

International Journal of Trade & Commerce-IIARTC January-June 2018, Volume 7, No. 1 pp. 183-190 © SGSR. (www.sgsrjournals.co.in) All rights reserved UGC Approved Journal No. 48636 COSMOS (Germany) JIF: 5.135; ISRA JIF: 4.816; NAAS Rating 3.55; ISI JIF: 3.721

An Analysis of Recent Digital India Programmes

V.N. Gupta^{a*}, Rupak Srivastava^b

^aDepartment of Commerce, Pt. Lalit Mohan Sharma Government P.G. College Rishikesh (U.K) India E-mail Id: drvirendranathgupta@gmail.com ^bDepartment of Commerce, Pt. Lalit Mohan Sharma Government P.G. College Rishikesh (U.K) India

Abstract

The term Digital India is made India literate in the sense of digital awareness by using paper less work. It is too important for rapid economic and digital literacy growth. India is developing country, in this competitive world the developing country has also need to make the nation by using modern techniques of digitalization. This paper deals with various programmes related with making India Digital. **Keywords:** Digital India, E-governance. PAPER/ARTICLE INFO RECEIVED ON: 20/01/2018 ACCEPTED ON: 21/02/2018

Reference to this paper should be made as follows:

V.N. Gupta, Rupak Srivastava (2018), "An Analysis of Recent Digital India Programmes", Int. J. of Trade and Commerce-IIARTC, Vol. 7, No. 1, pp. 183-190

*Corresponding Author

1. INTRODUCTION

E-governance initiatives in India took a broader dimension in the mid 1990s for wider sectoral applications with emphasis on citizen-centric services. The major ICT initiatives of the Government included, inter alia, some major projects such as railway computerization, land record computerization, etc. which focused mainly on the development of information systems. Later on, many states started ambitious individual e-governance projects aimed at providing electronic services to citizens. Though these e-governance projects were citizen-centric, they could make less than the desired impact due to their limited features. The isolated and less interactive systems revealed major gaps that were thwarting the successful adoption of e-governance along the entire spectrum of governance. They clearly pointed towards the need for a more comprehensive planning and implementation for the infrastructure required to be put in place, interoperability issues to be addressed, etc. to establish a more connected government. The national level e-Governance programme called National e-Governance Plan was initiated in 2006. There were 31 Mission Mode Projects under National e-Governance Plan covering a wide range of domains, viz. agriculture, land records, health, education, passports, police, courts, municipalities, commercial taxes, treasuries etc. 24 Mission Mode Projects have been implemented and started delivering either full or partial range of envisaged services. Considering the shortcomings in National e-Governance Plan that included lack of integration amongst Government applications and databases, low degree of government process reengineering, scope for leveraging emerging technologies like mobile, cloud...etc, Government of India has approved the E-Kranti programme recently with the vision of "Transforming e-Governance for Transforming Governance". All new and on-going E-Governance projects as well as the existing projects, which are being revamped, should now follow the key principles of E-Kranti namely 'Transformation and not Translation', 'Integrated Services and not Individual Services', 'Government Process Reengineering (GPR) to be mandatory in every MMP', 'ICT Infrastructure on Demand', 'Cloud by Default', 'Mobile First', 'Fast Tracking Approvals', 'Mandating Standards and Protocols', 'Language Localization', 'National GIS (Geo-Spatial Information System)', 'Security and Electronic Data Preservation'. The portfolio of Mission Mode Projects has increased from 31 to 44 MMPs. Many new social sector projects namely Women and Child Development, Social Benefits, Financial Inclusion, Urban Governance, e-Bhasha...etc have been added as new MMPs under e-Kranti.

2. **REVIEW OF LITERATURE**

Mittal & Mahesh (2008) in "Digital libraries and repositories in India: an evaluative study" identified and evaluated the collections within digital libraries and institutional repositories in India available in the public domain. They found that most of the IRs are using Open Source Software (OSS). Users of DSpace software are highest and collection sizes of most digital libraries are few hundred except Digital Library of India (DLI).

Stevenson & Hodges (2008) in "Setting up a university digital repository: experience with DigiTool" presented the experience of the project of creation of digital repository at Liverpool John Moores University, UK using DigiTool which is a proprietary software. It was found that DigiTool can be used to create an open access digital repository.



In 2005, Stanescu in "Assessing the Durability of Formats in a Digital Preservation Environment: The INFORM Methodology" presented a methodology called INFORM for measuring the preservation durability of digital formats. This methodology was developed for investigating and measuring the risk factors of digital formats and providing guidelines for preservation action plans. It defines tools, processes, and metrics necessary to select digital formats most apt to sustain the passage of time. INFORM methodology is descriptive not prescriptive giving archivists and managers of digital archives full control over the preservation actions they choose.

Williamson (2005) in "Strategies for managing digital content formats" discussed about the issue of long term preservation of digital resources and choice of proper formats. He pointed out three points for which individuals or organizations may choose to utilize proprietary formats rather than open formats. These are delayed development of open formats, organizational expertise, and reluctance to move to open formats.

