

A Study on Challenges in the Era of Digital India

Brij Mohan Goel

Assistant Professor, Vaish College of Engineering, Rohtak
brijmohan.vce@gmail.com

Abstract

The digital world is a world where the best possible use is made of digital technologies. Digital technologies which include cloud computing and mobile applications transpire as the catalysts for shaping our world. The Digital India programme faces various challenges in implementation. This research is an effort to overcome these challenges and to find some remedies for providing better future to everyone. The motto of this research is to find out how the government services can be available to every citizen electronically and improve the quality of life of every citizen.

Keywords: *Digital India, Digital Control, e-Services, Mobile Applications.*

1. Introduction

Today, the world has transformed from a knowledge savvy to techno knowledge savvy. Think of something and it is available in one click. So, Digital India is a step by the government to inspire and connect Indian Economy to such a knowledge savvy world. The program targets to make Government services available to people digitally and enjoy the benefit of the newest information and technological innovations. It brings out various schemes like E-Health, Digital Locker, E-Sign, E-Education etc. and nationwide scholarship portal. The program strives to provide equal benefit to the user and service provider. The consumers will be benefited by way of saving time, money, physical & cognitive energy spent in lengthy government processes.

The Digital India Programme has been launched with an aim of transforming the country into a digitally empowered society and knowledge economy. The Digital India would ensure that Government services are available to citizens electronically. It would also bring in public accountability through mandated delivery of government's services electronically; a Unique

ID and e-Pramaan based on authentic and standard based interoperable and integrated government applications and data basis.

Digital India is a dream project of the Government for the citizens and Industries of India which could help in connecting the various past and present projects to bring India to a global platform. Through this project government services are available for urban and rural citizens digitally or electronically. It will help to achieve digital innovation and create positive impact in the people living in rural and urban areas. It will attract investment in all product manufacturing industries. Andhra Pradesh is the first State to have opted this implementation. The Digital India project aims to transform our country into a digital economy with participation from rural or urban citizens and businesses. This will ensure that all government services and information are available anywhere, anytime, on any device that is easy-to-use, highly available and secured. Digital India Project removes digital gap between the rural and urban India.

2. Objectives

- To study the challenges face by digital India.
- To study the impact of Digital India on the Indian society.

3. Research Methodology

The secondary data has been collected. For this purpose, various magazines and journals have been used as it is a conceptual paper. Thus, the focus is to know more about the concept, its application and the impact on economy. Therefore qualitative data have been used.

4. Discussion

4.1 Initiatives under Digital India

Some of the facilities provided under the initiative of Digital India are as follows:

Digital Locker: Digital Locker facility helps citizens to digitally store their significant documents like PAN card, passport, mark sheets and degree certificates. Digital Locker offers secured access to Government issued documents. It uses authenticity services provided by Aadhaar. It is targeted at eliminating the use of physical documents and enables sharing of verified electronic documents across government agencies. Three key stakeholders of Digital Locker are Citizen, Issuer and requester.

Attendance.gov.in: Attendance.gov.in is a website, to keep a record of the attendance of Government employees on a real-time basis. This initiative started with implementation of a common Biometric Attendance System (BAS) in the central government offices located in Delhi.

MyGov.in: My Gov.in is a platform to share inputs and ideas on matters of policy and governance. It is a platform for citizen engagement in governance, through a "Discuss", "Do" and "Disseminate" approach.

SBM Mobile app: Swachh Bharat Mission (SBM) Mobile app is being used by people and Government organisations for achieving the goals of Swachh Bharat Mission.

E-Hospital: The e-Hospital application provides important services such as online registration, payment of fees and appointment, online diagnostic reports, enquiring availability of blood online etc.

National Scholarship Portal: National Scholarship Portal is a one step 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

E-Sign framework: e-Sign framework allows citizens to digitally sign a document online using Aadhaar authentication.

4.2 Nine Pillars of Digital India

The idea of Digital India is to bring abroad commitments to invest towards this initiative so that the investments would be utilized towards making internet devices and smart phones at an affordable price in India which would help in generating jobs, reduction in the time and cost of importing them from abroad. Digital India comprises of various initiatives under the single programme each targeted to prepare India as a knowledge economy and for bringing good governance to citizens through synchronized and coordinated engagement of the entire Government.

Highways to have broadband services: The first step is to provide high speed broadband highways through fiber optics that connect all the remote areas, government departments, universities, research and development etc. Web based portals and Mobile apps will be developed to access online information while on the move.

Easy access to mobile connectivity: The government is taking steps to ensure that by 2018 all villages are covered through mobile connectivity. The aim is to increase network penetration and cover gaps in all 44,000 villages. General public will access the online government services with the help

of handheld devices. Nation is ready to be well-connected, efficient, and more productive in every aspect.

