DIGITAL INDIA'S POTENTIAL TO BE NEXT SUPER POWER

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Abstract:
With over 300 million Internet users in the country and another 200 million Indians set to join by 2017, the Internet is opening up huge opportunities for Indian businesses and society. The end of June 2015 saw the number of internet users in India grow to 345 million (back in October of 2013, there were only 205 million internet users. This is an increase of 140 million users in less than two years). According to the Internet and Mobile Association of India, this year approximately 52million new users were added to the existing ones. The same study also indicates that India is now home to the second-largest number of internet users (after China). Not surprising anymore, more than 80% of the India Marketers use technology to power up their marketing. This paper of Digital India will bring forth ideas for engaging Indian society and awakening the Digital India through Government of India schemes for a sustainable country.

Keywords: India. Super Power and Digital India

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1. Introduction:

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. The Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. The journey of e-Governance initiatives in India took a broader dimension in mid 90s for wider sectoral applications with emphasis on citizen-centric services. Later on, many States/UTs started various e-Governance projects. Though these e-Governance projects were citizen-centric, they could make lesser than the desired impact. Government of India launched National e-Governance Plan (NeGP) in 2006. 31 Mission Mode Projects covering various domains were initiated. Despite the successful implementation of many e-Governance projects across the country, e-Governance as a whole has not been able to make the desired impact and fulfil all its objectives. It has been felt that a lot more thrust is required to ensure e-Governance in the country promote inclusive growth that covers electronic services, products, devices and job opportunities. Moreover, electronic manufacturing in the country needs to be strengthened. In order to transform the entire ecosystem of public services through the use of information technology, the Government of India has launched the **Digital India programme** with the vision to transform India into a digitally empowered society and knowledge economy.

2. Objectives:

a. To study the overall picture of Digital India scheme by Government of India
b. To study 9 pillars of Digital India programme
c. To study vision, implementation cost , impacts and challenges of Digital India Programme.

3. Digital India: A good governing body requires a good communication platform to communicate with the stakeholders efficiently. Communicating with the citizens has been a big challenge for the government of India with widespread geography, massive population, and enormous linguistic & cultural diversity. The way of communication has changed a lot from postal and telegraph era to print and broadcasting media to the era of Digital Communication. The efficient way to communicate with the citizens of the world's largest democracy with a population of 1.2 billion is only possible by connecting with everyone on a digital platform. Though India is considered as the IT powerhouse of the world, there is a huge digital divide. The Digital India initiative is a dream project of the Government to transform India into a

digitally empowered society and knowledge economy. **Digital India** is an initiative by the Government of India to ensure that Government services are made available to citizens electronically by improving online infrastructure and by increasing Internet connectivity. It was launched on 1 July 2015 by Prime Minister Narendra Modi. The initiative includes plans to connect rural areas with high-speed internet networks. The Government of India entity Bharat Broadband Network Limited which executes the National Optical Fibre Network project will be the custodian of Digital India (DI) project. BBNL had ordered United Telecoms Limited to connect 250,000 villages through GPON to ensure FTTH based broadband. This will provide the first basic setup to achieve towards Digital India and is expected to be completed by 2017. The government is planning to create 28,000 seats of BPOs in various states and set up at least one Common Service Centre in each of the gram panchayats in the state. Ravi Shankar Prasad announced on 27 February 2016 that National Institute of Electronics and Information Technology (NIELIT) would be set up in Kurukshetra to provide computer training to youth and a Software Technology Park of India(STPI) would be set up in Panchkula's existing HSIIDC IT Park in Sector 23. The 2016 Union budget of India announced 11 technology initiatives including the use data analytics to nab tax evaders, creating a substantial opportunity for IT companies to build out the systems that will be required. Digital Literacy mission will cover six crore rural households. It is planned to connect 550 farmer markets in the country through the use of technology.

4. Vision of Digital India

- Digital Infrastructure as a Utility to Every Citizen
    1. High speed internet as a core utility
    2. Cradle to grave digital identity -unique, lifelong, online, authenticable
    3. Mobile phone & Bank account enabling participation in digital & financial space
    4. Easy access to a Common Service Centre
    5. Shareable private space on a public cloud
    6. Safe and secure Cyber-space
- Governance & Services on Demand
    1. Seamlessly integrated across departments or jurisdictions
    2. Services available in real time from online &mobile platform
    3. All citizen entitlements to be available on the cloud
    4. Services digitally transformed for improving Ease of Doing Business
    5. Making financial transactions electronic & cashless
    6. Leveraging GIS for decision support systems & development
- Digital Empowerment of Citizens
    1. Universal Digital Literacy
    2. Universally accessible digital resources
    3. All documents/ certificates to be available on cloud
    4. Availability of digital resources / services in Indian languages
    5. Collaborative digital platforms for participative governance
    6. Portability of all entitlements through cloud

