Digital India New way of Innovating India Digitally
Prof. Maheshkumar Shankar Kedar
Sinhgad Institute of Management & Research Center, Wadgaon, Pune.

Abstract:-
Digital India is an ambitious programme of the Government of India with a vision to transform India into a digitally empowered society. The focus areas are: creation of a countrywide digital infrastructure as a utility for every citizen, ensuring governance and services on demand and digital empowerment of citizens. The Digital India Programme is a mission to prepare India for a knowledge future by making technology central to enabling change. The Digital India programme rests on nine pillars: 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. From enabling storage of legacy documents in digital format to providing a unified platform for all scholarships provided by the Government of India, from facilitating online registration and obtaining appointments in hospitals to propagating widespread use of digital signatures, from setting up of a National Centre for Flexible Electronics to creating an Electronic Development Fund as a Fund of Funds, from creating the fibre optics backbone infrastructure across the country to moving ahead with the Next-Generation Network that heralds the convergence of voice, data and multi-media services. Digital India is the most comprehensive programme under implementation, de-Signed to harness the immense potential of Digital to propel India forward. This paper explores Innovativeness of Digital India.

Keywords: - Digital India, Digitally Empowered Society, Digital Infrastructure, Broadband Highways, E-Governance, E-Kranti, Electronic Development Fund.

Introduction:-
Technology transforms people’s lives. It empowers and connects. From mitigating poverty to simplifying processes, ending corruption to providing better services, vitality of technology is everywhere. It is an important instrument of human progress.

Narendra Modi (Prime Minister)

Digital India is an initiative of Government of India to integrate the government departments and the people of India. It aims at ensuring the government services are made available to citizens electronically by reducing paperwork. The initiative also includes plan to connect rural areas with high-speed internet networks. Digital India has three core components. These include:

- The creation of digital infrastructure
- Delivering services digitally
- Digital literacy.

The project is slated for completion by 2019. A two-way platform will be created where both the service providers and the consumers stand to benefit. The scheme will be monitored and controlled by the Digital India Advisory group which will be chaired by the Ministry of Communications and IT. It will be an inter-ministerial initiative where all ministries and departments shall offer their own services to the public Healthcare, Education, Judicial services etc. The Public-private-partnership model shall be adopted selectively. In addition, there are
plans to restructure the National Informatics Centre. This project is one among the top priority projects of the Modi Administration.

The initiative is commendable and deserves full support of all stakeholders. However, the initiative also lacks many crucial components including lack of legal framework, absence of privacy and data protection laws, civil liberties abuse possibilities, lack of parliamentary oversight for e-surveillance in India, lack of intelligence related reforms in India, insecure Indian cyberspace, etc. These issues have to be managed first before introducing Digital India initiative in India. Digital India project is worth exploring and implementation despite its shortcomings that can be rectified before its implementation.

**Major Sector under Digital India Programme**

**Communication Infrastructure and Services**

- BharatNet
- BSNL Next Generation Network
- BSNL Wi-Fi Services

**Products**

- Digital Locker
- National Scholarships Portal
- e-Hospital/ORS
- e-Sign
- Digitize India Platform (DIP)

**Portals / Apps**

- Digital India Portal, Mobile App & Book
- MyGov Mobile App
- Swachh Bharat Mission App

**Institutions and Policies**

- National Centre for Flexible Electronics
- Centre of Excellence for Internet of Things (IoT)
- e-Governance Policy Initiatives Under Digital India
- Electronics Development Fund (EDP) Policy

**Indian Railway**

- E Ticket
- SMS Service
- E Catering
- Online Reservation System
- State Transport Service
- Cab Service
- BUS Ticket
- Mobile Recharge

Many more………………..

**Challenges before Digital India**

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 DI and is expected to be completed by 2017.
The Digital India initiative is a promising initiative of the Indian Government. Many companies have shown their interest in this project. It is also believed that E-commerce would facilitate the Digital India project. However, it is not free from challenges and legal hurdles. Some believe that Digital India cannot be successful till mandatory e-governance services in India are introduced. Having incomplete implementation of the National e-Governance Plan of India will only affect the success of the Digital India project. India has poor regulations in the field of privacy protection, data protection, cyber law, telegraph, e-governance, e-commerce, etc. Further, many legal experts believe that e-governance and DI without cyber security is useless. The cyber security trends in India have exposed the vulnerability of Indian cyberspace. Even the National Cyber Security Policy 2013 has not been implemented till now. In these circumstances, Critical infrastructure protection would be a really tough task to manage for the Indian Government. The project also lacks the concept of proper E-waste management.

Related Initiatives
The DI initiative must be read along with the Draft Internet of Things (IoT) Policy of India. However, the problems, the challenges and the deficiencies in the Indian legal structure remain the same.

