have expanded citizens' ability to access public information and participate in governance, yet the commercialization of communication, data extraction, and misinformation may limit democratic deliberation and public trust (Fuchs, 2022; Zuboff, 2024). These developments underscore that the democratic potential of digital platforms depends not merely on technological connectivity but on the dissemination of reliable, inclusive, and trustworthy public information that enables informed civic participation.

INFORMATION DISSEMINATION AS A BRIDGE BETWEEN INDIA'S DIGITAL PUBLIC INFRASTRUCTURE AND DEMOCRATIC ENGAGEMENT

Digital Public Infrastructure (DPI) strengthens democratic engagement not merely through the provision of digital services but by enabling the timely, accurate, and accessible dissemination of public information. Information dissemination functions as the critical mediating mechanism that connects digital infrastructure with democratic outcomes by

transforming technological access into informed civic participation. Platforms such as Aadhaar, DigiLocker, UMANG, MyGov, and the Centralized Public Grievance Redress and Monitoring System (CPGRAMS) facilitate continuous communication between the government and citizens by providing access to public services, welfare schemes, policy updates, and grievance redressal mechanisms. Through these platforms, citizens become better informed about government initiatives, administrative processes, and their rights and entitlements, thereby strengthening informed political participation, institutional transparency, and democratic accountability.

The mediating role of information dissemination can be understood through several interconnected mechanisms. First, transparent and timely access to government information reduces information asymmetry and strengthens public trust by enabling citizens to monitor government decisions and evaluate policy implementation. Digital platforms such as MyGov encourage citizens to participate in public consultations, policy discussions, and feedback mechanisms, transforming communication from one-way information delivery into interactive governance. Similarly, CPGRAMS allows citizens to register grievances, monitor their resolution, and engage directly with public authorities, thereby improving institutional responsiveness and political efficacy. In addition, digital platforms extend the reach of government information to geographically remote and socially disadvantaged communities, reducing physical barriers to public service access and promoting broader civic participation. Consequently, effective information dissemination converts Digital Public Infrastructure from a technological system into an institutional mechanism that facilitates informed democratic participation. This transformation demonstrates that the democratic value of Digital Public Infrastructure lies not merely in digital connectivity or service delivery but in its capacity to create an informed citizenry capable of meaningful participation in governance.

Despite these contributions, the effectiveness of information dissemination as a mediating mechanism depends on the quality, accessibility, and inclusiveness of digital information ecosystems. Persistent challenges such as the digital divide, inadequate digital literacy, misinformation, privacy concerns, cybersecurity risks, and institutional resistance continue to limit the democratic benefits of DPI. Unequal access to digital technologies may exclude vulnerable populations from governance processes, while misinformation and weak data governance can undermine public trust and informed decision-making. Therefore, the democratic potential of Digital Public Infrastructure depends not only on expanding digital infrastructure but also on ensuring reliable, inclusive,

and transparent information dissemination. In this context, information dissemination emerges as the critical mediating mechanism through which India's Digital Public Infrastructure translates technological capabilities into informed citizenship, meaningful civic participation, institutional accountability, and stronger democratic engagement.

OBJECTIVES OF THE STUDY

- To examine the relationship between DPI and democratic engagement.
- To analyse the mediating role of information dissemination.
- To identify challenges affecting this relationship.

RESEARCH METHODOLOGY

Research Design- This study adopts a qualitative, analytical, and conceptual research design to examine the relationship between Digital Public Infrastructure (DPI), information dissemination, and democratic engagement in India. A qualitative approach is appropriate as it facilitates the interpretation and synthesis of existing literature, policy frameworks, and theoretical perspectives to develop a conceptual understanding of the research problem.

Nature of the Study- The study is based on qualitative analysis of secondary literature related to digital governance, Digital Public Infrastructure, information dissemination, and democratic engagement. It aims to identify key concepts, themes, and relationships relevant to the study objectives.

Sources of Data- The research relies exclusively on secondary data collected from peer-reviewed journal articles, books, government reports, policy documents, official Digital India publications, and reports of national and international organizations.