Bernier (2006) in "An Introduction to JPEG 2000" discussed the benefits, limitations, and role of JPEG 2000 file format. He mentioned that the most obvious benefit of using JPEG 2000 is its increased compression capability. JPEG 2000 has both lossless and lossy compression option. So, it can be used for master archival image using lossless option; and for displaying over the web lossy option can be used.

3. VISION OF DIGITAL INDIA INITIATIVE

Here is what the government of India aims to achieve through Digital India initiative.

- **1. Infrastructure:** The Digital India initiative has a vision to provide high speed internet services to its citizens in all gram panchayats. Bank accounts will be given priority at individual level. People will be provided with safe and secure cyber space in the country.
- 2. Governance and services: Government services will be available online where citizens will be ensured easy access to it. Transactions will be made easy through electronic medium.
- **3. Digital empowerment of citizens:** This is one of the most important factor of the Digital India initiative to provide universal digital literacy and make digital sources easily accessible. The services are also provided in Indian languages for active participation.

9 major projects under Digital India initiative:

- **1. Manufacturing of electronics:** The government is focusing on zero imports of electronics. In order to achieve this, the government aims to put up smart energy meters, micro ATMs, mobile, consumer and medical electronics.
- **2. Provide public access to internet:** 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.
- **3. Highways to have broadband services:** Government aims to lay national optical fibre network in all 2.5 lakh gram panchayats. Broadband for the rural will be laid by December 2016 and broadband for all urban will mandate communication infrastructure in new urban development and buildings. By March 2017, the government aims to provide nationwide information infrastructure.



- **4.** 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.
- **5. e-Governance:** The government aims to improve processes and delivery of services through e-Governance with UIDAI, payment gateway, EDI and mobile platforms. School certificates, voter ID cards will be provided online. This aims for a faster examination of data.
- 6. IT Training for Jobs: The government aims to train around 1 crore students from small towns and villages for IT sector by 2020. Setting up of BPO sectors in North eastern states is also part of the agenda.
- **7. E-Kranti:** This service aims to deliver electronic services to people which deals with health, education, farmers, justice, security and financial inclusion.
- 8. 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 their suggestions and comment on various issues raised by the government, like net neutrality.
- **9.** Early harvest programs: Government plans to set up Wi-fi facilities in all universities across the country. Email will be made the primary mode of communication. Aadhar enabled Biometric Attendance System will be deployed in all central government offices where recording of attendance will be made online.

4. ANALYSIS OF GOVERNMENT SCHEMES

- 1. DIGI Locker It is a dedicated personal storage space for e-documents as well as Uniform Resource Identifier (URI) of e-documents issued by government departments. Individual locker will be linked to the resident's Aadhaar number, and enable sharing of e-documents across agencies whenever required. The sharing of these e-documents will be done through registered repositories thereby ensuring the authenticity of the documents online, and also minimize the loss and damage of important documents like birth certificate etc.
- **2. Bharat Net -** This initiative will work towards building high-speed digital highways to connect all 2.5 lakh Gram Panchayats of country by next year. This would be the world's largest rural broadband connectivity project using optical fiber.
- **3. MyGov app –** The PM also launched the mobile version of the MyGov.in website. This platform encourages citizen engagement in governance, and the app will do the same on mobile.
- **4. E-Sign –** An initiative to eradicate forgery and fraudulent signature, the E-Sign framework would allow citizens to digitally sign a document online using Aadhaar authentication.
- 5. National Scholarships Portal This new service is said to be a one-stop-solution for end-toend 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.
- **6. Swachh Bharat Mission (SBM) app -** To further the Swachh Bharat mission, the government has launched this app and would be used by people and Government organizations.



- **7. E-education** The program looks to provide high-tech education using technology like smartphones, apps and Internet services. It can also be used to provide education in far-flung areas where it may not be possible for teachers to be present in person. The education can be imparted through virtual means as part of the program.
- **8. E-health** This initiative aims at providing timely, effective and economical healthcare services to all, especially to the ones that have little access to healthcare services. This service too will be linked to Aadhaar numbers, and will make getting lab reports and OPD appointments easier. The Online Registration System (ORS) under the eHospital application has also been introduced.

This application provides important services such as online registration, payment of fees and appointment, online diagnostic reports, inquiring availability of blood online etc, the government claims. With this initiative, one can skip the hassles of registration and other formalities at hospitals by merely identifying self through the Aadhaar Number, select hospital and department, select date of appointment and get the same through SMS.

- **9.** Next Generation Network (NGN) This is a BSNL initiative which looks to replace 30 year old exchanges, with this new IP-based technology to manage all types of services like voice, data, multimedia/ video and other types of communication services.
- **10. Wi-Fi hotspots -** BSNL has undertaken large scale deployment of Wi-Fi hotspots throughout the country for Internet access on smatphones while on-the-go. The initiative has already kicked off with the government offering free Wi-Fi at tourist places like Taj Mahal, and spots at Shimla too.

The government even launched the official website for the Digital India program, and you can take a look at it here.