Civil Liberties Issues
Initiatives like DI and IoT would be required to comply with the Civil liberties requirements in general and civil liberties protection in cyberspace in particular. India has not given any importance to privacy and privacy laws so far. Indian government indulges into Mass surveillance in India and projects like Aadhaar, Central Monitoring System, Netra, NATGRID, etc. are operating without any law and parliamentary oversight. The intelligence agencies of India like Intelligence Bureau and law enforcement agencies like Central Bureau of Investigation are operating for decades without any law and parliamentary scrutiny. DI and IoT would further strengthen the mass surveillance activities of the Indian Government if proper procedural safeguards are not implemented and practiced.

Status of Digital India
Digital India is in the progress mode till the month of November 2014. The Apex Committee is going to analyze its progress very soon. Media reports have also hinted at development of policies for Digital India very soon. If correctly implemented, Digital India project can change the way public services would be delivered in India in the near future.

As the part of "Digital India" Indian government planned to launch Botnet cleaning centers. Government also launched a digital locker under the name "Digi Locker". Modi appointed Kruti Tiwari as brand ambassador for Digital India.

Digital India Week
At the launch ceremony of Digital India Week by Prime Minister Narendra Modi, top CEOs from India and abroad committed to invest Rs 4.5 lakh crore towards this initiative. The CEOs said the investments would be utilities towards making smartphones and internet devices at an affordable price in India which would help generate jobs in India as well as reduce the cost of importing them from abroad. 9 Key points of Digital India Programme are as follow

- 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
Reliance Industries Chairman Mukesh Ambani said his company would invest Rs 2.5 lakh crore across different Digital India heads, which have the potential to create employment for over five lakh people. He also announced setting up of the 'Jio Digital India Start Up Fund' to encourage young entrepreneurs who are setting up businesses focused around the Digital India initiative.

**Early Harvest Programmes**

Early Harvest Programme basically consists of those projects which are to be implemented within short timeline. The projects under the Early Harvest Programme are as follows:

**IT Platform for Messages**: A mass messaging application has been developed by DeitY that will cover elected representatives and all Government employees. Over 1.36 crore mobiles and 22 lakh emails are part of the database. The portal was released on 15th August 2014. Data collection and data sanitization are ongoing processes. Government Greetings to be e-Greetings

**Government Greetings to be e-Greetings**: A basket of e-Greeting templates have been made available. Crowd sourcing of e-Greetings through the MyGov platform has been ensured. Crowd sourcing has also been used to create designs for Independence Day, Teachers’ Day and Gandhi Jayanti greetings. E-Greetings portal has been made live on 14th August 2014.

**Biometric attendance**: It will cover all Central Government offices in Delhi to begin with. Over 40,000 Government employees from 150 organisations have already registered on the common Bio-metric attendance portal at http://attendance.gov.in. (link is external) Over 1000 bio-metric attendance terminals are under installation at entry gates of various Central Government buildings which will be connected with Wi-Fi Access points and mobile connectivity. Government employees will be able to mark their attendance from any of the central Government offices in Delhi.

**Wi-Fi in All Universities**: All universities on the National Knowledge Network (NKN) shall be covered under this scheme. Ministry of Human Resource Development (MHRD) is the nodal ministry for implementing this scheme. Secure Email within Government

**Secure Email within Government**: Email would be the primary mode of communication within government. The government e-mail infrastructure would be suitably enhanced and upgraded. Up-gradation of the infrastructure under Phase-I for 10 lakh employees has already been completed. Under Phase-II, infrastructure would be further upgraded to cover 50 lakh employees by March 2015 at a cost of Rs.98 Cr. DeitY is the nodal department for this scheme.

**Digital India Week**

Digital India, a flagship Programme of the Government of India, aims to “transform India into a digitally empowered society and knowledge economy”. This Programme centers on three key vision areas of “Infrastructure as a Utility to Every Citizen”, “Governance and Services on Demand” and “Digital Empowerment of Citizens”. The Digital India Week is a mega event planned for national launch of the Digital India Programme. This national event will have participation of all Central Ministries/Departments and all States/UTs.

**Vision of Digital India Week**

To formally launch the Programme, a one week Programme in the coming month comprising of awareness and communication events will be ear-marked as the **Digital India Week** to

- Effectively deliver the message of Digital India
- Expand visibility of Digital India by way of effective branding across various platforms with special focus on new media and public interface touch points.
To establish credibility of message by ensuring value proposition in terms of demonstration of service delivery to citizens by converging existing and new services, usage of digital infrastructure under Digital India

- Sustained connection with people by identifying and engaging serious stakeholders through ICT platform and increasing the demand for e-services.
- Communication in vernacular languages as far as possible

**Digital India Week Objectives**

- Inform, educate and engage with citizens through organization of events at large number of Digital Points of Presence such as CSCs/ Post Offices, Schools, Gram Panchayats etc
- Connect all citizens through Digital Media campaigns and events
- Inform all about the vision, services and benefits of the Program
- Popularize and expand the reach of existing e-services, plan and launch new services
- Educate citizens on functional digital literacy, cyber security, cyber hygiene, ensure better utilization of Digital infrastructure during the DI Week and beyond
- Incentivize, motivate and connect citizens with the Digital India Program.

