

Digital India: A roadmap for the development of rural India

Jyoti Yadav

Assistant Professor in Management, Dronocharya Govt. College, Gurgaon, Haryana, India

Abstract

The digital world that we live in today is the outcome of several innovations and technology advances. These novelties provide better future to everyone. Today, every nation wants to be fully digitalized that will empower society in a better manner. The 'Digital India' programme, an initiative of honorable Prime Minister Mr. Narendra Modi, will emerge new progressions in every sector and generates innovative endeavors for geNext. The motive behind the concept is to build participative, transparent and responsive system. This will provide all services electronically and promote digital literacy. Digital Technologies which includes the concept of cloud computing and mobile applications have emerged as the catalysts for express economic growth and citizen empowerment. Companies all over the world desire to invest in Digital India- the 21st century India, as a growth opportunity. The objective of this paper is to have a vision on the Digital India campaign where technologies and connectivity will come together to make an impact on all aspects of governance and improve the quality of life of citizens.

Keywords: digital India, digital control, e-services, mobile applications

Introduction

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.

Narendra Modi (Prime Minister)

Digital India is an initiative of Government of India to integrate the government departments and the people of India. It aims at ensuring the government services are made available to citizens electronically by reducing paperwork. The initiative also includes plan to connect rural areas with high-speed internet networks. Digital India has three core components. These include:

- The creation of digital infrastructure
- Delivering services digitally
- Digital literacy

The project is slated for completion by 2019. A two-way platform will be created where both the service providers and the consumers stand to benefit. The scheme will be monitored and controlled by the *Digital India Advisory group* which will be chaired by the Ministry of Communications and IT. It will be an inter-ministerial initiative where all ministries and departments shall offer their own services to the public Healthcare, Education, Judicial services etc. The Public-private-partnership model shall be adopted selectively. In addition, there are plans to restructure the National Informatics Centre. This project is one among the top priority projects of the Modi Administration. The initiative is commendable and deserves full support of all stakeholders. However, the initiative also lacks many crucial components including lack of legal framework, absence of privacy and data protection laws, civil liberties abuse possibilities, lack of parliamentary oversight for e-surveillance in India, lack of intelligence related reforms in India, insecure Indian cyberspace, etc. These issues have to be managed first before introducing Digital India initiative in India. Digital India project is worth exploring and

implementation despite its shortcomings that can be rectified before its implementation.

- Digital India is a Programme to prepare India for a knowledge future.
- The focus is on being transformative – to realize IT + IT = IT
- The focus is on making technology central to enabling change.
- It is an Umbrella Programme – covering many departments.
 - It 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.
 - Each individual element stands on its own. But is also part of the larger picture.
 - It is coordinated by DeitY, implemented by the entire government.
 - The weaving together makes the Mission transformative in totality
- The Programme
 - Pulls together many existing schemes.
 - These schemes will be restructured and re-focused.
 - They will be implemented in a synchronized manner.
 - Many elements are only process improvements with minimal cost.
- The common branding of programmes as Digital India highlights their transformative impact.

Objective of Study

There are following objectives of the study:

1. To study the vision and pillars of Digital India
2. To study the opportunities of the programme for the people of the country.
3. To study the challenges in implementing digital India

A) Vision of Digital India

Centered on 3 Key Areas

- Digital Infrastructure as a Utility to Every Citizen
- Governance & Services on Demand

- Digital Empowerment of Citizens

Vision Area 1: Infrastructure as a Utility to Every Citizen

- High speed internet as a core utility
- Cradle to grave digital identity -unique, lifelong, online, authenticable
- Mobile phone & Bank account enabling participation in digital & financial space
- Easy access to a Common Service Centre
- Shareable private space on a public cloud
- Safe and secure Cyber-space

Vision Area 2: Governance & Services on Demand

- Seamlessly integrated across departments or jurisdictions
- Services available in real time from online & mobile platform
- All citizen entitlements to be available on the cloud
- Services digitally transformed for improving Ease of Doing Business
- Making financial transactions electronic & cashless
- Leveraging GIS for decision support systems & development

