



DIGITAL INDIA : CHALLENGES AND SUGGESTIONS FOR IMPLEMENTATION

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ABSTRACT

Digital India is an outcome of many innovations and technological advancements. The 'Digital India' programme, is an initiative of honourable Prime Minister Mr. Narendra Modi. The vision of the programme is focus on three areas : creation of digital infrastructure ,delivery of governance and services on demand and digital empowerment of citizens. The Digital India drive is a dream project of the Indian Government to remodel India into a knowledgeable economy and digitally empowered society, with good governance for citizens by bringing synchronization and co-ordination in public accountability, digitally connecting and delivering the government programs and services to mobilize the capability of information technology across government departments. There are many roadblocks in the way of its successful implementation like digital illiteracy ,poor infrastructure, low internet speed, lack of coordination among various departments, issue pertaining to taxation etc . These challenges need to be addressed in order to realize the full potential of this programme.

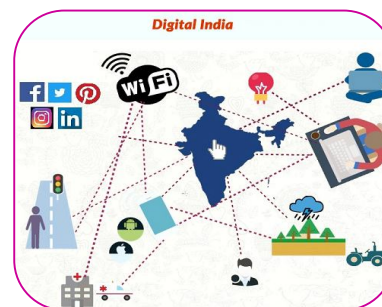
KEYWORDS: Digital India, Digital Technology, e-Kranti, e-Governance.

INTRODUCTION

ICT is evolving at a very fast pace. Our grandparents grew up in a society with no telephone; our parents in a society in which the radio was the first and television was the last source of information. We live in a world of internet and the new generation in in the wireless world. As a result the world around us also has changed dramatically over the years. This dramatic change in the field of ICT is a result of innovations in the field of science, defense and business. These innovations have reduced the size of the technological tools and increased the speed in which they operate to process data and communicate information. Digitalization is one of the most fundamental period of transformation we have ever witnessed The literal meaning of digitalization gives an apparent idea of development and technology dependent world. Digital India is a programme based on technology with a vision to transform India to a digitally empowered society and knowledge economy. Digital India was launched under the flagship of the Prime Minister of India Narendra Modi on 1 July 2015 with an objective of connecting rural areas with high-speed Internet networks and improving digital literacy. Digital India symbolizes the Government of India's vision for connecting and empowering 125 crore citizens; creating unprecedented levels of transparency and accountability in governance; and leveraging technology for quality education, health care, farming, financial inclusion and empowering citizens. Under the 'Digital India' Programme, technology will play a central role to achieve easy, effective and economical governance.

REVIEW OF RELATED LITERATURE

Gupta and Arora (2015) studied the impact of digital India project on India's rural sector. The study found that many schemes have been launched 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

Singh (2015) 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.

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

Pichai, Nadella, & Musk (2016) researched about Digital India and its preparedness to create jobs opportunities in the information sector. They 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.

RESEARCH METHODOLOGY

The paper is based on secondary data that have been retrieved from internet , magazines and journals .It is a conceptual paper.The focus is to know more about the concept, its application and the impact on economy. Therefore qualitative data have been used in this paper.

OBJECTIVES OF THE PAPER

The following were the objectives of the study :

1. To study the concept of digital India
2. To study the vision of digital India
3. To understand the pillars and initiatives of Digital India
4. To understand the initiatives of digital India
5. .To find out the challenges faced in implementation of this programme
6. To find out practical solutions and innovative ideas for implementation of the programme

CONCEPT OF DIGITAL INDIA

Digital India is a programme to transform India into a digitally empowered society and knowledge economy. The today’s digital world where we are living is the result of many innovations and technological advancement which helps to improve the life of all citizens .The tag line of Digital India program is “power to empower”. Digital India thought is about growth in electronic sector such as service, products; manufacturing and job opportunities etc .and also concentrate on three key areas that is Digital Infrastructure as a Utility to Every Citizen, Governance & Services on Demand and Digital Empowerment of Citizens. First object behind Digital India programme is to provide all services electronically to citizen and spread digital literacy among people. This initiative is marked change in country and enhances the growth of economy.The digital India initiative brings growth with an image to convert India into a digitally knowledge economy and empowered society which mainly focuses on „Digital India.

