Research Article

Digitalization: Structure and challenges

Dr. Lavlesh Srivastava
Department of Commerce, P.P.N. College Kanpur U.P.

Abstract

Digitalization of India is a campaign launched by government of India. This programme ensure that government services are made available to citizens electronically by improving online infrastructure and by increasing internet connectivity or by making the country digitally empower in the field of Technology. The programme comprises of various initiatives, each targeted to prepare India for becoming a knowledge economy and for bringing good governance to citizens through synchronised and coordinated engagement of the entire government.

Keywords: Finance, Accounting, Digitalization, Online infrastructure

Introduction

There are many roadblocks in the way of its successful implementation like is telling illiteracy, poor infrastructure, cybercrime, mind set of people, proper policy making, lack of co-ordination between departments, low internet speed. It requires a lot of efforts and dedication from all departments of government as well as private sector. If implemented properly, it will open various new opportunities for the citizens of country.

Digital India means removing manual efforts in India. (1) This will result in transparency between goods/services provide rand consumer. This does not mean reducing employment, although as manual efforts will decrease, employment will affect but new jobs would also be generated by digital India.

The campaign was started by our PM in 2015 with prior objective of connecting People digitally with the new transparent and responsive government like for example Railway computer in action, Land Record computerization, providing digital literacy, availability of speed internet, mobile phone and bank account enabling in digital space, providing services in online platform etc. (2)

The vision of digital India programme also aims at inclusive growth in areas of electronic services, products, manufacturing job opportunities etc. The vision of digital India is centred on three key areas-

1. **Digital Infrastructures a utility to every citizen** - The digital infrastructure entails sufficient availability of bandwidth for data movement until the last Mile and unequally big virtual space for storing such data securely and strategically especially in vast country. Providing mobile phone and bank account
enabling citizen participation in digital and financial space.

2. **Governance and services on demand** - single window access to all persons by seamlessly integrating departments or jurisdictions; availability of government services in online and mobile platforms, government services to be digitally transformed for improving ease of doing business, making financial transactions above threshold, electronic and cashless.

3. **Digital empowerment of citizens** - To empower citizen through Universal digital literacy. All digital resources Universal accessible; all government documents/certificates to be available on the cloud; availability of digital resources/services in Indian languages; collaborative digital platforms for participative governance.

**Nine key initiatives under digital India scheme**. Under digital India program 9 key initiatives are in progress, which are as follows-

1. **Broadband Highways** - The aim is to cover 250000 village Panchayats under National Optical Fibre Network (NOFN) by December 2016. Nationwide internet infrastructure (NII) would integrate the network and cloud infrastructure in the country to provide high speed connectivity and cloud platform to various government departments up to the panchayat level.

2. **Universal Access to Mobile Connectivity** - The aim is to increase network penetration and to provide mobile connectivity to 44000 villages by 2018 with investment of RS 16000.

3. **Information** for All My Gov.in is a website launched by the government to facilitate a 2-way communication between citizens and the government. It is a medium to exchange ideas or suggestion with government. The citizen would have open access to information through open data platform.

4. **IT for Jobs** The aim is to train 10 million people in towns and villages for IT sector jobs in five years. It also aims to provide training to three lakh service delivery agents as part of skill development to run viable businesses delivering IT services. It also focuses on training of five lakh Rural Workforce on Telecom and Telecom related services and setting up of BPOs in each North-eastern state.

5. **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.

6. **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.

7. **e-Kranti** - The aim is electronic delivery of services be it education, agriculture, health, justice or financial inclusion.

8. **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.

9. 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.

Digital India will raise India at new level of height. Since after digitalization most of the thing will be online, will reduced direct involvement of people in almost every field such that banking sector, and almost all government official which in then will reduce corruption. (3)

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. But to implement this scheme is a great challenge before the government. More than 3 years has been passed since digital India mission has been announced but it is facing multiple challenges in successful implementation. Few of the challenges are-

1. High level of digital illiteracy-
Digital illiteracy is the biggest challenge in the success of digital India program. Digital illiteracy is prevalent in most of the towns and villages in India, cities have opted digitalization but limited to certain extent. Low digital literacy is key hindrance in adaptation of Technologies. Full fledged digitalization is cashless transaction on daily basis, use of internet services to get government certificates. This requires administration changes and change in public mentality. According to ASSOCHAM-Deloitte report on digital India, November 2016, around 950 million Indians are still not on internet. So improving It literacy is great task. We need to spread digital literacy in rural India. Out of 168 million rural households, as many as 120 million households do not have computers and unlikely to have digital illiterate persons. Our finance minister said we now plan to launch a new digital literacy missionscheme for rural India to cover around 60 million additional households within the next three years. The Government of India along with NASSCOM and the private sectors have joined hands to form the national digital literacy mission (NDLM).