5. Pillars of Digital India

Digital India is an umbrella programme that covers multiple Government Ministries and Departments. It weaves together a large number of ideas and thoughts into a single, comprehensive vision so that each of them can be implemented as part of a larger goal. Each individual element stands on its own, but is also part of the larger picture. Digital India is to be implemented by the entire Government with overall coordination being done by the Department of Electronics and Information Technology (DeitY). Digital India aims to provide the much needed thrust to the nine pillars of growth areas, namely Broadband Highways, Universal Access to Mobile Connectivity, Public Internet Access Programme, e-Governance: Reforming Government through Technology, e-Kranti - Electronic Delivery of Services, Information for All, Electronics Manufacturing, IT for Jobs and Early Harvest Programmes. Each of these areas is a complex programme in itself and cuts across multiple Ministries and Departments. These three vision areas further encompass nine themes or 'pillars' of Digital India. Some of these are discussed below:

1	**Broadband Highways**		
	Broadband for all Rural	•Coverage: 250,000 GP •Timeline: December 2016 •CAPEX: Rs32,000 Cr •Nodal Dept: DoT	1yr:50,000GP 2yr:100,000GP 3yr:100,000GP
	Broadband for all Urban	•Virtual Network Operators for service delivery. •Mandate communication infrastructure in new urban development and buildings.	Changes in Rules to facilitate.
	National	•Coverage: Nationwide	Integration of SWAN, NKN,NOFN. To

	Information Infrastructure	•Timeline: March 2017 •Cost: Rs 15,686 Cr •Nodal Dept: DeitY	be implemented in 2 years
2	**Universal Access to Phones**		
	Universal Access to mobile connectivity	Coverage: Remaining uncovered villages (42,300 villages) •Timeline: FY 2014-18 •Cost: Rs 16,000 Cr •Nodal Dept: DoT Universal	Ongoing Programme Increased network penetration & coverage of gaps
3	**Public Internet Access Programme**		
	CSCs–made viable, multi-functional end-points for service delivery	•Coverage: 2,50,000 villages (now 130,000) •Timeline: 3 Years -March 2017 •Cost: Rs 4750 Cr •Nodal Agency: DeitY	Ongoing Programme Reach of Govt. services to all GPs
	Post Offices to become Multi-Service Centres	•Coverage: 1,50,000 Post Offices •Timeline: 2 Years •Nodal Agency: D/o Posts	This should be long term vision for POs
4	**E-Governance –Reforming government through Technology**		
	Government Business Process Re-engineering using IT to improve transactions •Form Simplification, reduction •Online applications and tracking, Interface between departments •Use of online repositories e.g. school certificates, voter ID cards, etc. •Integration of services and platforms –UIDAI, Payment Gateway, Mobile Platform, EDI □Electronic Databases –all databases and information to be electronic, not manual □Workflow automation inside government □Public Grievance Redressal -using IT to automate, respond, analyse data to identify and resolve persistent problems –largely process improvements □To be implemented across government -critical for transformation.		
5	**eKranti –Electronic delivery of services**		
	Technology for Education –e-Education •All Schools connected with broadband •Free wifiin all schools (250,000) •Digital Literacy program •MOOCs –develop pilot Massive Online Open Courses **Technology for Planning** •GIS based decision making •National GIS Mission Mode Project **Technology for Security** •Mobile Emergency Services **Technology for Financial Inclusion** •Mobile Banking •Micro-ATM program •CSCs/ Post Offices Ongoing Programme (NeGP) –will be revamped to cover these elements	**Technology for Health –e-Healthcare** •Online medical consultation •Online medical records •Online medicine supply •Pan-India exchange for patient information •Pilots –2015; Full coverage in 3 years **Technology for Farmers** •Real time price information •Online ordering of inputs •Online cash, loan, relief payment with mobile banking **Technology for Justice** •e-Courts, e-Police, e-Jails, e-Prosecution **Technology for Security** National Cyber Security Co-ordination Center	
6	**Information for All**		
	□Online Hosting of Information & documents, □Citizens have open, easy access to information, □Open data platform, □Government pro-actively engages through social media and web based platforms to inform citizens □MyGov.in, □2-way communication between citizens and government, □Online messaging to citizens on special occasions/programs, □Largely utiliseexisting infrastructure –limited additional resources needed		
7	**Electronics Manufacturing –Target NET ZERO Imports**		
	□Target NET ZERO Imports is a striking demonstration of intent , □Ambitious goal which requires coordinated action on many fronts , □Taxation, Incentives, □Economies of Scale, Eliminate cost disadvantages □Focused 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 inadequate to handle this goal. Need strengthening.		
8	**IT for Jobs**		

