# DIGITAL INDIA: INITIATIVE PROGRAMMES, IMPORTANCE AND IMPACT IN INDIA Dr. POONAM PUNIA Asstt. Prof.in HKMV, JIND(HR) E-MAIL-POONAMGILL25@GMAIL.COM

### Abstract:

Digital India is a campaign launchedby Prime Minister of India Narendra Modi on 1 July 2015 with an aim of transforming the country into a digitally awareness. The objective of digital India programme is connecting rural areas with high-speed Internet networks and improving digital literacy. It would also bring in public answerability through mandated delivery of government's services electronically. The Government's services are made available to citizens electronically by improve online infrastructure and by making the country digitally empowered in the field of technology. The vision of Digital India programme is inclusive growth in areas of electronic services, products, manufacturing and job opportunities. It is centered on three key areas – digital infrastructure as a utility to every citizen, governance and services on demand, and digital empowerment of Indian citizens. Digital India consists of three core components: the development of secure and stable digital infrastructure (ICT), delivering government services/applications digitally, and universal digital literacy. The objective of the mission is to build transparent and approachable governance to reach out the citizens in support of service of electronically and promote digital literacy in India with the help of digital technologies which includes the concept of on line applications and ICT tools have emerged as the catalysts for express economic growth and citizen empowerment. Thus, this paper aims to find out the concept of digital India, initiatives of government of India, eplan of government and its impact over Indian citizen. The primary focus is to clear the concept of digital India, its application and the impact on Indian economy. The historical and observation method has been applied in this study. The data used in this study are secondary. Views of scholars, writings in various magazines and journals have been used to conceptual description.

Key words: Digital India, E-governesses, E-plan of government, Economy.

## **INTRODUCTION:**

The Digital India Programme is a flagship programme of the Government of India launched on 1st July, 2015 with an objective to transform India into a digitally empowered society and knowledge economy. India has emerged as one of the country whereby government has initiated this development programme to stimulate economic development as well as to provide employment to young generations. It is a major initiative taken by the Government of India to ensure Government services are made available to people online by increasing the internet connectivity. It also aims at inclusive growth in areas of electronic services, manufacturing, product and job opportunities etc.

## **LITERATURE REVIEW**

'Digital India' initiative has been an area of interest of numerous researches from various disciplines because of its great significance and influence(effect) on the economy as a whole and particularly the technological sector. Sundar Pichai, Satya Nadella, Elon Musk researched about Digital India and its preparedness to create jobs opportunities in the information sector. He concluded that creating new jobs should be continued with shifting more workers into high productivity jobs in order to provide long term push to the technological sector in India. Microsoft CEO, **Satya Nadella** intends to become India's partner in Digital India program. He said that his company will set up low cost broadband technology services to 5lakhs villages across the country. Prof. Singh began with the basic overview of what Digital India entails and led a discussion of conceptual structure of the program and examined the impact of "Digital India" initiative on the technological sector of India. He concluded that this initiative has to be supplemented with amendments in labor laws of India to make it a successful campaign. Arvind Gupta intends to say that Digital India movement will play an important role in effective delivery of services, monitoring performance, managing projects and improving governance. An Integrated Office of Innovation & Technology to

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achieve the same, for problem solving, sharing applications and knowledge management will be the key to rapid(magic) results, given that most departments work on their own silos. Tracking and managing the projects assumes significance because India has been busy spending money in buying technology that we have not used effectively or in some cases not even reached implementation stage. Sharing learning's and best practices across departments needs to be driven by this Office of Technology.

**Gupta and Arora (2015)** studied the impact of digital India project on India's rural sector. The study found that many schemes have beenlaunched in digital India to boost agriculture sector and entrepreneurship development in rural areas. Digital India programme has also set the stage for empowerment of rural Indian women.

**Rani (2016)** concluded that the digital India project provides a huge opportunity to use the latest technology to redefine India the paradigms of service industry. It also pointed out that many projects may require some transformational process, re-engineering, refinements to achieve the desired service level objectives.

