

Opportunities and Challenges of Digital India Programme

Dr. Brijesh Kumar

Associate Professor, Department of Management, Rakshpal Bahadur Management Institute, Greater Noida, (India)

ABSTRACT

“Digital India” is a programme of the Central Government of India to transform India into a global digitized hub and to prepare India for a knowledge future. The ‘Digital India’ programme targets to make government services available to citizen digitally by reducing paper work with the help of improving digital connectivity. For this purpose the Indian Government planning is that people enjoy the benefit of the newest information, technological innovations, technological advancements, skill enhancement and various other incentives to make the country digitally empowered in the field of technology. The motive behind the concept is to build participative, transparent and responsive system. It is a dream project of Honorable Prime Minister Mr. Narendra Modi and Indian Government to remodel India into a knowledgeable economy and digitally empowered society. The Digital India programme faces the serious issues in implementation. This research is an effort to overcome these issues and to find some cure for providing better future to everyone. It describes the different opportunities of the programme for the people of the country.

Keywords: Digital India, Digital Empowerment, Job Creation, Skill Enhancement, Mobile Applications, e-Services.

I. INTRODUCTION

On 1st July 2015, Digital India Program was launched by the Prime Minister of India Narendra Modi with an objective of connecting rural areas with high-speed internet networks and improving digital literacy in the people of India. Digital India Program is a national digital learning education campaign to transform India into a globally connected hub by Digital Technologies. Digital Technologies which incorporates the concept of cloud computing and mobile applications have appeared as the catalysts for express economic growth and citizen empowerment across the globe. The emphasis of Digital India program is on creating jobs and skill enhancement in the Broadband Highways, Electronic delivery of services, e-Governance, Universal access to Mobile Connectivity, Electronics Manufacturing, and Information for all etc. which will ultimately lead to increase in GDP and revenues from tax. It is an initiative of Indian government to integrate the government Departments and the people of India. This initiative will ensure that are government services and information are available anywhere, anytime on any device that are user friendly and secured with Digital India project, the government is ready for the big programme by connecting every service with e-power. It aims at ensuring that the Government services are made available to citizens electronically by reducing paper work. The initiative also includes plan to connect rural areas with high speed internet networks. It is an initiative to transform the country into digitally empowers knowledge economy.

II. LITERATURE REVIEW

Shri Narendra Modi (Hon’ble Prime Minister of India), “Technology transforms people’s lives. It empowers and connects. From mitigating poverty to simplifying processes, ending corruption to providing better services, vitality of technology is everywhere. It is an important instrument of human progress.”

Shri Narendra Modi (Hon’ble Prime Minister of India), “E-Governance is an essential part of our dream of Digital India, the more technology we infuse in Governance; the better it is for India.”

Shri Ravi Shanker Prasad (Hon’ble Minister of Electronics & Information Technology and Law & Justice, Government of India), “Digital India is more for the poor and underprivileged. It aims to bridge the gap between the digital haves and have-nots by using technology for citizen.”

Microsoft CEO, Satya Nadella, “He said that his company will set up low cost broadband technology services to 5 lakhs villages across the country.”

III. OBJECTIVES OF STUDY

1. To Study the concept of digital India programme.
2. To Study the significance of digital India programme.
3. To study the scope of Digital India.
4. To study the opportunities of the programme for the people of the country.
5. To understand the pillars and initiatives of Digital India.
6. To study the various challenges faced by the Digital India Programme.
7. To study the impact of Digital India on the Indian Economy.
8. To trace out practical solutions and innovative ideas to accomplish the vision of a digital India-a reality.
9. To identify how the technologies and connectivity together can make an impact on all aspects of governance and improve the quality of life of citizens.

IV. VISION OF DIGITAL INDIA

The vision of Digital India programme is to transform India into a digitally empowered society and knowledge economy. The Digital India programme is centered on three key vision areas:

Digital Infrastructure as a Core Utility to Every Citizen
Governance & Services on Demand
Digital Empowerment of Citizens

Digital Infrastructure as a Core Utility to Every Citizen

- Availability of high speed internet as a core utility for delivery of services to Citizen.
- 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 on Digital Platform.

Governance & Services on Demand

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

Digital Empowerment of Citizens

- 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

V. NINE PILLARS OF DIGITAL INDIA PROGRAMME

The government aims to target nine ‘Pillars of Digital India’. Which are as follows:-

Broadband Highways: Government aimed to provide high speed broadband highways through national optical fibre network in all 2.5 lakh gram panchayats. Broadband for the rural areas was to be laid by December 2016 and broadband for all urban areas was to be updated with communication infrastructure in new urban development and buildings. By March 2017, the government aimed to provide nationwide information infrastructure which connects 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.