Literature Selection- Relevant literature was identified through structured searches of academic databases (such as Scopus, Web of Science, and Google Scholar), institutional repositories, and official government websites. Peer-reviewed articles, policy documents, and government reports published between 2015 and 2025 were selected to ensure the relevance and reliability of the evidence.

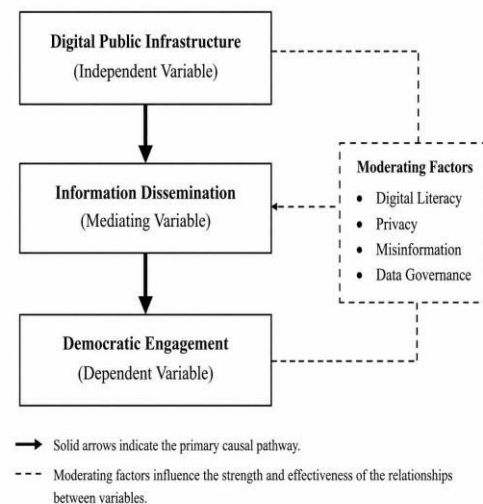
Inclusion and Exclusion Criteria- The review included English-language peer-reviewed articles, books, government reports, and policy documents published between 2015 and 2025 that addressed Digital Public Infrastructure, digital governance, information dissemination, and democratic engagement. Publications unrelated to the research objectives, duplicate records, opinion pieces, newspaper articles, non-peer-

reviewed sources, and studies lacking sufficient academic quality were excluded.

DATA ANALYSIS TECHNIQUE-

The collected literature was analyzed using thematic and conceptual content analysis to identify recurring themes and relationships concerning Digital Public Infrastructure, information dissemination, and democratic engagement. The analysis focused on themes such as digital inclusion, citizen participation, transparency, accountability, misinformation, privacy, and data governance.

Conceptual Framework- The conceptual framework identifies Digital Public Infrastructure (DPI) as the independent variable, Information Dissemination as the mediating variable, and Democratic Engagement as the dependent variable. It explains how effective information dissemination through digital platforms enhances citizen awareness, transparency, and civic participation while recognizing the influence of digital literacy, privacy, misinformation, and data governance. The framework therefore assumes that the relationship between Digital Public Infrastructure and democratic engagement is indirect and operates primarily through the mediating role of information dissemination.



Scope of the Study- The study focuses on major Digital Public Infrastructure initiatives in India and examines their role in promoting information dissemination and democratic engagement. It also explores challenges related to digital inclusion, information accessibility, privacy, misinformation, and data governance within India's digital transformation.

RESULT AND DISCUSSION

Digital Public Infrastructure: Effective E-Governance and Citizen Empowerment Digital Public Infrastructure (DPI) strengthens effective e-governance by facilitating the timely, accurate, and transparent dissemination of public information, thereby enabling meaningful citizen empowerment. Rather than merely digitizing government services, DPI provides citizens with easy access to information on government policies, welfare schemes, public services, and grievance redressal mechanisms through platforms such as Aadhaar, DigiLocker, UMANG, MyGov, and CPGRAMS. Timely access to reliable information enhances citizens' awareness of their rights, entitlements, and public services, enabling them to make informed decisions, participate in policy discussions, submit feedback, and hold public institutions accountable. This continuous flow of information reduces information asymmetry, strengthens transparency and trust, and promotes greater citizen participation in governance. Consequently, citizen empowerment emerges not merely from access to digital technologies but from the effective dissemination of credible public information that enables informed citizenship, strengthens institutional accountability, and promotes inclusive and participatory democratic governance. (Jaeger, 2005).

