



## Transforming India: India's Digital Transformation

**For Prelims:** [Digital banking](#), [Digital India program](#), [Unified Payments Interface \(UPI\)](#), [Pradhan Mantri Grameen Digital Saksharta Abhiyan \(PMGDSA\)](#), [Ayushman Bharat Digital Mission](#), [MPS \(Immediate Payment Service\)](#), [Prepaid Payment Instruments \(PPIs\)](#), [Aadhaar-enabled Payment System \(AePS\)](#), [National Electronic Toll Collection \(NETC\)](#), [Digital Personal Data Protection Bill 2023](#)

**For Mains:** Impact of Digital Technology on Different Sectors in India, Current Scenario of India's Digital Payments, India's Global Vision for Digital Transformation

### Context

India today is the **world's largest digitally connected democracy**, with **830 million Internet users**. Digital transactions have grown manifold in recent years, making **India the undisputed leader in real time digital payments**.

The widespread adoption of smartphones and affordable mobile data plans has also **contributed to the growth of India's digital economy**. [E-commerce](#), [mobile payments](#), [digital banking](#), [healthcare](#), [tourism](#), and [business](#) are **some of the sectors that have seen significant growth in recent years**.

### What accelerated Digital Transformation in India?

- India's digital transformation has been remarkable, with improved connectivity and technological capabilities **leading to increased digital access and inclusivity for its citizens**.
- Initiatives such as the [Digital India program](#), [Pradhan Mantri Grameen Digital Saksharta Abhiyan \(PMGDSA\)](#), and [Unified Payments Interface \(UPI\)](#), etc. have played a **significant role in transforming India into a digitally empowered society** and a major player in the digital economy.
  - Some of the initiatives like the Telecom development plan, [aspirational district scheme](#), and **initiatives in areas affected by left-wing extremism** have **improved accessibility, connectivity, affordability, and inclusivity pan India**.
- Initiatives like the [Common Service Centers \(CSCs\)](#) have provided services such as [e-governance](#), education, healthcare, and banking to **underserved communities in rural areas**.

### What is the Digital India Programme?

- The Digital India program, **launched in 2015, aims to transform India into a digitally empowered society** and a knowledge-based economy.
- Its **key objectives include** strengthening digital infrastructure, delivering services digitally, and promoting digital financial inclusion.
- As a result of **dedicated digital drives across the country, internet subscriptions have increased by 150%** in both rural and urban areas.
  - As per the data, **95.76 million internet subscribers were added in rural areas, while 92.81 million were added in urban areas** between 2019-2021.

- **Digilocker** which was **launched under this programme has witnessed over 16 crore registrations**. Users can share and access any documents and certificates digitally since its launch.

## What is Pradhan Mantri Grameen Digital Sakshata Abhiyan?

- **PMGDSB was launched in 2017 and is promoting digital literacy in rural India.**
- **The PMGDSA has resulted in improved accessibility, connectivity, affordability, and inclusivity pan-India.**
- **It has trained 5.96 crore candidates and certified 4.44 crore students in digital literacy. It's the world's largest digital literacy programme under which so far 6.92 crore candidates have been registered.**

## How is Digital Technology Impacting Different Sectors in India?

- **Healthcare:**
  - Digital technology helped run the **world's largest and most efficient Covid-19 vaccination program initiatives** in the country.
  - The **National Digital Health Mission** and **National Digital Health Blueprint** have been **instrumental in strengthening healthcare delivery.**
  - Whether it is **Telemedicine**, AI-enabled medical devices, or electronic medical records, digital technology is **quickly making inroads in the Indian health systems.**
  - Initiatives like the **Ayushman Bharat Digital Mission** have further **accelerated the pace of digitisation of Health systems in India.**
  - The Indian healthcare system is **becoming more citizen-centric, holistic, and proactive with the use of technology.**
- **Tourism:**
  - Another sector that **has seen a profound transformation** as a result of the digital revolution is **tourism and travel.**
  - The internet has played a **pivotal role in revolutionising how people explore, plan and experience travel.**
  - From online bookings to virtual tours and travel content creation the **internet has become an indispensable tool for travelers.**
- **Businesses:**
  - Digital payments have **transformed businesses by simplifying the payment process, reducing operational work, and increasing productivity.**
  - The rapidly expanding digital payments landscape has **transformed businesses, particularly small and medium-sized enterprises,** by simplifying the payment process.
  - Nowadays, businesses are able to **save both time and money,** while also concentrating on their core competencies. This is made possible by offering digital payment options, **which enable them to tap into a larger market and attract new customers.**