Universal access to mobile: The government is taking steps to that by 2018 all villages will be covered through mobile connectivity in the country and also in North East area. The aim was to increase network penetration and fill the gaps in connectivity in all 44,000 villages in the country. 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 for Jobs: The government is providing training and teaching skills to the youth for availing employment opportunities in the IT/ITES 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 in the country. This initiative was taken to train 10 million people/students in rural and urban areas for IT/ITES sector jobs over five years. It aimed to train 0.3 million service delivery agents to run viable businesses delivering IT services. Additionally, the project involved training of 0.5 million strong rural workforce for telecom service providers in five years.

Electronics Manufacturing: The government is focusing on zero imports of electronics by 2020 through local manufacturing of items such as smart cards, smart energy meters, micro ATMs, mobile, set-top boxes, consumer and medical electronics. Government is also taking several steps to promote local manufacturing and investment in electronics sector by providing exemption on taxation and incentives skill development etc. This milestone will create a huge base for electronics manufacturing in India with the aid of digital technologies and skills.

Public access to Internet: The government aimed 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. Under this programme these post offices are proposed to be converted into multi service centers for the people.

E- Governance: The government aimed to improve processes and delivery of services through E-Governance with UIDAI, payment gateway, EDI and mobile platforms. School certificates, voter ID cards, online applications and tracking, using online repositories for citizen documents, introducing publicly-visible government workflow automation, and public grievance redress were to be provided online. This governance will transform every manual work into fully automation system. All information would be available in electronic form.

E- Kranti: This service aimed to deliver electronic services to people which deals with health, education, farming, justice, rights, security, financial inclusion and many more services will be delivered on a very high bandwidth. There are now a total of 44 Mission Mode Projects (MMPs) under different stages of implementation, including 13 new ones added.

Global Information: Hosting data online and engaging social media platforms for governance was the aim of the government. A website, MyGov.in, was 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 neutrality. Online hosting of information and documents would facilitate open and easy access to information for citizens. Government can engage through social media and web to inform and interact with citizens

Early Harvest Programmes: Government plans to install Wi-Fi facilities in all universities across the country. All books will be converted into e books. Email will be made the primary mode of communication within government. Biometric Attendance System will be installed in all central government offices where recording of attendance will be made online.

VI. RESEARCH METHODOLOGY

The secondary data has been collected. The specific types of information and data needed to conduct a secondary analysis will depend on the focus of study. For this research purpose, secondary data analysis is usually conducted to gain in-depth understanding of the "Digital India" initiative. Thus, the focus is to know more about the concept, its application and the impact on economy. Therefore qualitative data have been used. Secondary data review and analysis involves collecting information, statistics, and other relevant data at various levels of aggregation in order to conduct a requirement analysis of the various area for "Digital India" and mostly the paper is based on the information collected from the research papers, internet via journals, books, newspapers, magazines, articles, media report and expert opinions on the same subject matter.

VII. BENEFITS OF DIGITAL INDIA PROGRAMME

2,50,000 villages and institutions will be connected through internet by 2019. Almost 42,000 villages where there is no mobile connectivity will be connected through projects.

The digital India mission would lead to inclusive growth by enabling access to education, healthcare, financial services and government services to all the citizens of the country through common service delivery outlets by the latest technology. People can get better advice on health services. Those who can't afford school/ colleges can get chance to online education. It will help in improving the social and economic condition of people living in rural areas.

There would be more transparency as all the data would be made online and would be accessible to citizens of the country.

E-Governance will help in reducing corruption system and getting things done quickly.

Digital locker facility will help citizen to digitally store their important documents like Pan Card, passport, mark sheets, certificates etc. It will help in decreasing documentation and paper work which help to save stress & protect environment.

This will lead to a cashless society.

E-sign will help electronically signing of the documents and national scholarship portal will help the students.

Digital India can help small businesses. People can use online tools to expand their business.

The programme would generate giant demand for jobs in IT, electronics and telecommunication sector directly or indirectly.

According to World Bank report a 10% increase in mobile and broadband penetration increases per capita GDP by 0.81% and 1.31% respectively in developing countries. So, it can play a key role in GDP growth.