DIGITAL LITERACY

Digital literacy plays a crucial role in enhancing the effectiveness of information dissemination through Digital Public Infrastructure (DPI). Citizens can benefit from digital governance initiatives only when they possess the knowledge and skills required to access, evaluate, and use digital information available through platforms such as Aadhaar, DigiLocker, UMANG, MyGov, and CPGRAMS. Higher levels of digital literacy enable individuals to understand government policies, access public services, participate in online consultations, and utilize grievance redressal mechanisms more effectively. Conversely, limited digital literacy restricts access to reliable information, reduces civic participation, and widens the digital divide. Therefore, digital literacy strengthens the mediating role of information dissemination by enabling citizens to convert digital access into informed civic participation, institutional transparency, and meaningful democratic engagement. (Eshet-Alkalai, 2004; Ng, 2012).

E-GOVERNANCE

E-governance refers to the use of Information and Communication Technology (ICT) to improve the delivery of public services, enhance administrative efficiency, and strengthen transparency and accountability in governance (Heeks, 2001; Macintosh, 2004). Through Digital Public Infrastructure (DPI), governments are able to disseminate public information more efficiently, enabling citizens to access

government policies, welfare schemes, and essential public services through digital platforms. This demonstrates that the effectiveness of e-governance depends not only on technological infrastructure but also on the quality, accessibility, and credibility of information shared with citizens.

The effectiveness of e-governance, however, depends not only on the availability of digital platforms but also on the quality and accessibility of information disseminated through them. Timely, accurate, and inclusive information enables citizens to make informed decisions, participate in governance processes, and hold public institutions accountable. Consequently, e-governance strengthens democratic engagement by using information dissemination as the key mechanism through which Digital Public Infrastructure empowers citizens and promotes participatory governance.

DIGITAL INDIA INITIATIVES

The Digital India programme, launched in 2015, has established a comprehensive Digital Public Infrastructure (DPI) that enhances the dissemination of public information and strengthens citizen–government interaction. Rather than merely digitizing public services, initiatives such as Aadhaar, DigiLocker, UMANG, MyGov, BharatNet, PMGDISHA, e-Hospital, and Direct Benefit Transfer (DBT) have created an integrated digital ecosystem that improves access to government information, welfare schemes, and essential public services. By making public information more accessible, timely, and transparent, these initiatives reduce information asymmetry and enable citizens to interact more effectively with government institutions.

Each initiative contributes to democratic engagement through different mechanisms of information dissemination. Aadhaar facilitates the accurate identification of beneficiaries, ensuring that information and welfare benefits reach the intended recipients efficiently. DigiLocker enhances citizens' access to authenticated public documents, reducing administrative barriers and improving transparency in service delivery. UMANG provides a single digital platform through which citizens can obtain information and access multiple government services, while MyGov promotes two-way communication by enabling public consultations, feedback, and participation in policy discussions. BharatNet expands digital connectivity in rural areas, and PMGDISHA improves digital literacy, ensuring that a larger section of the population can access and utilize digitally disseminated information. Similarly, e-Hospital and DBT improve transparency and accessibility in healthcare and welfare delivery by providing timely and reliable information through digital platforms.

Collectively, these Digital India initiatives demonstrate that the democratic value of Digital Public

Infrastructure lies not only in digitizing public services but also in strengthening the dissemination of reliable public information. By improving citizens' access to authenticated information, expanding digital inclusion, enhancing transparency, and facilitating continuous interaction between citizens and government, these initiatives empower individuals to make informed decisions, participate in governance, and hold public institutions accountable

ROLE OF DIGITAL LITERACY IN E-GOVERNANCE

Digital literacy is essential for effective e-governance because it enables citizens to access, understand, and use information disseminated through Digital Public Infrastructure (DPI). It helps individuals utilize digital platforms to access government services, welfare schemes, and public information more efficiently (National e-Governance Division, 2025). Digitally literate citizens are better able to interpret government information, participate in online consultations, use grievance redressal mechanisms, and hold public institutions accountable. By improving access to reliable information, digital literacy strengthens transparency, informed decision-making, and civic participation in governance (Ng, 2012). Therefore, digital literacy enhances the democratic impact of e-governance by enabling citizens to effectively use digitally disseminated information. It reinforces the mediating role of information dissemination between Digital Public Infrastructure and democratic engagement, promoting more inclusive, transparent, and participatory governance (Norris et al., 2001)