2. Connectivity- It is Mammoth task to have connectivity with each and every village, town and city. Connecting 250000 Gram Panchayats through National Optical Fibre is not an easy task, It will require a lot of efforts and dedication from BSNL, the Nodal agency for laying down the cable; According to a joint report of ASSOCHAM-Deloitte India needs over 80 lacs hotspots as against the availability of about 31000 hotspots at present to reach the global level of one Wi-Fi hotspot penetration every 150 people. “For digital technology to be accessible to every citizen, significant efforts are needed to customise apps and services to Cater to local needs. Finding vendors who can provide such applications has become a challenge” the report Pointed out. Less
than 20% of people in India use the internet (compared to more than 85% in America and 48% in China) despite India being a global leader in information technology. This digital divide is mainly due to lack of internet penetration into the rural interiors of the country where two thirds of the total population of the country resides.

The national Optical Fibre network project, initiated in 2011, envisaged providing high speed broadband connectivity to 200000 Gram Panchayats by 2013. But as it generally happens in India, the project got off to a very slow start and missed it deadline by light years. With increased connectivity and greater access to information, more and more people would be able to enjoy the fruits of development in the country.

3. **Changing the mind set of people** - Making digital India scheme known and creating awareness among common masses about its benefits is also a great challenge. People are accustomed with years of same of practice that they are not ready to change

4. **Cyber crime** - Fear of cyber crime and breach of privacy has been deterrent in adoption of digital Technologies. Most of the technology including cyber security tools are imported. We do not have requisites skills to inspect these for hidden malwares. We have no top level experts for these high ends jobs at present. we need a strong anti cybercrime team which maintains the database and protects it round the clock. According to NASSCOM India needs 1 million trained cyber security professionals by 2025 the current estimate number is 62000. Security of data is very important and data vulnerability is big issue specially in financial transactions.

5. **Lack of High speed internet** - A very important factor under the digital India programme is high speed of internet as a core utility to facilitate online delivery of various services. India has low internet speed. According to 3rd quarter 2016 Akamai report on internet speed, India is at the 105th position in the world in average internet speed.

6. **Lack of indigenous instruments** - Almost the entire requirement of hardware in our country is currently being met through imports. With increasing focus being given to the development of smart cities and IT devices, it’s essential that indigenous manufacturing capabilities get enhanced.

7. **According to ASSOCHAM** - deloitte reports-2016 currently over 55000 villages remain deprived of mobile connectivity because providing mobile connectivity in such location is not commercially viable for services providers many request proposals issued by government are not picked up by component private sector organisations since they are not commercially viable.

The biggest challenge faced by Digital India program is the slow/delayed infrastructure development. Spectrum availability in India metros is about a tenth of the same in cities in developed countries.

This has put a major roadblock in providing high speed Data Services. Reports suggest that as recently as 2014 nearly 70% of Indian consumers indicated that lack of awareness was the main reason
for not using internet services with proliferation of cloud-based services like Digilocker, data security has emerged as a major challenge.

The recent data breach in August 2016, in which debit card data for more than 3.2 million subscribers was stolen highlights the importance of implementing foolproof security systems, adds the study. Development of digital infrastructure, the following measures should be considered as uniform policies for deploying Telecom and optic fibre infrastructure

**Conclusion**

The vision of digital India is Grand. It is a huge step towards building a truly empowered Nation. Information technology Revolution has transformed the standing of India in global community of nations over the last two decades. However the goal is still far away since most of the 9 pillars of digital India mission are facing serious challenges in implementation. (4)

Unless the involvement of citizen is ensured the gains of digital India would remain Limited to few. As a citizen we can do the following to make the digital India project a success. Educate people around us about the initiative so that more and more people come forward and participate in it. People must be made aware that they need not stand in queue for hours in front of government offices when most of the government services can be carried out with the click of a button. A significant change that has happened over the last few years globally and in a more pronounced manner in our country has been the reach of mobile devices that are smart, easy to use and now with local language transliterations tools legible to even the so-called illiterates. (5)

In fact we all should be mentally prepared for the change and be ready to face the challenges in implementing this policy, only then it would be possible to make this vision a reality.

**References**

4. https://en.m.wikipedia.org/wiki/Digital_India