

# Digitization of Public Services

## -Opportunities and Challenges

By

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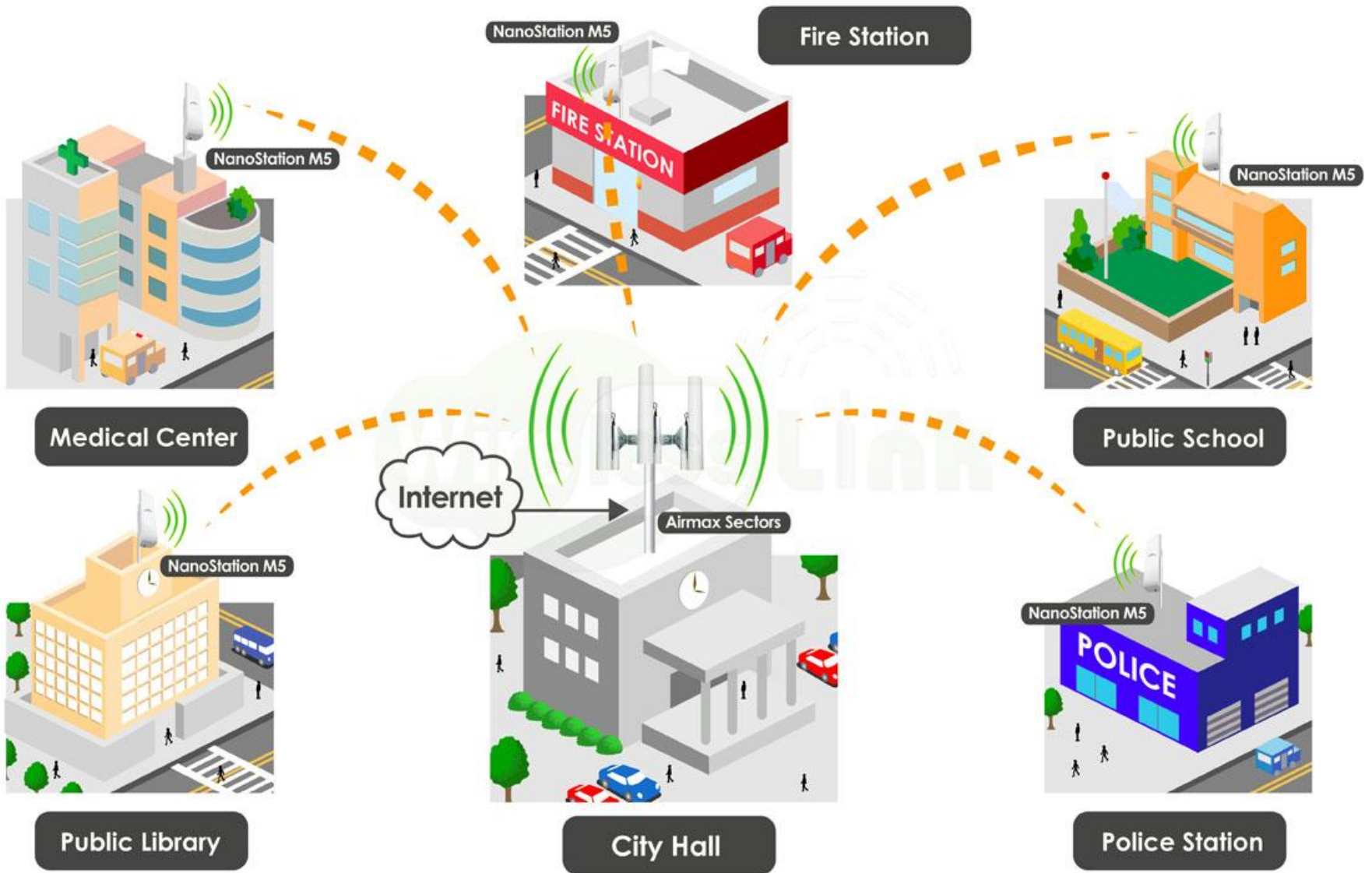
Krishna University - Machilipatnam