Vision Area 3: Digital Empowerment of Citizens

- Universal Digital Literacy
- Universally accessible digital resources
- All documents/ certificates to be available on cloud
- Availability of digital resources / services in Indian languages
- Collaborative digital platforms for participative governance
- Portability of all entitlements through cloud

Nine Pillars of Digital India

At the launch ceremony of Digital India Week by Prime Minister Narendra Modi, top CEOs from India and abroad committed to invest Rs 4.5 lakh crore towards this initiative. The CEOs said the investments would be utilities towards making smart phones and internet devices at an affordable price in India which would help generate jobs in India as well as reduce the cost of importing them from abroad. 9 Key points of Digital India Programme are as follow.

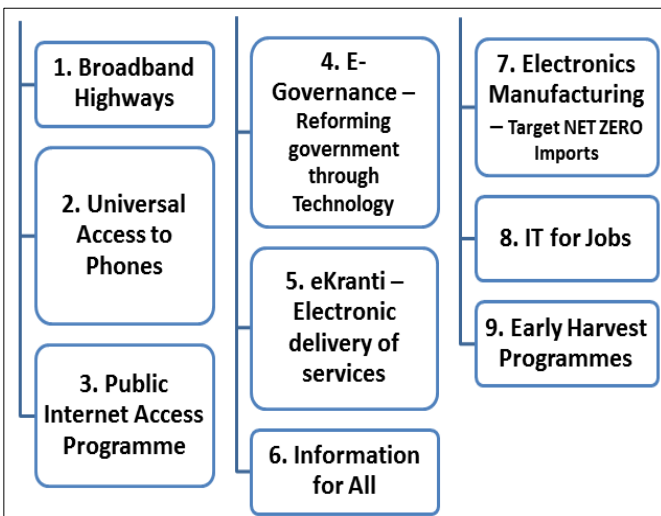


Fig 1

i) Broadband highways

The government with the vision of “Digital India” has allocated `5 billion to build high speed broadband highways connecting all the villages, government departments, universities, R&D institutes, etc. The digital development sees broadband as a key driver in addressing the challenges in the Millennium Development Goals primarily through fiber networks. The National Optical Fiber Network (NOFN) project, funded by the Universal Service Obligation Fund, has set the stage for providing broadband access to the country’s 250,000 gram panchayats by 2016. 1 This `200 billion project involves laying 600,000 km of fiber across the country.

BSNL, RAILTEL (telecom arm of the Indian Railways), and Power Grid Corporation are the three PSUs responsible for this mammoth task. The participation of private players is very important for faster rollout of optic fibre networks across the length and breadth of a vast country like India. The competition from private players will not only bring efficiency into the processes but also helps in bringing down the price of high speed digital services. Moreover, the innovation in marketing, operations and business process proven by private players can help in faster and greater adoption of high bandwidth services in the remote and rural areas.

ii) Universal Access to Phone

- The initiative is to focus on network penetration and fill the gaps in connectivity in the country.
- All together 42,300 uncovered villages will be covered for providing universal mobile connectivity in the country.
- DoT will be the nodal department and project cost will be around Rs 16,000 Cr during FY 2014-18.

iii) Public Internet Access Programme

- The two sub components of Public Internet Access Programme are Common Service Centers and Post Offices as multi-service centers.
- Common Service Centers would be strengthened and its number would be increased from approximately 135,000 operational at present to 250,000 i.e. one CSC in each Gram Panchayat. CSCs would be made viable, multi-functional end-points for delivery of government and business services. DeitY would be the nodal department to implement the scheme.
- A total of 150,000 Post Offices are proposed to be converted into multi service centers. Department of Posts would be the nodal department to implement this scheme.

iv) E-Governance

The National e-Governance Plan (NeGP) has been formulated by the Department of Electronics and Information Technology (DeitY) and Department of Administrative Reforms and Public Grievances (DARPG). The e-governance project works in both centralized and decentralized way. The centralized way focuses on inter-operability of various e-governance applications and ensures optimal utilization of ICT infrastructure and resources while allowing for a decentralized implementation model. There are many different initiatives from central government as well as state-governments under the NeGP project to ensure government services are available to citizens electronically.

