# Mains Practice Question

**Q.** Evaluate the potential and limitations of Digital Public Infrastructure (DPI) in driving inclusive economic growth and financial transformation in India **(250 words)**

27 Nov, 2024     GS Paper 3 Economy

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**Approach**

- Introduce the answer by mentioning features of DPI
- Give Potential of DPI along with supporting examples
- Delve into the Limitations of DPI
- Suggest a way forward
- Conclude suitably.

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## Introduction

India's G20 presidency highlighted **Digital Public Infrastructure (DPI)** as a transformative enabler for inclusive economic growth and financial transformation.

- DPI, characterized by **its openness, interoperability, and scalability**, integrates foundational systems such as **Aadhaar and UPI** with sectoral initiatives like Ayushman Bharat Digital Mission to drive digital empowerment.

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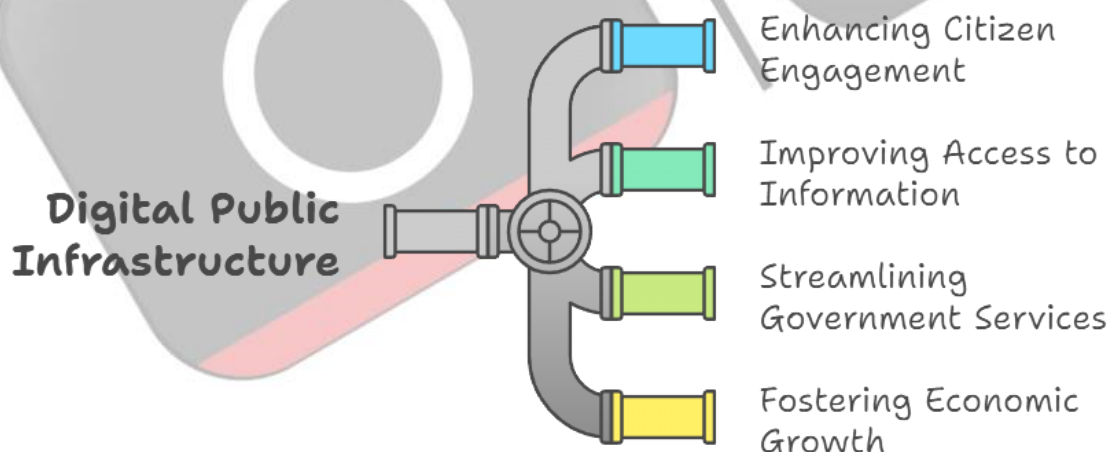


## Body

**Potential of DPI:**

- **Inclusive Economic Growth:**
    - **Financial Inclusion:** Aadhaar-enabled payment systems and UPI have expanded access

to formal banking for marginalized groups, with over 10 billion UPI transactions monthly.
- **Economic Value:** DPI could contribute 4.2% of GDP by 2030, as projected by Nasscom, enhancing India's potential to become an $8 trillion economy.
- **Empowerment of MSMEs:** Platforms like ONDC democratize e-commerce, fostering equitable market access.
- **Improved Governance and Service Delivery:**
  - **E-Governance:** Platforms like CoWIN facilitated 2.2 billion vaccine administrations, showcasing seamless public service delivery.
  - **Data Empowerment**: Digilocker and DEPA ensure secure data management while upholding privacy.
- **Catalyst for Innovation:**
  - Digital ecosystems encourage startups and private sector innovation, leveraging tools like the Account Aggregator Framework for fintech development.

**Limitations of DPI:**

- **Digital Divide**: As of 2022, India's internet penetration is **only 52%, with rural areas significantly behind urban centers, l**imiting access to digital services like UPI and e-governance.
- **Digital Illiteracy**: Despite initiatives like the **Pradhan Mantri Gramin Digital Saksharta Abhiyan,** a large portion remains digitally illiterate, impacting the adoption of services like digital payments (UPI).
- **Cybersecurity Risks:** India faces over **3,000 cyberattacks weekly,** with incidents like the **2023 AIIMS Delhi ransomware attack** exposing vulnerabilities in digital public infrastructure.
- **Data Privacy and Security:** The **Digital Personal Data Protection Act, 2023** is still being implemented. Past breaches, such as the **Aadhaar leak in 2018,** highlight concerns about data security.
- **Digital Sovereignty:** Policies like the **RBI's mandate to store payment data locally** challenge global tech companies and impact cross-border data flows.

## Way Forward

- **Universal Connectivity Expansion:** Expand **broadband and mobile internet coverage**, focusing on underserved rural areas. Leverage initiatives like **BharatNet** to ensure nationwide access.
- **Promotion of Digital Literacy:** Scale up programs like **Pradhan Mantri Gramin Digital Saksharta Abhiyan t**o improve digital skills. Integrate **digital literacy into school curricula and community training centers.**
  - Focus on increasing women's and marginalized communities' access to digital education.
- **Strengthening Cybersecurity Framework:** Build a **comprehensive cybersecurity strategy to protect critical infrastructure.** Regular audits of government and private sector digital platforms.
- **Ensuring Data Privacy and Protection**: Implement the **Digital Personal Data Protection Act, 2023**, to safeguard personal data. Establish clear guidelines for data localization while ensuring cross-border data flow.
- **Enhancing Language Inclusivity**: Develop multilingual digital platforms to cater to **India's linguistic diversity.** Expand initiatives like BHASHINI to promote content in regional languages..
- **Upholding Digital Sovereignty:** Strengthen laws around **data localization and protect national interests.** Balance global tech collaboration with data security concerns.

## Conclusion

DPI has **immense potential to bridge socio-economic gaps** and drive financial transformation, but challenges such as **digital inequality, privacy risks, and regulatory fragmentation** must be addressed. By adopting these measures, India can solidify DPI as a cornerstone of inclusive growth, fostering a digital ecosystem that is innovative, equitable, and resilient.