# Road map of Presentation

- **Introduction**
- **Why should we Digitize the public services?**
- **Government's Initiation**
- **Benefits of Digital India programme**
- **Major Challenges**
- **Suggestions**
- **Conclusion**

# 1) Introduction

- Changing role of technology in present day society
- Simple computation –Moving towards Analytics
- Impact of Digitization on Indian Economy
  - Acceleration at every stage
- $IT + IT = IT$   
(Indian Talent + IT = India Tomorrow)



## (Reform – Perform - Transform)

- Transformed nature of services
- Volatile Data structure(unstructured)
- Isolated systems (vs) Centralized system
- More transparency
- Addressing Corruption problem
- Accurate decision making
- Making life of citizen easier
- To provide services that meet the evolving expectations of citizens
- And many more.....results in economy boost

High Speed Wi-Fi Connectivity



Information for all

e-Kranti



Digital Literacy



Broadband Highways



Smart Phones & applications



Digital Technology enabled Farming



Telemedicine



IT Jobs

# DIGITAL INDIA: A VISION FORWARD

# 3) Government's initiation towards Digital India

## 3.1) 9 Pillars

- \* Broad band high ways(Integration of NKN & SWAN)
- \* Universal access to phones
- \* Public internet access programme  
(Post office as Multi Service centre)
- \* E-Governance
- \* E-Kranthi
- \* Information for all
- \* Electronic manufacturing(Zero Import Target)
- \* IT for jobs(10 Million jobs in next 5 years)
- \* Early harvest programmes

## 3.2) Projects under Digital India Programme

- Digital Lockers(PAN cards/PASSPORT/Marks sheets.....)
- MyGov.in(for citizen engagement in Governance through DISCUSS, DO and DISSEMINATE approach)
- Swach Bharat Mission APP
- e-sign frame work(through AADHAR authentication)
- e-Hospital application
- National Scholarship portal(APs Vidyawan Portal)
- Bharat Net(2.5L GramPanchayats-Wifi hotspots)
- Next Generation Networks by BSNL  
(to manage heterogeneous services: data/voice/multimedia)



### 3.3) National E-Governance Plan 2.0(e-Kranti)

- Total Mission Mode Projects(MMPs)-41

24 MMPs were already on track

#### a) Key Principles

- \* Transformation and NOT translation
- \* Integrated Services NOT Individual
- \* Cloud by default(Since Data sharing is key activity)
- \* Mobile First ( Mini Computer in every house)
- \* Fast Tracking Applications
- \* Mandatory standards and Protocols
- \* Language Localization
- \* National GIS
- \* Security and Electronic data preservation

## b) 3-Key vision areas

### \* Digital Infrastructure as a utility to every citizen

- Well connected Nation :: Well served Nation
- Connecting remote villages
- Delivery of e-Govt. Services to every citizen
- Realization of Financial Inclusion

### \* Governance & Services on Demand

- Integrated services across departments
- Real time service availability
- All citizen entitlements to be portable and  
available on cloud(contd..)

- Digitally transformed services for improving  
**Ease of Doing Business**
- Electronic and cash less financial transactions
- Leveraging GIS for DSS and development

### \* **Digital Empowerment of Citizens**

- Digital Services in Indian languages
- Providing collaborative digital platforms for participative governance(**Integrated Portal**)
- Citizens not required to physically submit  
documents/certificates

# Internet users will gradually rely on digital technologies and services

## Stages of digital reliance

### Stage 1

- First-time users
- Experiencing Internet through social media
- Engaging in short messaging
- No major language barriers

**Interacting  
with friends**

### Stage 2

- Repeat users, savvy in social media
- Increasingly searching for content, using apps
- Consuming video
- Language barriers emerging

**Consuming  
content**

### Stage 3

- Experienced Internet users
- Transacting online and on mobile
- Significant enabling platform barriers