- Pensioners’ portal, a web-based portal called Pensioner’s Portal has been created for the redresses of pensioners’

grievances. It also provides information to pensioners on retirement and pension-related issues.

- The Digital Chip Maker Intel along with the government unveiled a digital skills training application in 5 Indian languages, 2 which includes modules on digital literacy, financial inclusion, healthcare and cleanliness. Intel will work with the Indian government to create digital literates across 1000 panchayats, a move that will impact five million citizens by the end of 2015.

v) e-Kranti

The e-Kranti project provides electronic delivery of services to the citizens. The government has allocated `5 billion for the e-Kranti project which includes many sub-level projects

vi) Information for All

- Open Data platform and online hosting of information & documents would facilitate open and easy access to information for citizens.
- Government shall pro-actively engage through social media and web based platforms to inform citizens. MyGov.in has already been launched as a medium to exchange ideas/ suggestions with Government. It will facilitate 2-way communication between citizens and government.
- Online messaging to citizens on special occasions/programs would be facilitated through emails and SMSs.
- The above would largely utilise existing infrastructure and would need limited additional resources.

vii) Electronics Manufacturing

- Target NET ZERO Imports is a striking demonstration of intent. This ambitious goal requires coordinated action on many fronts
- Taxation, incentives
- Economies of scale, eliminate cost disadvantages
- Focus areas – Big Ticket Items FABS, Fab-less design, Set top boxes, VSATs, Mobiles, Consumer & Medical Electronics, Smart Energy meters, Smart cards, micro-ATMs
- Incubators, clusters
- Skill development
- Government procurement

There are many ongoing programs which will be fine-tuned. Existing structures are inadequate to handle this goal and need strengthening.

viii) IT for Jobs

- 1 Cr students from smaller towns & villages will be trained for IT sector jobs over 5 years. DeitY would be the nodal department for this scheme.
- BPOs would be set up in every north-eastern state to facilitate ICT enabled growth in these states. DeitY would be the nodal department for this scheme.
- 3 lakh service delivery agents would be trained as part of skill development to run viable businesses delivering IT services. DeitY would be the nodal department for this scheme.
- 5 lakh rural workforces would be trained by the Telecom Service Providers (TSPs) to cater to their own needs.

Department of Telecom (DoT) would be the nodal department for this scheme.

ix) Early Harvest Programmes

- Government plans to set up Wi-Fi facilities in all universities across the country.
- Email will be made the primary mode of communication.
- Aadhaar Enabled Biometric Attendance System will be deployed in all central government offices where recording of attendance will be made online.
- Educational books to e-books.

A) Opportunities of Digital India programme

Though Digital India programme has faced many challenges in its implementation but it has some prospects which are mentioned below

1. It would bring in public accountability through mandated delivery of Government services electronically.
2. Digital India programme will put an end to corruption system which becomes the main feature of the country.
3. Digital India programme aims to reduce paper work which will help to save trees & protect environment.
4. National scholarship portal, a project under Digital India, will put an end to scholarship process right from submission of student's application, verification, sanction and disbursal to end beneficiary for all scholarships provided by The Government of India.
5. It benefits people of India in every village in terms of knowledge improve by using internet in day to day life.
6. Each person will be having bank account.

Scope of digital India

The scope of overall programme is

- The digital India is a great plan to develop India for a knowledge future.
- On being transformation– to realize IT (Indian Talent) +IT (Information Technology) =IT (India Tomorrow).
- The programme pulls together many schemes like e-Health, e-Sign, e-Education etc.
- It weaves together a large number of ideas and thoughts into a single, comprehensive goal so that each of them is seen as part of a larger goal.
- Each individual element stands on its own. But is also a part of the largest picture.
- The common branding of program as Digital India highlights their transformative impact.