IT Training for Jobs: The government is preparing to provide training and teaching skills to the youth for employment opportunities in the IT sector. BPO industries will be established for the fastest growing segment of the Information Technology Enabled Services industry. It offers e-services 24/7 in every field and gives more jobs potentials. This initiative seeks to train 10 million people in towns and villages for IT sector jobs in five years. It also aims to train 0.3 million agents to run viable businesses delivering IT services.

Manufacturing of electronics: This milestone will create a huge base for electronics manufacturing in India with the aid of digital technologies and skills. Target NET ZERO Imports is a striking demonstration of intent. This ambitious goal requires coordinated action on many fronts.

Provide public access to internet: Virtuous technologies that support cost containment, collaboration, security, services-on-the-go, social-connect, and in-built intelligence that deliver remote access to any information or service available across the domain. This change will open new doors of e-services to every citizen. The government aims to provide internet services to 2.5 lakh villages which comprises of one in every Panchayat by March 2017 and 1.5 lakh post offices in the next two years. These post offices will become Multi Service centres for the people.

E-Governance: This governance will transform every manual work into fully automation system. It will revolutionize the system in the following ways:

- Online access to applications i.e. availability of all databases and information in electronic format.
- Effortlessly tracking of assignments.
- Interface between departments for superior production of work.
- Quickly respond, analyze and resolve persistent problems and many more.

E-Kranti: This Kranti will fully focus on digital knowledge program where education, health, farming, rights, financial and many more services will be delivered on a very high bandwidth. Physical boundaries no longer are a limitation when almost everyone and everything is a digital handshake away.

Global Information: Hosting data online and engaging social media platforms for governance is the aim of the government. Information is also easily available for the citizens.

MyGov.in is a website launched by the government for a 2-way communication between citizens and the government. People can send in their suggestions and comment on various issues raised by the government, like net neutrality.

Early harvest programs: This programme will generate short timeline projects where every manual service is altered by e-service. E-services like:

- Implementation of Wi-Fi in all the universities.
- Public Wi-Fi Sports to access online information.
- Educational books to e-books.

- People will use the e-services for entertainment, weather information, latest updates etc.
- Replacement of manual attendance to Biometric procedure

4.3 Challenges for digital India Program

The digital India initiative is an ambitious project of the government. There is so many challenges for the completion of the project.

Lack of coordination among departments: It is very large project which including many department so a strong and timely support is most important for the timely completion of the projects.

High cost of implementation: A very high amount is required to implement the all project of DI plan. approx Rs. 1.13 trillion (including ongoing and new projects) Infrastructure National optic fibre network (NOFN) project is planning to build a high speed broadband highway but still we need other supportive infrastructure such as robust and large data center for managing a large data of entire country.

Time overrun NOFN : Project has been delayed several times and suffering two years so it also delayed other projects. Timely completion of the project is most important for the successful of the projects.

Participation of private players: So many regularities checks and long and delayed projects breaking entering private [players in digital India projects. Private companies will play a crucial role in its success.

4.4 To overcome all these challenges, we need to find some remedies

- A few new programs may be needed- particularly in electronics manufacturing and skill development.
- Have a dedicated training institute in each state under DIP, to aid in augmenting the digital literacy and awareness level.
- To inspire the youth for making effective DIP.
- Government should conduct the seminars to aware people about the digital services.

- To advertise the policies of DIP on Books, pen, TV, newspapers etc. so that people could aware about the e-services.
- Mandate a lecture about Digital India in every educational institute to enhance the policies of DIP.
- To launch a help-line number of DIP so that people can tell the problems relating to e-services.
- Provide a help center in each state to solve public issues.
- To print the booklets of e-Services with picture and distribute to each home for awareness.
- To turn the villages into smart economic centers that connects farmers directly to e-Markets to know the well price of crops.

4.5 Proposed Impact of Digital India

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, labour 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%.

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 Information and Communications Technology (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).

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 (Information and Communications Technology) 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.

5. Conclusion

To conclude the digital India program is a flagship programme of the government of India to shape by connectivity and technological opportunity. It is a vision to transform India into a digitally empowered society and knowledge economy. It is a good effort to develop India. Although, digital India programme is facing some challenges, yet it has a great impact on India to make the best future of every citizen. We Indians and others should work together to shape the knowledge economy. More employment prospects will open for the youth that will boost the nation's economy. Digital India campaign is a welcome step in shaping India of the 21st century powered by connectivity and the technological opportunity. In short, this paper focuses on the key of barriers and providing remedies for prevent the challenging facing by the Indian people.

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