**Transacting  
online**

### Stage 4

- Cannot do without Internet
- Using Internet to connect humans and machines and vice versa
- Integrating Internet into day-to-day life

**Integrating  
machines**

## 4) Benefits of Digital India programme

- Availability of Govt. Services through common Platform
- More transparency
- E-Governance---Free from corruption
- Digital Lockers
- Less documentation and paper work
- Business expansion through online tools
- GDP growth

### World Bank Report:

10% increase in mobile usage-0.81% hike in GDP

10% increase in Broadband penetration-1.31% hike in GDP

- Jobs creation in IT, Electronics and Telecom Sector

# Digitalization enabling a “smarter” region



## 5) Suitable approaches to Digital India Programme

- Existing e-Governance initiatives should be revamped to align with the principles of Digital India.
- States should be given flexibility to include state specific projects which are relevant to their socio-economic needs.
- Citizen centric service orientation
  - Interoperability of various Government services
  - Optimal utilization of ICT infrastructure/resources

## Suitable approaches to Digital India Programme(contd..)

- Exercising importance of unique Id(UIDAI-Aadhar)
  - PPPs with adequate management and strategic control
  - Infrastructure as a Service(IaaS)-Cloud usage
  - PPIs- Governed by Payment and Settlement Systems Act-2007 and RBI guidelines on RBI (Ex: Paytm)
- \*\* All required activities to fulfill the contract between public and Government need to be initiated.



## 5) Major Challenges

- Digital Literacy

ASSOCHAM-Delloitte report-Nov 2016, around 95 crore Indians are still not on Internet.

- Creating awareness among common masses

- Connecting Grama Panchayats(2.5 lakhs) is very difficult. Even in pilot project 67% of NOFN points are non-functional

- Internet speed

Akamai Report-Third quarter of 2016, India is at 105<sup>th</sup> position and lowest in Asia Pacific region.

## Major Challenges(Contd..)

- Taxation and Regulatory guidelines

Ex: Lack of clarity in FDIs – E-Commerce

- Slow and delayed infrastructure development

ASSOCHAM-Delloit report- 80 Lakh hotspots are needed.  
But, now we have only 31000 hotspots.

- Private participation in Government projects is poor in India because of long and regulatory process

- Many requests/proposals issued by the Government are not picked up by the Private organizations since they are **commercially not feasible.**

## Major Challenges(Contd..)

- Wide digital divide between urban and rural India.
- Non availability of digital services in local language is a great barrier(1600+ languages).
- Fear of cyber crime and breach of privacy  
Strong policy is required. By 2025, we require 10L cyber security professionals, but, we have only 62000 at present. (What is the role of CERT ?)
- Standardization of Internet protocols as they are varied from state to state depending on the H/W and S/W used.

## Major Challenges(Contd..)

- Inter departmental coordination is to be strengthened
- Huge Capital Cost
  - Fruits of investment will be received only after few years.
- Compatibility with Centre and State database
  - Ex: Some times, we are facing problem with Aadhar information mismatch.
- Net Neutrality – All content should be equally treated by service providers and Government.
- Changing the mindset of the people

## 6) Possible Solutions/Suggestions

- \* Digital India campaign can not be successful on its own. Policy changes are needed to make it a reality.
- Digital literacy and people should know how to secure their online data.
- Massive awareness program is required on uses of Internet.
- Digital divide needs to be addressed
- Content and service partnerships with telecom companies and other firms are to be established
- PPP mode of infrastructure development
- Maximum connectivity with minimum risks

