Digital India programme

Part of: GS-III- S&T (PT-MAINS-PERSONALITY TEST)

India is amongst the top 2 countries globally, just behind China on many dimensions of digital adoption. By 2022, India’s digital economy is likely to cross $1 trillion. This was the focus at the India Digital Summit 2019, held in New Delhi. The summit deliberated on what India needs to become a trillion dollar digital economy, the challenges on the way forward as well as the threats to cybersecurity.

**Imp Points**

**Digital India programme**

- **Vision Areas**
  - Digital infrastructure as Utility to Every Citizen
  - Governance and services on demand
  - Digital empowerment of citizens
- **Objectives**
  - To prepare India for a knowledge future.
  - For being transformative that is to realize \( \text{IT (Indian Talent) + IT (Information Technology)} = \text{IT (India Tomorrow)} \).
  - Making technology central to enabling change.
  - On being an Umbrella Programme – covering many departments.
  - The programme weaves together a large number of ideas and thoughts into a single, comprehensive vision so that each of them is seen as part of a larger goal.
  - The Digital India Programme will pull together many existing schemes which would be restructured and re-focused and implemented in a synchronized manner.

**Nine pillars of Digital India**

- Broadband Highways
- Universal Access to Mobile Connectivity
- Public Internet Access Programme
- e-Governance: Reforming Government through Technology
- e-Kranti - Electronic Delivery of Services
- Information for All
- Electronics Manufacturing
- IT for Jobs
- Early Harvest Programmes

**Progress and Impact of Digital India Programme**

- Overall 12000 rural post office branches have been linked electronically.
- Increased in electronic transactions related to e-governance as it is estimated that there are more than 100 cr mobile phones in India.
- 2, 74,246 km of optical fiber network has connected over 1.15 lakh Gram Panchayats under the Bharat Net programme.

*Common Service Center*

- A Common Service Center (CSC) is an information and communication technology (ICT)
access point created under the National e-Governance Project of the Indian government. 

- A CSC is essentially a kiosk with a personal computer, a wireless connection, and other equipment. Through computer and Internet access, the CSCs provide multimedia content related to e-governance, education, health, telemedicine, entertainment, and other government and private services.
- There is a rapid expansion in the network of Common Service Centers.
- DigiGaon or Digital Village conceptualized as the connected village where the citizen can avail various e-services. These DigiGaons are projected to be change agents, promoting rural entrepreneurship, building rural capacities and livelihoods through community participation.
- Digital villages have been equipped with solar lighting facility, LED assembly unit, sanitary napkin production unit, Wi-Fi choupal.
- The aim of the programme is to turn each village into a self-sustaining unit.
- It has been estimated that the internet service sector is expected to reach $74 billion in 2022. Internet data has become the major tool for the delivery of the services.
- India till Dec 2017 had made tremendous progress in urban internet penetration with 64%. However, four fifth of rural India is yet to get access to the internet.
- Presently, there are 300 million daily active users which have risen from 10-15 million daily users in 2011. And, it is estimated that by 2020 the number would double.

**Initiatives launched by the Government of India**

- **Digilockers**—it is a "digital locker" service operated by the Government of India that enables Indian citizens to store certain official documents on the cloud. The service is aimed towards reducing the need to carry physical documents.
- **BHIM app**—It is an app to enable digital payments. BHIM app was used to facilitate 913 million transactions in 2017-18.
- **Pradhan Mantri Gramin Digital Saksharta Abhiyan** to make citizen digitally literate. The project is expected to be one of the largest initiatives of the country with an overall target of training 6 crore students until the financial year, 2019. The government has accepted 250,000 Gram Panchayats to register at least 200-300 candidates each.

**India’s Digital Economy**

- India’s digital economy will touch $1 trillion by the year 2022. India would be $10 trillion economy by 2030 and half of it would be the digital economy.
- Fintech sector—the Fintech sector in a recent couple of years has seen a huge jump in growth. Digital currency and online payments platforms have played a major role in financial inclusion.
- Public Services Sector—steady and efficient digital transformation across areas like e-governance and this has also considerably brought down leakages and corruption. In recent years India performed well in transparency index.
- Health care sector—it is catching up to meet the demands of its tech-savvy population. Demand is shifting now to quality and affordable healthcare, much of it being fulfilled by a public-private partnership.
- Digital healthcare startups are playing a major role in addressing areas like preventive healthcare, analytics, emergency services and engage with super-aggregation platforms like Facebook and Google.
- Enterprise and Deep Technology sector—startups in this sector have made their presence felt globally with their success. The IT services in the country are set to reach USD 13.2
billion by the end of this year.

- E-commerce and Consumer internet sector—India’s e-commerce market is set to grow three times to surpass USD 100 billion by 2022.
- Travel and Hospitality sector—this sector has enjoyed rapid online growth since the beginning of this century. The growth is also attributed to the increase in disposable income, especially, among the millennials, who are changing decades of traditional travel trends.

Challenges

Slow roll-out of Wi-Fi hotspots and the slow speed, in comparison to other developed nations. Most small and medium scale industry is struggling to adapt to modern technology. Entry level smartphones have limited capabilities for smooth internet access, and the outreach of the ‘smartphones’ is limited. There is an absence of enough skilled manpower in digital technology. Lack of user education and there are limited facilities to train personnel. India needs over one million cybersecurity experts to check and monitor the growing menace of digital crime.

Dark fibre

- It is an unused optical fibre that has been laid but is not currently being used in fibre-optic communications. Since fibre-optic cable transmits information in the form of light pulses, a "dark" cable refers to one through which light pulses are not being transmitted.
- Companies lay extra optical fibres in order to avoid cost repetition when more bandwidth is needed.
- It is also known as unlit fibre.

National Digital Literacy Mission

- National Digital Literacy Mission (NDLM) has been initiated with the vision to empower at least one person per household with crucial digital literacy skills by 2020.
- NDLM is an effort to complement the government’s vision to transform one from each household as digitally literate.
- The project aims at helping adults with low technological literacy develop the skills they need to interact in an increasingly digital world.

Bharat Broadband Network Limited

- It is a Special Purpose Vehicle set up by the Government of India under the Companies Act, 1956 with an authorized capital of ₹1000 crore.
- It comes under the Ministry of Communications and Information Technology.
- In 2011, it was mandated to create the National Optical Fiber Network (NOFN) in India which was later renamed as the BharatNet project in 2015.