



## Revamping Digital Infrastructure in India

**For Prelims:** [Artificial intelligence](#), [IndiaAI Mission](#), [Large Multimodal Models](#), [Digital Public Infrastructure \(DPI\)](#), [sustainable development](#), [Aadhaar](#), [UPI](#)

**For Mains:** Challenges and Mitigation of India's Digital Public Infrastructure (DPI), IndiaAI Mission, Boosting AI innovation and startups, AI ecosystem in India

[Source: PIB](#)

### Why in News?

India's **digital infrastructure** has evolved rapidly, contributing **11.74%** to [Gross Domestic Product \(GDP\)](#) in 2022-23 and **projected to reach 20% of GVA** by 2029-30.

- To further accelerate this growth, [Union Budget 2025-26](#) has sanctioned **Rs 2,000 crore** for the **IndiaAI Mission** to develop AI infrastructure and skill-building programs.

### What are the Key Achievements in India's Digital Infrastructure Growth?

- **Unified Payments Interface (UPI):** [UPI](#) was launched in 2016, it now powers **49% of global real-time transactions** (ACI Worldwide Report 2024).
  - Digital transactions rose from **Rs 707.93 crore (2016) to Rs 23.24 lakh crore (2024)**, with participating banks increasing from **35 to 641**. It has expanded to **7 countries**, including the **UAE, Singapore, and France**.
- **Internet Infrastructure:**
  - **Telephone connections** increased from 933 million (2014) to **1,188.70 million (2024)**.
    - **Internet connections** grew from 25.15 crore (2014) to **96.96 crore (2024)**, an **increase of 285%**.
    - **Broadband penetration** rose by 1,452% from 6.1 crore (2014) to **94.92 crore (2024)**.
  - [BharatNet](#), launched in 2011 to provide **affordable high-speed internet to Gram Panchayats** has connected 2.14 lakh Gram Panchayats by 2025 with **6.92 lakh km of optical fiber** cable laid, and **1.04 lakh Wi-Fi hotspots** installed.
- **Aadhaar:** [Aadhaar](#), launched in 2009, serves as a digital identity framework, linking biometric and demographic data. It has enabled **direct benefit transfers**, [financial inclusion](#), and reduced **corruption**.
  - By **March 2023**, **136.65 crore Aadhaar cards** were issued. **Aadhaar face authentication** crossed **100 crore transactions** (Jan 2025), and **E-KYC transactions** grew from **0.01 crore (2014) to 1,470.22 crore (2023)**.
- **DigiLocker & UMANG:** [DigiLocker](#) launched in **2015**, provides secure access to digital documents, reducing reliance on physical records.
  - As of **February 2025**, it has **46.52 crore users**, with yearly signups rising from **9.98 lakh (2015) to 2025.07 lakh (2024)**.
  - [UMANG app](#), launched to integrate e-Gov services, has **7.34 crore registered**

users in 2024, up from 0.25 lakh (2017).

- **ONDC & GeM:** ONDC (launched in 2022) promotes fair e-commerce competition, benefiting **MSMEs**. By **December 2024**, it expanded to **616+ cities**, with **7.64 lakh sellers** and **154.4 million orders**.
  - **GeM**, launched in 2016, streamlines government procurement with **Rs 4.09 lakh crore GMV** in **FY 2024-25**, supporting **1.6 lakh buyers** and **22.5 lakh sellers**, fostering transparency and efficiency for small enterprises.
- **BHASHINI:** **BHASHINI** has enhanced digital access in **22+ Indian languages**, facilitating **100 million+ inferences** monthly and has over **500,000 app downloads**, promoting inclusive digital governance and bridging linguistic divides.

## What is IndiaAI Mission?

- **About:** The **IndiaAI Mission** is a flagship initiative launched by the Government of India aimed at creating a **comprehensive AI ecosystem** to **foster innovation, research, and development in AI**.
- **Objective:** It aims to **build a robust AI ecosystem** by establishing high-performance computing infrastructure, enhancing data quality and AI models, promoting indigenous AI technologies, and fostering innovation in sectors like healthcare, agriculture, and governance.
  - It also focuses on **supporting AI startups, attracting talent, and ensuring ethical AI practices**.
- **Budgetary Allocation:** **Rs 2,000 crore** has been allocated for **2025-26**, which is nearly a fifth of the scheme's total outlay.
- **Key Components:**
  - **AI Center of Excellence:** It aims at **integrating AI technologies into the curriculum** to enhance educational outcomes. The **Union Budget 2024-25** allocates **Rs 500 crore** for this.
    - Additionally, **3 AI centers in agriculture, health, and sustainable cities**, announced in 2023, will continue to receive support.
  - **IndiaAI Innovation Centre**
  - **IndiaAI Datasets Platform**
  - **IndiaAI Application Development Initiative**
  - **IndiaAI FutureSkills**
  - **IndiaAI Startup Financing**
  - **Safe & Trusted AI**

## Conclusion

India's digital infrastructure has significantly boosted economic growth, governance efficiency, and financial inclusion. To sustain this progress and achieve a **'Viksit Bharat' by 2047**, the focus must shift to enhancing **cybersecurity, expanding 5G, and promoting digital literacy**. Leveraging its digital capabilities, India can drive sustainable development, improve service delivery, and empower citizens in the digital era.

### Drishti Mains Question:

What are the objectives and key components of the IndiaAI Mission? How does it aim to transform India's AI landscape?

## UPSC Civil Services Examination Previous Year Question (PYQ)

### Prelims

**Q. With the present state of development, Artificial Intelligence can effectively do which of the following? (2020)**

1. Bring down electricity consumption in industrial units

2. Create meaningful short stories and songs
3. Disease diagnosis
4. Text-to-Speech Conversion
5. Wireless transmission of electrical energy

**Select the correct answer using the code given below:**

- (a) 1, 2, 3 and 5 only
- (b) 1, 3 and 4 only
- (c) 2, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

**Ans: (b)**

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### **Mains**

**Q.** What are the main socio-economic implications arising out of the development of IT industries in major cities of India? (2022)

**Q.** “The emergence of the Fourth Industrial Revolution (Digital Revolution) has initiated e-Governance as an integral part of government”. Discuss. (2020)

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