## Possible Solutions/Suggestions(Contd..)

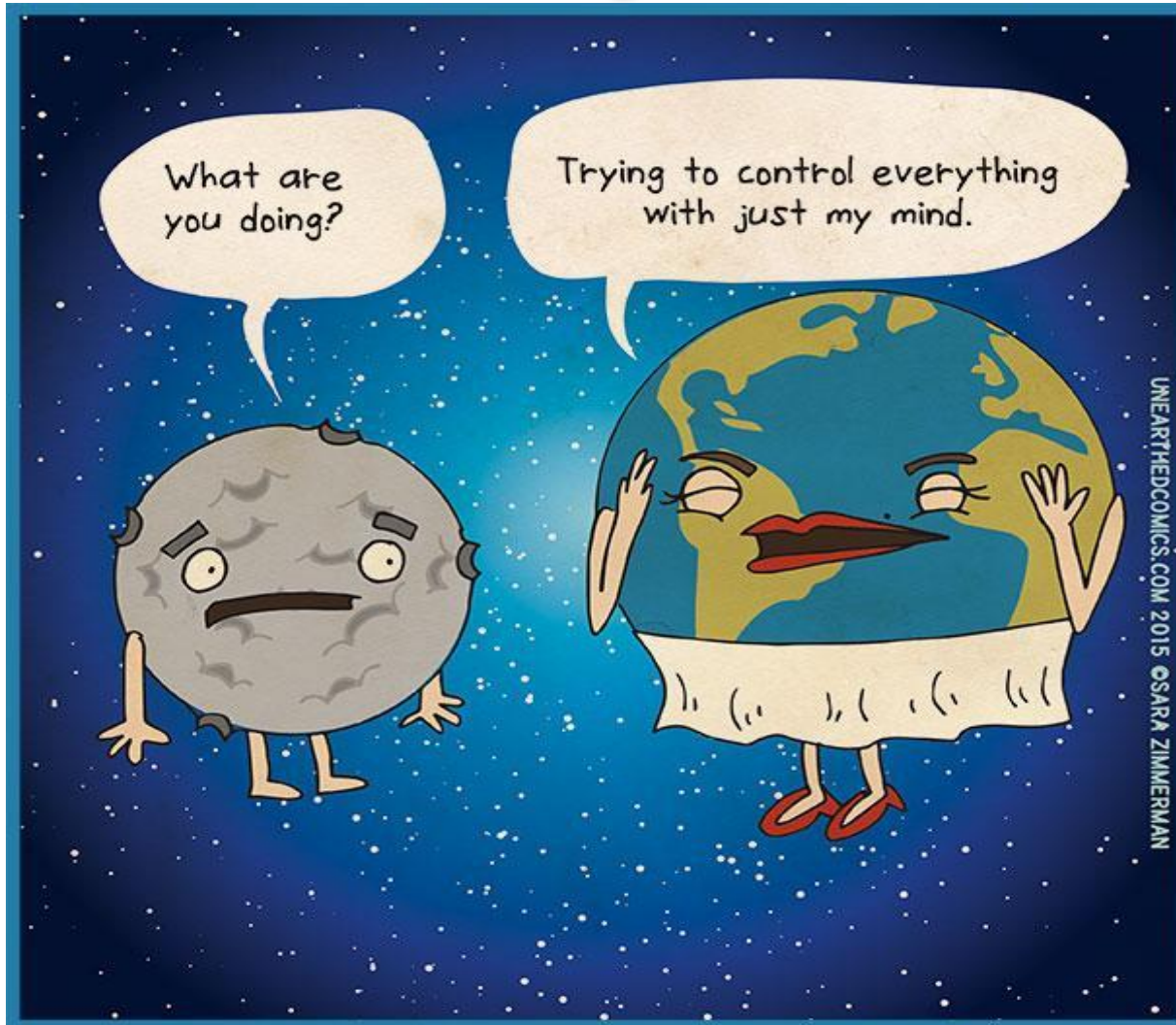
- Private sector should be encouraged to develop infrastructure in rural and remote areas.

**Liberal taxation and quicker clearance of projects**

- Introduction of Cyber security courses at UG and PG levels of education and required training programmes need to be organized
- Amendments of legislation towards the growth of technology in India.

**\*\* Change is inevitable. Hence, every one should be mentally prepared to face the challenges.**

# Thank you all



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