	Train people in smaller towns & villages for IT sector jobs	•Coverage: 1 Crore students •Timeline: 5 years •Cost: Rs 200 Cr for weaker sections •Nodal Agency: DeitY	New Scheme IT ready workforce
	IT/ITES in NE	•Scope: Setting up of BPO per NE State •Coverage: NE States •Nodal Agency:DeitY	ICT enabled growth in NE
	Train Service Delivery Agents to run viable businesses delivering IT services	•Coverage: 3,00,000 •Timeline: 2 Years •Nodal Agency:DeitY	Ongoing Skilled VLEs and Viable CSCs
	Telecom service providers to train rural workforce to cater to their own needs	•Coverage: 5,00,000 •Timeline: 5 Years •Nodal Agency:DoT	Telecom ready workforce
9	**Early Harvest Programmes**		
	IT platform for messages	•Coverage: Elected representatives, All Govt employees •1.36 Cr mobiles and 22 Lakh emails •Mass Messaging Application developed	Targeted Mass messaging since July 14
	Government Greetings to be e-Greetings	•Basket of e-Greetings templates available •Crowd sourcing of e-Greetings thru MyGov •e-Greetings Portal ready by 14 August 2014	1ste-Greeting from PM on 15thAug 2014
	Biometric attendance	•Coverage: All Central Govt. Offices in Delhi •Operational in DeitY & Initiated in Urban Development •On-boarding started in other depts •Procurement of devices –tender issued	To be completed by Oct 2014
	Wi-fi All Universities	•Scope: All universities on NKN •400 additional Universities •Cost: Rs 790 CrWi-	Approval -Oct 2014 Implementation done by Dec 2015
	Secure email within government	•Phase I upgradation for 10 Lakh employees done •Ph II for 50 Lakh employees by March 2015 •Cost: Rs 98 Cr	Email to be primary mode of communication
	Standardize government email design	•Standardised templates under preparation	To be ready by October 2014
	Public wifi hotspots	•Coverage: Cities with pop > 1 Mill., tourist centres *Nodal Agency-Dot / MoUD	Digital Cities Completed by Dec 2015
	School Books to be eBooks	•Nodal Agency: MHRD/ DeitY	Completed by Mar 2015
	SMS based weather information, disaster alerts	•DeitY's Mobile Seva Platform ready •Nodal Agency: MoES(IMD) / MHA (NDMA)	In place by Dec 2014
	National Portal for Lost & Found children Digital	•Nodal Agency: DeitY/ DoWCD	In place by Oct 2014

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-fiin 2.5 lakh schools, all universities; Public wi-fihotspots 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

6. Challenges & Changes Needed

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

7. **Findings:** The estimated impact of Digital India by 2019 would be cross cutting, ranging from broadband connectivity in all Panchayats, Wi-fi in schools and universities and Public Wi-Fihotspots. The programme will generate huge number of IT, Telecom and Electronics jobs, both directly and indirectly. Success of this programme will make India Digitally empowered and the leader in usage of IT in delivery of services related to various domains such as health, education, agriculture, banking, etc," the government claims.

8. **Conclusion:** Even though India is known as a powerhouse of software, the availability of electronic government services to citizens is still comparatively low. The National e-Governance Plan approved in 2006 has made a steady progress through Mission Mode Projects and Core ICT Infrastructure, but greater thrust is required to ensure effective progress in electronics manufacturing and e-Governance in the country. The Digital India opens in a new window vision provides the intensified impetus for further momentum and progress for this initiative and this would promote inclusive growth that covers electronic services, products, devices, manufacturing and job opportunities. India in the 21st Century must strive to meet the aspirations of its citizens where government and its services reach the doorsteps of citizens and contribute towards a long-lasting positive impact. The opens in a new window aims to transform India into a digitally empowered society and knowledge economy by leveraging IT as a growth engine of new India.

References:

1. https://www.surveymonkey.com/r/DigitalIndia
2. Hubspot Science Blogging http://blog.hubspot.com/marketing/email-marketing-examples-list
3. www.digitalindia.gov.in
4. www.treehugger.com/clean-technology/video-conferencing-can-save-19-billion-55-milliontons-of-co2.htm
5. "Digital India – A programme to transform India into digital empowered society and knowledge economy", Press Information Bureau.See: http://pib.nic.in/newsite/ PrintRelease.aspx?relid=108926
6. Government advances NOFN rollout deadline. See: http://timesofindia.indiatimes.com/tech/tech-news/Government-advances-NOFN-roll-out-deadline/articleshow/45318168. cms
7. TRAI Performance Indicator Report – June 2014
8. Digital India, Government of India Press Release, August 2014. See:http://pib.nic.in/newsite/PrintRelease.aspx?relid=108926
9. The Power of Data Analytics to Transform Government, Forbes, October 2014. See: http://www.forbes.com/sites/forbesinsights/2014/10/01/ the-power-of-data-analytics-to-transform-government
10. The launch of 4G in India is expected to be a key growth driver for M2M, December 2014. See: http://www.informationweek.in/informationweek/interviews/298863/ launch-4g-india-expected-key-growth-driver-m2m-vivek-varshney-ust-global