**Midha (2016)** concluded that digital India is a great plan to develop India for knowledge future but its improper implementation due to inaccessibility and inflexibility to requisite can lead to its failure. Though digital India programme is facing number of challenges yet if properly implemented it can make the best future of every citizen. So we Indians should work together to shape the knowledge economy.

## **OBJECTIVES OF THE STUDY: -**

1. To discuss the Digital India Programme along with its vision and vision areas

- 2. To analyze the impact of Digital Programme on India.
- 3. To discuss the various initiatives / schemes by Government of India under this umbrella programme.

## VISION AND AREAS OF DIGITAL INDIA:

The vision of Digital India programme is to transform India into a digitally empowered society and knowledge economy and this vision is concentrated on three key areas such as:

**A.Digital infrastructure as a utility to every citizen:** - A well connected nation is a prerequisite to a well-served nation. Once the remotest of the Indian villagers are digitally connected through broadband and high speed internet, then delivery of electronic government services to every citizen, targeted social benefits, and financial inclusion can be achieved in reality. One of the key areas on which the vision of Digital India is centered "digital infrastructure as a utility to every citizen". Key component under this vision are:

- Availability of high speed internet as a core utility for delivery of services to citizens.
- Cradle to grave digital identity that is unique, lifelong, online and authenticable to every citizen.
- Mobile phone & bank account enabling citizen participation in digital & financial space.
- Easy access to a Common Service Centre.
- Shareable private space on a public cloud
- Safe and secure cyber-space.
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## **B.** Governance and Services on Demand:

Over the years, a large number of initiatives have been undertaken by various State Governments and Central Ministries to usher in an era of e-governance. Sustained efforts have been made at multiple levels to improve the delivery of public services and simplify the process of accessing them. E-governance in India has steadily evolved from computerization of Government Departments to initiatives that encapsulate the finer points of Governance, such as citizen centricity, service orientation and transparency. **Key component under this vision are:** 

- Seamlessly integrated services across departments or jurisdictions.
- Availability of services in real time from online & mobile platforms
- All citizen entitlements to be portable and available on the cloud.

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- Digitally transformed services for improving ease of doing business.
- Making financial transactions electronic & cashless.
- Leveraging Geospatial Information Systems (GIS) for decision support systems & development.

#### C.Digital Empowerment of citizens: -

- Key component under this vision are:
- Universal digital literacy.
- Universally accessible digital resources.
- Availability of digital resources / services in Indian languages.
- Collaborative digital platforms for participative governance.
- Citizens not required to physically submit Govt. documents / certificates.
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### PILLARS OF DIGITAL INDIA PROGRAMME:

Digital India is an umbrella programme that covers multiple Government Ministries and Departments. It weaves together a large number of ideas and thoughts into a single, comprehensive vision so that each of them can be implemented as part of a larger goal. Each individual element stands on its own, but is also part of the larger picture. Digital India is to be implemented by the entire Government with overall coordination being done by the Department of Electronics and Information Technology. It is consisted of the following nine pillars: -



#### Fig.1

This covers three sub components, namely Broadband for All - Rural, Broadband for All - Urban and National Information Infrastructure (NII).

## Nine Pillars of Digital India

### **1. Broadband Highways**

• To provide high-speed broadband coverage highways connecting about 250,000 villages, various government departments, universities, etc.

• To provide an integrated information infrastructure with integration of State Wide Area Network (SWAN), National Knowledge Network (NKN) and National Optical Fiber Network (NOFN).

### 2. Universal Access to Phones

• To provide mobile connectivity to about 42,300 villages.

#### **<u>3 Public Internet Access Programme.</u>**

• To make 250,000 CSCs operational at Gram Panchayat level for delivery of government services.

#### • To convert 150,000 post offices into multi-service centers.

#### 4 E-Governance Reforming Governance through technology.

• To use business process re-engineering to transform government processes and make them simple, automated and efficient.