FINDINGS AND DISCUSSION

Finding 1: Information dissemination functions as the primary mediating mechanism between Digital Public Infrastructure and democratic engagement The analysis indicates that the democratic impact of Digital Public Infrastructure (DPI) is realized through effective information dissemination rather than through digital infrastructure alone. Digital platforms facilitate the timely, accurate, and accessible flow of public information related to government policies, welfare schemes, public services, and grievance redressal. This continuous dissemination of information enhances citizens' awareness and political knowledge, enabling informed decision-making and greater participation in democratic processes. Therefore, information dissemination serves as the critical mechanism that transforms digital infrastructure into meaningful democratic outcomes. This finding supports Habermas' conception of the public sphere by demonstrating that democratic participation depends not merely on access to technology but on citizens' ability to access and engage with reliable public information

Finding 2: Transparent digital communication strengthens citizen participation and accountability The study finds that Digital Public Infrastructure enhances democratic participation by improving transparency and promoting two-way communication between citizens and government. Platforms such as Aadhaar, DigiLocker, UMANG, MyGov, BharatNet, CPGRAMS, and Direct Benefit Transfer (DBT) provide authenticated public information and facilitate public consultations, feedback, and grievance redressal. These mechanisms reduce information asymmetry, increase public trust, and enable citizens to monitor government actions, thereby strengthening accountability and participatory governance. The finding indicates that democratic engagement is reinforced when digital platforms facilitate continuous two-way communication rather than one-way dissemination of government information.

Finding 3: Digital literacy and inclusion determine the effectiveness of information dissemination

The findings reveal that the benefits of Digital Public Infrastructure largely depend on citizens' digital literacy and access to digital technologies. Citizens possessing adequate digital skills can effectively access, interpret, and utilize digitally disseminated information for civic participation, whereas inadequate digital literacy and limited digital access restrict participation and widen the digital divide. Consequently, digital literacy enhances the effectiveness of information dissemination and increases the democratic impact of Digital Public Infrastructure by enabling informed and inclusive citizen engagement. This suggests that digital literacy should be viewed as a democratic capability that enables citizens to meaningfully participate in governance rather than merely as a technical skill.

POLICY RECOMMENDATIONS

The findings suggest that strengthening the democratic impact of Digital Public Infrastructure (DPI) requires policies that improve the quality, accessibility, and inclusiveness of information dissemination. Government agencies should develop multilingual and citizen-centric digital communication strategies to ensure that public information is accessible across diverse linguistic and socio-economic groups. Digital platforms should incorporate real-time fact-checking mechanisms, transparent information verification systems, and standardized communication protocols to reduce misinformation and enhance public trust. Expanding digital literacy programmes, particularly in rural and underserved communities, is essential to improve citizens' ability to access, interpret, and utilize digital information effectively. Furthermore, strengthening data privacy, cybersecurity, and transparent data governance frameworks will increase public confidence in digital platforms and encourage greater civic participation. In addition, periodic

monitoring and independent evaluation of Digital Public Infrastructure initiatives should be undertaken to assess the effectiveness of information dissemination, identify implementation gaps, and support evidence-based policy improvements. Finally, integrating interactive feedback mechanisms, public consultations, and efficient grievance redressal systems across Digital Public Infrastructure platforms can promote continuous citizen–government engagement, improve accountability, and foster more informed, inclusive, and participatory democratic governance in India.

CONCLUSION

This study demonstrates that information dissemination is the critical mediating mechanism through which Digital Public Infrastructure (DPI) strengthens democratic engagement in India. While Digital Public Infrastructure has expanded access to digital governance and public services, its democratic value depends on the effective dissemination of timely, accurate, and accessible public information that enhances citizen awareness, transparency, accountability, and civic participation. By integrating perspectives from digital governance, the public sphere, e-governance, and digital literacy, the study contributes to the existing literature by demonstrating that information dissemination functions as the principal mediating mechanism through which Digital Public Infrastructure translates technological capacity into meaningful democratic engagement. However, the study is limited by its qualitative and conceptual nature, relying exclusively on secondary sources without empirical validation.

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