Digital India

A programme to transform India into a digitally empowered society and knowledge economy
What is Digital India?

- 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.
World Internet Statistics

1995

35 million+ internet users
0.6% population penetration

2014

2.8 billion internet users
39% population penetration

Source: INTERNET TRENDS 2015 – CODE CONFERENCE
India: The Digital Behemoth

India is taking giant strides...

YOUTH

65%
Age: less than 35 yrs

TECHNOLOGY

Mobile
3G connectivity

INDIA

The Digital Behemoth
India on the Internet

- Total Population: 1,236 million
- Internet Users: 232 million (+37% Y-o-Y growth)
- Population Penetration of Internet: 16%
- 2014 Internet User Growth Rate: 33% (+63 million users in 2014)
- Rank: #1 in new internet user additions

Source: INTERNET TRENDS 2015 – CODE CONFERENCE
India on the Mobile

- Total Population: 1,236 million
- Total Mobile Subscriptions: 907 million
- Total Smartphone Subscriptions: 140 million
- Smartphone % of mobile subscriptions: 15%
- Smartphone Subscription Growth Rate in 2014: 55%
- Population Penetration of Smartphone: 11%

Source: INTERNET TRENDS 2015 - CODE CONFERENCE
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

1. Broadband Highways
2. Universal Access to Phones
3. Public Internet Access Programme
4. E-Governance – Reforming government through Technology
5. eKranti – Electronic delivery of services
6. Information for All
7. Electronics Manufacturing – Target NET ZERO Imports
8. IT for Jobs
9. Early Harvest Programmes
**Pillar 1. Broadband Highways**

**Broadband for all Rural**
- Coverage: 250,000 GP
- Timeline: December 2016
- CAPEX: Rs 32,000 Cr
- Nodal Dept: DoT

1yr: 50,000 GP
2yr: 100,000 GP
3yr: 100,000 GP

**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 Information Infrastructure**
- Coverage: Nationwide
- Timeline: March 2017
- Cost: Rs 15,686 Cr
- Nodal Dept: DeitY

Integration of SWAN, NKN, NOFN. To be implemented in 2 years
Pillar 2. Universal Access to Mobile connectivity

**Universal Access to mobile connectivity**

- **Coverage:** Remaining uncovered villages (~42,300 villages)
- **Timeline:** FY 2014-18
- **Cost:** Rs 16,000 Cr
- **Nodal Dept:** DoT

**Ongoing Programme**
Increased network penetration & coverage of gaps
Pillar 3. Public Internet Access Programme – National Rural Internet Mission

**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

**Post Offices**
to become Multi-Service Centres

- **Coverage:** 1,50,000 Post Offices
- **Timeline:** 2 Years
- **Nodal Agency:** D/o Posts

**Ongoing Programme**
Reach of Govt. services to all GPs

This should be long term vision for POs
Pillar 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.
Pillar 5. eKranti - Electronic Delivery of Services

- **Technology for Education – e-Education**
  - All Schools connected with broadband
  - Free wifi in all schools (250,000)
  - Digital Literacy program
  - MOOCs – develop pilot Massive Online Open Courses

- **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 Planning**
  - GIS based decision making
  - National GIS Mission Mode Project

- **Technology for Farmers**
  - Real time price information
  - Online ordering of inputs
  - Online cash, loan, relief payment with mobile banking

- **Technology for Security**
  - Mobile Emergency Services

- **Technology for Financial Inclusion**
  - Mobile Banking
  - Micro-ATM program
  - CSCs/ Post Offices

- **Technology for Justice**
  - e-Courts, e-Police, e-Jails, e-Prosecution

- **Technology for Security**
  - National Cyber Security Co-ordination Center

**Ongoing Programme (NeGP) – will be revamped to cover these elements**
Pillar 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 utilise existing infrastructure** – limited additional resources needed
Pillar 7. Electronics Manufacturing
Target NET ZERO IMPORTS by 2020

- 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.
## D I G I T A L  I N D I A

### Pillar 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**
Pillar 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

**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

**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

Targeted Mass messaging since July 14
1st e-Greeting from PM on 15th Aug 2014
To be completed by Oct 2014
Pillar 9. Early Harvest Programmes

**Wi-fi in All Universities**
- Scope: All universities on NKN
- 400 additional Universities
- Cost: Rs 790 Cr

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
**Pillar 9: Early Harvest Programmes**

- **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**
  - **Nodal Agency:** DeitY/ DoWCD
  - **In place by Oct 2014**
Institutional Mechanisms at National Level

**Monitoring Committee on Digital India**

- Digital India Advisory Group
  (Chaired by Minister CIT)
- Apex Committee
  (Chaired by Cab Sec.)