#### 5.e- Kranti Electronic Delivery of Services

•To use technology for service delivery such as e-education, e-healthcare, technology for planning, farmers, security, financial inclusion, justice, etc.

#### 6. Information for everyone.

• To provide open access to government information and documents online.

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• To provide two-way communication between citizens and the government through online platforms and social media.

#### 7.Electronic Manufacturing Target NET ZERO Import

• To target net zero imports by 2020, through various actions in areas such as taxation/incentives, economies of scale, skill development, government procurement, etc.

## 8. IT for Jobs Electronic Delivery of Services

• To provide necessary skills and training that enable the youth to avail jobs in IT sector.

#### 9. Early Harvest Programmes

• To focus on execution of project within short timelines, such as IT platform for messages, greetings from the government, biometric attendance, Wi-Fi in all universities, etc.

#### **KEY PROJECTS UNDER DIGITAL INDIA PROGRAMME: -**



To increase digital connectivity and make governance more transparent, Digital India initiative has launched some amazing projects. Few of them are as follows.

**1. Digital Locker System** aims to minimize the usage of physical documents and enable sharing of e-documents across agencies. The sharing of the e-documents will be done through registered repositories thereby ensuring the authenticity of the documents online.

**2. MyGov.in** has been implemented as a platform for citizen engagement in governance, through a "Discuss", "Do" and "Disseminate" approach. The mobile App for MyGov would bring these features to users on a mobile phone.

**3. Swachh Bharat Mission (SBM) Mobile app** would be used by people and Government organizations for achieving the goals of Swachh Bharat Mission.

4. E-Sign framework would allow citizens to digitally sign a document online using Aadhaar authentication.

5. The Online Registration System (ORS) under the e- Hospital application has been introduced. This application provides important services such as online registration, payment of fees and appointment, online diagnostic reports, enquiring availability of blood online etc.

**6.** National Scholarships Portal is a one stop solution for end to end scholarship process right from submission of student application, verification, sanction and disbursal to end beneficiary for all the scholarships provided by the Government of India.

7. DeitY has undertaken an initiative namely **Digitize India Platform (DIP)** for large scale digitization of records in the country that would facilitate efficient delivery of services to the citizens.

8. The Government of India has undertaken an initiative namely **Bharat Net**, a high speed digital highway to connect all 2.5 lakh Gram Panchayats of country. This would be the world's largest rural broadband connectivity project using optical fiber.

**9.** BSNL has introduced **Next Generation Network (NGN)**, to replace 30-year-old exchanges, which is an IP based technology to manage all types of services like voice, data, multimedia/ video and other types of packet switched communication services.

**10.** BSNL has undertaken large scale deployment of Wi-Fi hotspots throughout the country. The user can latch on the BSNL Wi-Fi network through their mobile devices.

11. To deliver citizen services electronically and improve the way citizens and authorities transact with each other, it is imperative to have ubiquitous connectivity. The government also realizes this need as reflected by including **'broadband highways'** as one of the pillars of Digital India. While connectivity is one criterion, enabling and providing technologies to facilitate delivery of services to citizens forms the other.

### Highlights of the progress of Digital India

• More than 12,000 rural post office branches have been linked digitally and soon payment banking would also become a reality for them.

• The government also plans to make 'digital village' across the country, by linking all schemes with technology. The 'digital village' would be powered by LED lighting, solar energy, skill development centers and e-services like e-education and e-health.

• Electronic transactions related to e-governance projects in the country have almost doubled in 2015, owing to the Digital India Programme. According to government website electronic transaction aggregation and analysis layer (eTaal), 3.53 billion transactions took place in 2014, which almost doubled in 2015 to 6.95 billion.

• The progressive policies and aggressive focus on 'Make in India' have played a significant role in the resurgence of the electronics manufacturing sector.