VIII. CHALLENGES OF DIGITAL INDIA PROGRAMME

Almost two years are to be passed since Digital India mission is announced. Digital India is a great plan. But its improper implementation due to inaccessibility & inflexibility to requisite can lead to its failure. There are a number of challenges of the Digital India programme which are as follows:

Lack of coordination among departments: Digital India is very large project which including participation of several departments and demanding commitment & effort. For the success of digital India programme a strong leadership and timely support of all the involved entities is most important for the timely completion of the projects. Within the government there are various departments which should be integrated. Self-ego of the officers and staff of our government services are hurdle in the change.

High illiteracy rate of poverty and illiteracy: In India, high illiteracy rate of poverty and illiteracy stands as major problem in public internet access. Where there is still 25 % illiteracy the target of high level of digital illiteracy is one of the biggest challenge in the success of digital India programme. According to ASSOCHAM-Deloitte report on Digital India, November, 2016, around 950 million Indians are still not on internet. Reliance Jio has contributed a lot in his regard.

Low Internet Speed: India has very low internet speed & connectivity problem in rural areas and some part of the urban areas. This low internet speed cannot facilitate online delivery of various services due to infrastructure deficit such as lack of towers, especially in the country side. Hence, majority of population across India has still no access to internet and a large population in rural areas is still illiterate in the field of digital technology. More Innovations required making the digital education more interactive and robust.

Private Sector Participation: Participation of private sector players in government projects becomes quite crucial and poor. Many regularities checks, complex and long process and delayed projects are breaking the entry of private players in Digital India Projects. Hence, private sector players have shown limited involvement, this needs to be boosted quite rapidly and private companies will play a crucial role in the success of Digital India.

Diversified culture in India: India is a diversified country in terms of culture. Each state has its own specific language, customs, food habits, laws and traditions. Digital India program aims to integrate the whole country digitally. India has 1600 languages and dialects. Non availability of digital services in local languages is a great barrier in digital literacy. For Indians who speak no English the barriers to the information age are inseparable. Thus in practice unless Indian know English which most Indian do not, no matter how be computer use and internet access are effectively.

Complete integration that is integration of technology and language is one of the main challenges the mission would face in its implementation.

Broadband Networks: National optic Fibre Network project is planning to build a high speed broadband highway. National Optical fiber network ensures broadband reaches in every nook and corner of the country. But to reach broadband connection country wide is not an easy task. It is a colossal task to have connectivity with each and every village, town and city. But still we need other supportive infrastructure such as robust and large data centre for managing a large data of entire country.

Cyber-crime Enemies: We live in a world where internet and cyber-crime are inseparable enemies. Fear of cybercrime and breach of privacy has been deterrent in adoption of digital technologies. Most of the technologies including cyber security tools are imported. We do not have requisite skills to inspect these for hidden. With cybercrime on the rise, the idea of putting information of about a billion citizens online seems like a risky move. Hence highest levels of security measures and protocols would need to be taken to ensure a safe environment for the citizens. The entire architecture should be designed in such a way that there is proper authentication done of all the documents put online by citizens and it is available to the right users at any time they want with the right authentication. In order to ensure the cyber security the country should have privacy norms.

Skilled and qualified manpower: Skilled and qualified manpower is, perhaps, the biggest challenge of all. Creating a system to train and provide gainful employment to so many people is an immense challenge. The technology sector increasingly finds that the dwindling manpower resources available for its jobs are undertrained and mismatched to its needs.

Changing the mindset: Indians are accustomed with years of same of practice that they are not ready to change or to prepare ourselves for the upcoming challenge.

Insufficient funds: Digital education involves effective and efficient usage of appropriate and latest hardware and software technology available in the market. In developing countries like India, digital technology implementation into education systems is a difficult task as it requires huge funds and infrastructure. Through Digital India programme, the government has promised availability of funds for technology implementation but lack or insufficiency of finances leads to redundant and obsolete infrastructure and equipment's in rural schools.