KEY IDEA BEHIND DIGITAL INDIA

1. The theme can be explained as - Indian Talent (IT) + Information Technology IT = India Tomorrow
2. The focus is on making technology central to enable change.
3. It is an Umbrella Programme—covering many departments.

Vision of Digital India

The Digital India programme is centered on three key vision areas:

1. Infrastructure as a utility to every citizen : this includes

- High speed internet shall be made available in all gram panchayats
- Cradle to grave digital identity
- Mobile and Bank account would enable participation in digital and financial space at individual level
- ; Shareable private space on a public cloud
- Safe and secure cyber space in the country.

2. Governance & Services On Demand

- Services available in real time from online & mobile platform
- Services digitally transformed for improving Ease of Doing Business
- Making financial transactions electronic & cashless
- All citizen entitlements to be available on the cloud

3. 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
- Portability of all entitlements through cloud

Nine Pillars for the Growth of Digital India

Digital India intends to provide thrust through nine pillars of growth areas i.e. broadband highways, universal access to mobile connectivity, public internet access programme, e-governance by reforming government through technology, e-kranti (NeGP 2.0) through electronic delivery of services, information for all, electronics manufacturing with a target of net-zero imports, IT for jobs and some early harvest programmes

First Pillar – Broadband Highways

- In the rural areas, the broadband highways would be implemented through Department of Telecommunications (DoT).
- The rural broadband highways intend to cover Gram Panchayats
- In the urban areas, focus would be on changing rules towards efficient development of the respective broadband highways.
- The National Information Infrastructure would be put into practice within a time-frame of two years by integrating SWAN, NKN, and NOFN.
- Web based portals and Mobile apps will be developed to access online information while on the move.

Second Pillar – Universal Access to Mobile Connectivity

- Increasing the network penetration and coverage.
- Universal access to mobile connectivity would be implemented through Department of Telecommunications (DoT).

Third Pillar – Public Internet Access Programme –

- **National Rural Internet Mission**
- the Post Offices to be converted into Multi-Service Centers

Fourth Pillar – e-Governance: Reforming Government through Technology

- Online applications and tracking, developing interface between departments, use of online repositories like school certificates and voter identity cards, integration of services and platforms like UIDAI, payment gateway, mobile platform and EDI.
- Focus would also be on workflow automation inside government systems. Public Grievance Redressal would be automated using IT so as to analyse data to identify and resolve persistent problems, largely process improvements. These measures which are critical for transformation would be implemented across government.

Fifth Pillar – e-Kranti: Electronic Delivery of Services

- e-kranti shall foster 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 shall be the limitation.

Sixth Pillar – Information for All

- It encompasses making information online and hosting websites and documents.
- Easy and open access to information by the public in general along with development of open data platforms.
- The Government would pro-actively engage through social media and web based platforms to inform citizens. The platform 'MyGov.in' would foster 2-way communication between citizens and government. Also, it would enable sending online messages to citizens on special occasions/programs.

Seventh Pillar – Electronics Manufacturing: Target NET ZERO IMPORTS by 2020

- 'NET ZERO Imports' in the days to come.
- The areas under focus would include items like FABS, Fab-less design, Set top boxes, VSATs, Mobiles, Consumer & Medical Electronics, Smart Energy meters, Smart cards and micro-ATMs.

Eighth Pillar – IT for Jobs

- Train people in smaller towns and villages for IT sector jobs.
- to train rural workforce to cater to their own needs and hence create a telecom ready workforce.
- The aim is to train 10 million people in towns and villages for IT sector jobs in five years.

Ninth Pillar – Early Harvest Programmes

- technological improvements such as Government greetings would now be e-Greetings, implementation of biometric attendance in all government offices
- Wi-Fi in all universities, secured emails within government, standardized government email design, public Wi-Fi hotspots, school Books to be e-Books, SMS based weather information, SMS based disaster alerts and a national portal for lost-&-found children.

Initiatives of Digital India

The initiative is implemented to create empowerment among the masses. The governance will shift from e-governance to m-governance, 'Mobile Governance'. The initiative aims to bring big investments in the technology sector and this Rs 1.13 lakh crore initiative will help in creating a participative, transparent and responsive government.

1. Digi Locker: The service was launched as an important facility to store crucial documents like Voter ID Card, Pan Card, BPL Card, Driving License, education certificates, etc. in the cloud.
2. MyGov.In : MyGov..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.