## **IMPACT IN INDIA**

• Proposed Impact of Digital India

## A. Economic impact:

- According to analysts, the Digital India plan could boost GDP up to \$1 trillion by 2025. It can play a key role in macro-economic factors such as GDP growth, employment generation, labor productivity, growth in number of businesses and revenue leakages for the Government.
- As per the World Bank report, a 10% increase in mobile and broadband penetration increases the per capita GDP by 0.81% and 1.38% respectively in the developing countries. India is the 2nd largest telecom market in the world with 915 million wireless subscribers and world's 3rd largest Internet market with almost 259 million broadband users. There is still a huge economic opportunity in India as the tele-density in rural India is only 45% where more than 65% of the population lives. Future growth of telecommunication industry in terms of number of subscribers is expected to come from rural areas as urban areas are saturated with a tele-density of more than 160%.

## **B.** Social impact:

- Social sectors such as education, healthcare, and banking are unable to reach out to the citizens due to obstructions and limitations such as middleman, illiteracy, ignorance, poverty, lack of funds, information and investments. These challenges have led to an imbalanced growth in the rural and urban areas with marked differences in the economic and social status of the people in these areas.
- Modern ICT makes it easier for people to obtain access to services and resources. The penetration of mobile devices may be highly useful as a complementary channel to public service delivery apart from creation of entirely new services which may have an enormous impact on the quality of life of the users and lead to social modernization.
- The poor literacy rate in India is due to unavailability of physical infrastructure in rural and remote areas. This is where m-Education services can play an important role by reaching remote masses. According to estimates, the digital literacy in India is just 6.5% and the internet penetration is 20.83 out of 100 populations. The digital India project will be helpful in providing real-time education and partly address the challenge of lack of teachers in education system through smart and virtual classrooms. Education to farmers, fisher men can be provided through mobile devices. The high speed network can provide the adequate infrastructure for online education platforms like massive open online courses (MOOCs).
- Mobile and internet banking can improve the financial inclusion in the country and can create win-win situation for all parties in the value-chain by creating an interoperable ecosystem and revenue sharing business models. Telecom operators get additional revenue streams while the banks can reach new customer groups incurring lowest possible costs.
- Factors such as a burgeoning population, poor doctor patient ratio (1:870), high infant mortality rate, increasing life expectancy, fewer quality physicians and a majority of the population living in remote villages, support and justify the need for tele medicine in the country. M-health can promote innovation and enhance the reach of healthcare services.

• Digital platforms can help farmers in know-how (crop choice, seed variety), context (weather, plant protection, cultivation best practices) and market information (market prices, market demand, logistics).

#### **C** Environmental impact:

- The major changes in the technology space will not only brought changes to the economic system but will also contribute to the environmental changes.
- The next generation technologies will help in lowering the carbon footprint by reducing fuel consumption, waste management, greener workplaces and thus leading to a greener ecosystem. The ICT sector helps in efficient management and usage of scarce and non-renewable resources.
- Cloud computing technology minimizes carbon emissions by improving mobility and flexibility. The energy consumption can be decreased from 201.8 terawatt hour (TWh) in 2010 to 139.8 TWh in 2020 by higher adoption of cloud data centers causing a 28% reduction in carbon footprint from 2010 levels.

### **CONCLUSION & POLICY IMPLICATIONS**

This paper tries to discuss the concept of digital India, its vision, Pillars and ongoing projects under Digital India Programme. A digitally connected India can help in improving social and economic condition of people through development of non-agricultural economic activities apart from providing access to education, health and financial services. However, it is important to note that ICT alone cannot directly lead to overall development of the nation. The overall growth and development can be realized through supporting and enhancing elements such as literacy, basic infrastructure, overall business environment, regulatory environment, etc.

The vision of digital India is grand. It is a huge step towards building a truly empowered nation. If successful, it transforms citizen access to multimedia information, content and services. However, the goal is still far away since most of the nine pillars of digital India mission are facing serious challenges in implementation. It is imperative that focused persistent attention must be given to each and every pillar so that this programme does not end up in failure. In fact, we all should be mentally prepared for the change and be ready to face the challenges in implementing this policy, only then it would be possible to make this vision a reality.

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