Each pillar has its own barriers

IX. SUGGESTIONS

Digital India campaign can't be successful on its own. Policy changes are needed to make digital India a reality. Few of the suggestions are –

1. Digital literacy is first step in empowering citizens. People should know how to secure their online data. For this, a dedicated training institute in each state under Digital India Programme, to aid in augmenting the digital literacy and awareness level.
2. To make this programme successful, a massive awareness programme has to be conducted. Government should conduct the seminars to aware people about the digital services. There is pressing need to educate and inform the citizens, especially in rural and remote areas, about the benefits of internet services to increase the growth of internet usage. Private sector should be encouraged for development of last mile infrastructure in rural and remote areas.
3. A few new programs may be needed-particularly in electronics manufacturing and skill development. Manufacturing content is not government's strength. This mission needs content and service partnerships with telecom companies and other firms.
4. PPP models must be explored for sustainable development of digital infrastructure. To encourage private sector, there must be favorable taxation policies, quicker clearance of projects.
5. The success of digital India project depends upon maximum connectivity with minimum cyber security risks. For this we need a strong anti-cyber-crime team which maintains the database and protects it round the clock.
6. To improve skill in cyber security, we need to introduce cyber security course at graduate level and encourage international certification bodies to introduce various skill based cyber security courses.
7. There is need for effective participation of various departments and demanding commitment and efforts. Various policies in different areas should support this goal. For successful implementation, there must be amendments in various legislations that have for long hindered the growth of technology in India.
8. To inspire the youth for making effective Digital India programme and mandate a lecture about Digital India in every educational institute to enhance the policies of Digital India Programme.

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

CONCLUSION

Digital India' initiative is a refreshing move and quite the need of the hour for the weakened technological sector. The Government of India hopes to achieve growth on multiple fronts with the Digital India Programme. Specifically, the government aims to target nine 'Pillars of the Digital India.' However, it requires to be rightly substantiated with amendments to various legislations that have for long hindered the growth of Indian technology. India should focus more on developing domestically led connectivity, promoting research and innovation-led development to establish itself strongly on the international stage as an economic superpower and particularly a thriving technological hub. 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.

REFERENCES

- [1]. Seema Dua (2017). "Digital India: Opportunities & Challenges". IJSTM, volume-6, Issue 3, pp61-67 Govt of India. (2017, January). eNAM. Retrieved April 2017, from http://www.enam.gov.in/NAM/home/about_nam.html#.
- [2]. KPMG. (n.d.). Goods and Services Tax. Retrieved April 2017, from <https://home.kpmg.com/in/en/home/services/tax/indirect-tax/goods-and-services-tax.html>.
- [3]. MEIT. (2017). Empowerment Digital India Programme. Retrieved April 2017, from
- [4]. <http://www.digitalindia.gov.in/empowerment>.
- [5]. Mygov. (n.d.). Digital India. Retrieved April 2017, from <https://www.mygov.in/group/digital-india/>.
- [6]. NCRB. (n.d.). Crime and Criminal Tracking Network & Systems (CCTNS). Retrieved April 2017, from <http://www.ncrb.gov.in/BureauDivisions/CCTNS/cctns.htm>
- [7]. <https://secure.mygov.in/group/digital-india/>
- [8]. Rani Suman (2016). Digital India: Unleashing Prosperity. Indian Journal of Applied Research, volume-6, Issue 4, pp187-189 Retrieved from <https://www.worldwidejournals.com/indian-journal-of-applied>
- [9]. Midha Rahul (2016). Digital India: Barriers and Remedies. International Conference on Recent Innovations in Sciences, Management, Education and Technology. Retrieved from [http:// data. Conference world .in/ICISMET/P256-261. Pdf](http://data.conferenceworld.in/ICISMET/P256-261.Pdf).
- [10]. Goswami, H. (2016). Opportunities and Challenges of Digital India Programme. International Education and Research Journal, 2(11), 78-79.
- [11]. Gulati, M. (2016). Digital India: Challenges and Opportunities. International Journal of Management, Information Technology and Engineering, 4(10), 1-4.
- [12]. Koregaonkar, K. T. (2016). Digital India: A Program to transform India into a Digitally Empowered Society. International Journal of Business Quantitative Economics and Applied Management Research, 2(9), 41-52.
- [13]. Midha, R. (2016). Digital India: Barriers and Remedies. International Conference on Recent Innovations in Sciences, Management, Education and Technology, 256-261.
- [14]. Shikha Dua, Ms Seema Wadhawan, Ms Sweety Gupta (2016). Issues, Trend & Challenges of Digital Education: An Empowering innovative classroom Model for Learning International Journal of Science Technology and Management. Vol. No.5, Issue No. 05. ISSN 2394-1537
- [15]. Himakshi Goswami (2016). Opportunity and Challenges of Digital India Programme.
- [16]. International Education & Research Journal [IERJ]. E-ISSN No: 2454-9916 Volume: 2 Issue: 11 Nov 2016.