5. PILLARS OF DIGITAL INDIA

- Broadband Highways
- Universal Access to Phones
- Public Internet Access Programme
- e-Governance Reforming government through Technology
- e-Kranti Electronic delivery of services
- Information for all
- Electronics Manufacturing Target NET ZERO Imports
- IT for Jobs
- Early Harvest Programmes

6. 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 & e-Services: Across government



- India to be leader in IT use in services health, education, banking
- Digitally empowered citizens public cloud, internet access

7. ANALYSIS OF NINE KEY INITIATIVES UNDER DIGITAL INDIA SCHEME

Under Digital India programme, 8 key initiatives are in progress, which are as follows:

- **Broadband Highways:** The aim is to connect 250000 Gram Panchayats through high speed internet by December 2016 with the investment of Rs 32,000 crore; Nationwide internet infrastructure through National Optic Fibre Network (NOFK) by 2016.
- Universal Access to Mobile Connectivity: The aim is to connect all the remaining 42300 villages which are unconnected through mobile telephony with the investment of Rs 16000 crore by the financial year 2018.
- National Rural Internet Mission: The aim is to make available government services to all Gram Panchayats through Common Service Centres (CSCs) by March 2017 with the investment of Rs. 4750 crore; also, 150000 Post-Offices are to become Multi-service Centres by 2016.
- **e- Governance:** The aim is to simplify government business processes by introduction of IT, online interface and tracking across departments, integration of services and platforms-UIDAI, Payment Gateway, Mobile Platform etc; public grievance redressal through IT.
- **Information for All:** The aim is online hosting of data and proactive engagement with citizen through social media and web portals such as mygov.in; citizen will have open access to information and open data platform.
- Electronic Manufacturing: The aim is Net Zero imports by 2020 through increased level of local manufacturing of electronic items such as: Set Top Boxes, VSATs, Mobiles, Consumer and medical Electronics, Smart Cards etc.; efforts will be made to provide clarity on taxation, incentives, skill development and government procurement.
- **Training and Job Creation:** The aim is to train students in small towns and villages for IT sector jobs; the target is training of 1 crore students in next five years to make them IT ready workforce; Setting up BPOs in each North Eastern State; Telecom service providers will train 500000 people in five years to create a Telecom ready rural workforce to cater to their own needs.
- Early Harvest Programme: All Universities across the country will be connected through Wi-Fi by December 2015; e-mail to be the primary mode of communication- to secure e-mail services across all departments of government; Biometric attendance in all Ministries and Departments.

7.1 Challenges before Digital India Initiative

The Digital India project, no doubt is one of the grandest projects till date because it embraces all the government machinery and departments in its fold; its aim is to create a truly participatory democracy with the use of digital technology; its target is to connect more than 120 crore Indians with their Government so that they could avail services and benefits of government services in real time and also get their grievances redressed in quick time.

But to implement this scheme is a great challenge before the Government.



Firstly, connecting 250000 Gram Panchayats through National Optical Fibre Network is not an easy task; it will require a lot of efforts and dedication from BSNL, the nodal agency for laying down the cables.

Secondly, improving IT literacy is a great task ahead because for the project to become successful, it is necessary that mass of people must know how to utilise the digital services.

Thirdly, security of data is very important because digital medium is still very unsafe and data vulnerability is a big issue specially in financial transactions; thus, internet data security is a big concern ahead.

Fourthly, making Digital India scheme known and creating an awareness among common masses about its benefits is also a great challenge.

Overall this great initiative will require great efforts from the entire government machinery and people concerned to make it successful.

- 8. ANNOUNCEMENTS
- **1. Project Management Information System (PMIS):** Project Management and Information System (PMIS) has been developed in NeGD for Mission Mode Projects under e-Kranti.
- PMIS is an integrated information system
- PMIS offers information on the cost, time and performance parameters of a project
- PMIS is decision oriented
- PMIS is capable of providing exception reports
- The SEMT Orientation Programme: The (State e Mission Teams) SeMT Orientation programme is part of the Capacity Building Scheme – Phase II aimed to orient new SeMT & NeGD officials.

The objective of the programme was to give the SeMT and NeGD new members an understanding of DeITY, NeGD, SeMT institutional mechanisms, policies, eco system with respect to their roles and responsibilities in the required area of work.

So far 10 Orientation programmes have been conducted and 352 aprox SeMTs have undergone the orientation training programme.

The 11th batch of SeMT residential orientation for newly joined SeMT & NeGD members is from 14th – 18th March 16, in Delhi. The first of the five days orientation covered:

- NeGP & e-Governance basics
- Digital India Framework
- Salient feature of CB Phase II
- Semt Role and expectation in CB II
- Fund allocation to States/UTs
- Government administration and communication process
- Legal framework for e-Governance implementation
- DPR, RFP & Monitoring and Evaluation for e-Governance Projects
- 3. Filling up position of Middle Management (Sr.GM) in NeGD
- **4.** Filling up positions of Senior Management , in National e- Governance Division (NeGD) on deputation basis



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