C) Challenges & Changes Needed

- Program on this scale never conceived
- Each Pillar/program has own challenges
- **Human Resource Issues**
 - NIC - not equipped for a fraction of this task (obsolesce) - needs revamping & restructuring
 - DeitY – needs program managers – at least 4 more officers at senior levels
 - Ministries – Need a Chief Information Officer / Chief Technology Officer (CIO/CTO)
 - Could begin with CIOs 10 major Ministries
 - Can be anyone – from within or outside government
 - To be patterned as AS & FAs – dual reporting

- **Financial Resource Issues**
 - Mostly structured around ongoing programs : Better focus, need some restructuring
 - Some others are process improvements or better utilisation of resources
 - A few new programs may be needed – particularly in Electronics manufacturing and Skill Development
- **Coordination Issues**
 - Program covers many other departments
 - Need commitment and effort
 - Leadership and support critical for success

Estimated Cost and Impact of Digital India Overall Costs of Digital India

- Rs 100,000 Cr in ongoing schemes (only DeitY, DOT & not incl. those in other line Ministries)
- Rs 13,000 Cr for new schemes & activities

Impact of Digital India by 2019

- Broadband in 2.5 lakh villages, universal phone connectivity
- Net Zero Imports by 2020
- 400,000 Public Internet Access Points
- Wi-fi in 2.5 lakh schools, all universities; Public wi-fi hotspots for citizens
- Digital Inclusion: 1.7 Cr trained for IT, Telecom and Electronics Jobs
- Job creation: Direct 1.7 Cr. and Indirect at least 8.5 Cr.
- E-Governance & eServices: Across government
- India to be leader in IT use in services – health, education, banking
- Digitally empowered citizens – public cloud, internet access

Conclusion

Digital India is a large umbrella program which will restructure and re-focus several existing schemes to bring in a transformative impact. The Digital India vision aims to transform our country into a digital economy with participation from citizens and businesses. This initiative will ensure that all government services and information are available anywhere, anytime, on any device that is easy-to-use, seamless, highly-available and secured. The Digital India program is just the beginning of a digital revolution, once implemented properly it will open various new opportunities for the citizens. It is one of the highly ambitious programs of Indian government, and is directly monitored by Hon'ble Prime Minister of India. The program is a multi-ministry program, with the involvement of central cabinet ministers, state governments etc. Various grand companies like Microsoft, Google and Fujitsu will also agreed be partner and help the success of Digital India initiative. While there are many obstacles in the path of Digital India program, one major of which is electricity. But this problem will soon be solved as there will be pressure on local leaders to get electricity in their village when Digital India program will be running in the nearby villages. Also, it will open gates for employment as Telecom Minister said while addressing students at Shri Ram College of Commerce: "IT gives employment to about 30 lakh people. Once Digital India becomes reality, we can give jobs to five crore plus people."

References

1. GIS based Planning. See: <http://india.gov.in/gis-based-planning-atlas-lucknow-district>
2. Digital India plan could boost GDP up to \$1 trillion by 2025: McKinsey, December 2014. See: <http://economictimes.indiatimes.com/industry/telecom/digital-india-plan-couldboost-gdp-up-to-1-trillion-by-2025-mckinsey/articleshow/45536177.cms>
3. India is now world's third largest internet. See: <http://www.thehindu.com/sci-tech/technology/internet/india-is-now-worlds-third-largest-internet-user-after-us-china/article5053115.ece>
4. Intel Digital Skills program. See: <http://www.livemint.com/Politics/tVi3qteBfYKkXOPdwl1O4J/Intel-India-to-aid-govt-with-digital-literacy-programme.html>
5. E-Kranti scheme gets Rs 500 crore boost. See: <http://www.india.com/budget-2014/union-budget-2014-live-e-kranti-scheme-gets-rs-500-crore-boost-93234/>
6. Here is the biggest challenge to Modi's digital India vision, October 2014. See: <http://qz.com/274880/here-is-the-biggest-challenge-to-modis-digital-india-vision/>
7. https://en.wikipedia.org/wiki/Digital_India