- DeitY

- Line Ministries

- State Governments / UTs

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**DIGITAL INDIA**
Composition of Monitoring Committee on Digital India

- Prime Minister – Chairman
- Finance Minister
- Minister of Communications & IT
- Minister of RD
- Minister of HRD
- Minister of Health

Special Invitees:
- Principal Secretary to PM
- Cabinet Secretary
- Secretaries of Expenditure, Planning, DoT and Posts
- Secretary, DeitY – Convener
Estimated Costs and Impacts

- **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
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
Digital India
A programme to transform India into digital empowered society and knowledge economy

Digital India Initiatives

Investments & Technology Promotion Division, Ministry of External Affairs, Govt. of India
AADHAR

- A 12-digit unique identity for every Indian individual, including children and infants.
- Establishes uniqueness of every individual on the basis of demographic and biometric information.
- Aadhaar will provide a universal identity infrastructure which can be used by any identity-based application (like ration card, passport, etc.)
- Coverage: 925 million and growing
- Direct Benefit Transfer:
  - LPG
  - Scholarships
  - PDS scheme

A 12-Digit Unique Identity for Every Indian Individual, Including Children & Infants

Investments & Technology Promotion Division, Ministry of External Affairs, Govt. of India
E-Sign facilitates digitally signing a document by an Aadhaar holder using an Online Service. Aadhaar is mandatory for availing the eSign Service.

E-Sign is envisaged as a giant leap towards large scale adoption of digital signature and hence paperless transactions.
PayGov

With a view to make all Government services accessible to the citizens, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs, the government has created a common platform with a facility to make online payment using net banking, credit cards and debit cards.

PayGov India offers a range of payment options through which a payment can be made by the citizen to avail a service. The different options available to a citizen are:
• Net banking (approx. 65+ banks)
• Debit card
• Credit card
• IMPS
• Cash Cards/ Wallets
• Mobile Wallet
• NEFT/ RTGS
Digital Locker

DigiLocker is a service launched by Government of India in February 2015 to provide a secure dedicated personal electronic space for storing the documents of resident Indian citizens. The storage space (maximum 1GB) is linked to the Aadhaar number of the user.

Advantages:

- Help citizens to digitally store their important documents like PAN card, passport, mark sheets and degree certificates.
- Provide secure access to Government issued documents.
- Eliminates the use of physical documents and enables sharing of verified electronic documents across government agencies.
- A dedicated personal storage space in the cloud to citizens, linked to citizens Aadhaar number.
- Reduce the administrative overhead of government departments and agencies created due to paper work.
- Easy for citizens to receive services by saving time and effort as their documents will now be available anytime, anywhere and can be shared electronically.

https://digitallocker.gov.in/

To sign-up for your Digital Locker, one needs an Aadhaar card & a Mobile number that is linked to that Aadhaar card Number.
**E-TTAL**

- ettal is a web portal for dissemination of e-Transactions statistics of National and State level e-Governance Projects including Mission Mode Projects.

- It receives transaction statistics from web based applications periodically on near real time basis.

- eTaal presents quick analysis of transaction counts in tabular and graphical form to give quick view of transactions done by various e-Governance projects.

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**National e-Transaction Count**

Since 1st Jan, 2015  
6,53,45,88,666

Since 1st Nov, 2015  
21,15,31,940

- Promotes healthy competition amongst:  
  - States/Union Territories  
  - Departments and  
  - Mission Mode Projects / e-Governance initiatives

Investments & Technology Promotion Division, Ministry of External Affairs, Govt. of India
Jan Dhan Yojana

- Biggest financial inclusion initiative in the world.
- Date of launch: 28th August 2014
- **193 million accounts** opened till Nov 15, 2015
- Features of the scheme include:
  - No minimum balance required.
  - Interest on deposit.
  - Accidental insurance cover of Rs.100,000.
  - Life insurance cover of Rs.30,000/-.
  - Easy Transfer of money across India.
  - Beneficiaries of Government Schemes will get Direct Benefit Transfer in these accounts.
  - Overdraft facility of up to Rs.5000/- will be permitted (only one account per household, preferably lady of the household), after satisfactory operation of the account for 6 months
  - RuPay Debit Card will be provided (must be used at least once in 45 days.)
  - Access to Pension.
National Digital Literacy Mission

- Making one person in every family digitally literate
- Project to cover 5.25 million

Two levels of training under the SCHEME

Level 1: Appreciation of Digital Literacy
Citizens will be trained to operate digital devices, like mobile phones, tablets, etc., send and receive emails and search Internet for information, etc.

Level 2: Basics of Digital Literacy
Citizens would also be trained to effectively access the various e-Governance services being offered to the citizen by the Government and other agencies.

Eligibility Criteria
Level 1: Non-IT literate - Illiterate and up to 7th standard pass
Level 2: Non-IT literate with at least 8th standard pass
Age: 14 to 60 years

“Digital Literacy is the ability of individuals and communities to understand and use digital technologies for meaningful actions within life situations”
E-Bhasha

- All government websites: Will move from bilingual to multilingual
- Digital India website: Available in 12 languages…Work in progress to cover all 22 constitutionally recognized languages
Digital India investment opportunities

- Building broadband infrastructure
- Creating identity solutions, payment systems, web or mobile based delivery structures etc.
- Cybersecurity
- Healthcare - telemedicine and remote health
- Smart Cities - 100 smart cities program already announced.
- Make in India - Electronics Manufacturing - For India to transition to a digital future, it is imperative that a greater proportion of its consumption is serviced locally.

Investments in support of Digital India

- Reliance Industries Ltd: US$ 39.3 billion
- Bharti Airtel: US$ 15 billion
- Aditya Birla Group: US$ 7 billion
- Vedanta (Sterlite Tech): US$ 6 billion
- Vodafone: US$ 2 billion
- ADA Ltd: US$ 1.4 billion
THANK YOU