Revamping Digital Infrastructure 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 GDP 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)

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)