3. eSign Framework: This initiative would enable users to digitally sign a document online using Aadhaar authentication.
4. Swachh Bharat Mission mobile app: The app will enable organizations and citizens to access information regarding the cleanliness drive and achieve the goals of the mission.
5. National Scholarship Portal: This initiative aims at making the scholarship process easy. From submitting the application, verification, sanction and disbursement to end beneficiary, everything related to government scholarships can be done on this single portal online.
6. eHospital: Online Registration System under this initiative enables people to avail services like online registration, payment of fees and appointment, online diagnostic reports, checking on the availability of blood online, etc.
7. Digitize India Platform : This initiative will involve digitization of data and records on a large scale in the country to make easy and quick access possible.
8. Bharat Net: Under this initiative, a high-speed digital highway will connect all 250,000 gram panchayats of the country. This is the world's largest rural broadband project using optical fibre.
9. Wi-fi Hotspots : development of high speed BSNL Wi-Fi hotspots throughout the country is yet another initiative to improve digital connectivity in the country.
10. Next Generation Network: Launched by BSNL, this service will replace 30-year old telephone exchanges to manage all types of services like voice, data, multimedia and other types of communication services.
11. Electronics Development Fund: The fund will be set up to support the manufacturing of electronics products that would help create new jobs and reduce import. The funds will promote innovation, research and product development to create a resource pool within the country.
12. Centre of Excellence on Internet of Things (IoT): In partnership with NASSCOM, DeitY and ERNET in Bangalore, Centre of Excellence will enable rapid adoption of IoT technology and encourage a new growth strategy. IoT will help the citizens in services like transport system, parking, electricity, waste management, water management and women's safety to create smart cities, smart health services, smart manufacturing and smart agriculture, etc.

Challenges in Implementing Digital India Programme

Almost everyone on Facebook changed their profile pictures to support digital India but to make it reality here are list of challenges in the implementation of digital India. Challenges are in every sector right from policy making, changing the work flow up to changing the mentality of the government officers. It is technological change within the most diversified nation. Few of them have been listed below:

- **Connectivity to Remote Areas:** It is a mammoth task to have connectivity with each and every village, town and city. The problem of connectivity is a complex issue because every state has different laws pertaining to its execution. Also it is challenging for the central authorities to make a database where such a huge information can be stored.
- **High Level of Digital Illiteracy:** Digital illiteracy is prevalent in most of the towns and villages in India. Cities have adopted digitalization but limited to certain extent. Full fledged digitalization is cashless transaction on daily basis, use of internet services to get government certificates. This requires administration changes, Taxation changes and change in public mentality. So it's a team work which includes citizen's responsibility and support to the new system.
- **Cyber Crime:** There is cyber threat all over the globe and digital India will not be any exception. Hence we need a strong anti cyber crime team which maintains the database and protects it round the clock
- **Inter Departmental Coordination:** Within the government there are various departments which should be integrated. Integration has technical as well as corporate issue. Corporate in the sense self ego of the officers and staff of our government services are hurdle in the change. Also the middle man policy will be eliminated completely because of digital India, hence there will be imminent resistance from the working staff.

- **Net Neutrality:** The issue is still on the table and we are blindly following the digital India. Net neutrality is must and we should make sure that digital India without net neutrality would be a great blow to entrepreneurs and citizens of India.
- **Changing The Mindset:** This point will come into picture when you have allocated the required resources and material but when it comes to implementing them, most of them will be hesitant to change. People are accustomed with years of same of practice that they are not ready to change.
- **Exchange of Information:** The information stored should also be used by other government offices. For example police, surveillance and other security issues can be easily resolved with digital India but its coordination is a mammoth task. It is not only a technological question but also deals with the question of privacy and security.

SUGGESTIONS FOR IMPLEMENTATION OF DIGITAL INDIA PROGRAMME

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:

Digital literacy is first step in empowering citizens. People should know how to secure their online data.

To make this programme successful, a massive awareness programme has to be conducted. 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.

1. .Digital divide needs to be addressed.
2. Manufacturing content is not government's strength. This mission needs content and service partnerships with telecom companies and other firms.
3. PPP models must be explored for sustainable development of digital infrastructure.
4. .Private sector should be encouraged for development of last mile infrastructure in rural and remote areas. 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.
8. .For successful implementation , there must be amendments in various legislations that have for long hindered the growth of technology in India.

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