## What is the Current Scenario of India's Digital Payments?

- **India's Digital Payment Revolution:**
  - The rapid expansion of **digital infrastructure has resulted in a remarkable transformation in India's payment landscape.**
    - A financial transaction model has witnessed a dramatic shift towards digital payments **paving the way for a modern digital and cashless economy** by placing utmost importance on promoting digital payments.
  - Over the past few years, **India has witnessed an unprecedented surge in digital payment transactions.** User-friendly and convenient digital payment methods such as:
    - **Bharat Interface for Money - Unified Payments Interface (BHIM-UPI), IMPS (Immediate Payment Service), Prepaid Payment Instruments (PPIs), Aadhaar-enabled Payment System (AePS) and National Electronic Toll Collection (NETC)** have experienced substantial growth revolutionising the digital payment

landscape **by facilitating both person to person and person-to-merchant payments.**

▪ **UPI Takes the Lead in Global Digital Payments:**

- India leads the world in digital payments with 89.5 million transactions in 2022 with **UPI emerging as a revolutionary product.** As per the data, India accounted for **46% of global real time payments** in the year.
  - Brazil was **second on the list** followed by China, Thailand and South Korea.
  - The exponential growth is reflected in the fact that digital payment transactions in India are **more than the other four leading countries combined.**
- UPI **transactions are on course to reach 1 billion a day by 2025** accounting for 90% of retail digital payments in the country.

▪ **Traditional Payment Methods:**

- Traditional payment methods such as debit cards, credit cards, [National Electronic Fund Transfer \(NEFT\)](#), and [Real Time Gross Settlement System \(RTGS\)](#) have also **experienced rapid expansion.**

**Note:**

- In Feb 2023, **India's UPI and Singapore's PayNow were integrated to enable faster [Remittances](#)** between the two countries.

**How is India Addressing Data Protection in the Digital Age?**

- India has passed the Landmark [Digital Personal Data Protection Bill 2023](#) **to ensure the safety and trustworthiness of the digital world.**
- The Bill aims to safeguard personal data from misuse and enable the flow of global tech-based investments, **making the sector a key driver in India's journey towards becoming a [USD 5 trillion economy.](#)**
- The bill ushers in a **new era in India's digital development journey, one which recognises the value and centrality of personal data** in today's globally interconnected digital economy and also takes cognizance of the need to safeguard such personal data from misuse.

**What is India's Global Vision for Digital Transformation?**

- India's digital transformation journey **has impacted every aspect of society, ensuring digital access, digital delivery of services,** and digital inclusion for all, based on sustainable, affordable, and transformative technology.
- Pushing this transformation to the rest of the world, **India has called for a governance framework and [digital public infrastructure at the G20](#)** to ensure that it is accessible to all countries equally.
- Data for development is an **integral part of the overall theme of "One Earth, One Family, One Future" i.e. Vasudhaiva Kutumbakam, during India's G20 presidency.**

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

**Prelims**

**Q. Consider the following: (2022)**

1. Aarogya Setu
2. CoWIN
3. DigiLocker
4. DIKSHA

**Which of the above are built on top of open-source digital platforms?**

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

**Ans: (d)**

**Q. Which of the following is/are the aim/aims of “Digital India” Plan of the Government of India? (2018)**

1. Formation of India’s own Internet companies like China did.
2. Establish a policy framework to encourage overseas multinational corporations that collect Big Data to build their large data centres within our national geographical boundaries.
3. Connect many of our villages to the Internet and bring Wi-Fi to many of our schools, public places and major tourist centres.

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

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

**Ans: (b)**

**Q. Regarding ‘DigiLocker’, sometimes seen in the news, which of the following statements is/are correct? (2016)**

1. It is a digital locker system offered by the Government under Digital India Programme.
2. It allows you to access your e-documents irrespective of your physical location.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Ans: (c)**

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### **Mains**

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

**Q. How can the ‘Digital India’ programme help farmers to improve farm productivity and income? What steps has the Government taken in this regard? (2015)**