Digital Technologies which include Cloud Computing and Mobile Applications have emerged as catalysts for rapid economic growth and citizen empowerment across the globe. Digital technologies are being increasingly used by us in everyday lives from retail stores to government offices. They help us to connect with each other and also to share information on issues and concerns faced by us. In some cases they also enable resolution of those issues in near real time.

The objective of the Digital India Group is to come out with innovative ideas and practical solutions to realise Hon’ble Prime Minister Narendra Modi’s vision of a digital India. Prime Minister Modi envisions transforming our nation and creating opportunities for all citizens by harnessing digital technologies. His vision is to empower every citizen with access to digital services, knowledge and information. This Group will come up with policies and best practices from around the world to make this vision of a digital India a reality.

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.

**Vision of Digital India**

The vision of Digital India programme is to transform India into a digitally empowered society and knowledge economy.

**Vision Areas of Digital India**

The Digital India programme is centered on three key vision areas:

- **Digital Infrastructure as a Core Utility to Every Citizen**
Governance and Services on Demand

Digital Empowerment of Citizens

E-governance initiatives in India took a broader dimension in the mid-1990s for wider sectorial 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.

e-Kranti: National e-Governance Plan 2.0

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”.


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, eBhasha...etc have been added as new MMPs under e-Kranti.

Approach and Methodology for Digital India Programme are:

i. Ministries / Departments / States would fully leverage the Common and Support ICT Infrastructure established by GoI. DeitY would also evolve/ lay down standards and policy guidelines, provide technical and handholding support, undertake capacity building, R&D, etc.

ii. The existing/ ongoing e-Governance initiatives would be suitably revamped to align them with the principles of Digital India. Scope enhancement, Process Reengineering, use of integrated & interoperable systems and deployment of emerging technologies like cloud & mobile would be undertaken to enhance the delivery of Government services to citizens.
iii. States would be given flexibility to identify for inclusion additional state-specific projects, which are relevant for their socio-economic needs.

iv. e-Governance would be promoted through a centralised initiative to the extent necessary, to ensure citizen centric service orientation, interoperability of various e-Governance applications and optimal utilisation of ICT infrastructure/resources, while adopting a decentralised implementation model.

v. Successes would be identified and their replication promoted proactively with the required productization and customisation wherever needed.

vi. Public Private Partnerships would be preferred wherever feasible to implement e-Governance projects with adequate management and strategic control.

vii. Adoption of Unique ID would be promoted to facilitate identification, authentication and delivery of benefits.

viii. Restructuring of NIC would be undertaken to strengthen the IT support to all government departments at Centre and State levels.

ix. The positions of Chief Information Officers (CIO) would be created in at least 10 key Ministries so that various e-Governance projects could be designed, developed and implemented faster. CIO positions will be at Additional Secretary/Joint Secretary level with over-riding powers on IT in the respective Ministry.

Programme Management Structure for Digital India Programme

The Programme management structure for the Digital India programme as endorsed by the Union Cabinet is as follows:

A. For effective management of the Digital India programme, the programme management structure would consist of a Monitoring Committee on Digital India headed by the Prime Minister, a Digital India Advisory Group chaired by the Minister of Communications and IT and an Apex Committee chaired by the Cabinet Secretary. The structure has the needed secretarial/monitoring/technical support and appropriate decentralization of power and responsibility to ensure effective execution of the various projects/components by the implementing departments/teams.

B. Key components of the Programme Management structure would be as follows:

a. Cabinet Committee on Economic Affairs (CCEA) for programme level policy decisions.

b. A Monitoring Committee on Digital India under the Chairpersonship of Prime Minister which will be constituted with representation drawn from relevant Ministries/Departments to provide leadership, prescribe deliverables and milestones, and monitor periodically the implementation of the Digital India Programme.

c. A Digital India Advisory Group headed by the Minister of Communications and IT to solicit views of external stakeholders and to provide inputs to the Monitoring Committee on Digital India, advise the Government on policy issues and strategic interventions necessary for accelerating the implementation of the Digital India Programme across Central and State Government Ministries/Departments. The composition of the Advisory Group would include representation from the Planning Commission and 8 to 9 representatives from States/UTs and other Line Ministries/Departments on a rotational basis.

d. An Apex Committee headed by the Cabinet Secretary would be overseeing the programme and providing policy and strategic directions for its implementation.
and resolving inter-ministerial issues. In addition it would harmonize and integrate diverse initiatives and aspects related to integration of services, end to end process re-engineering and service levels of MMPs and other initiatives under the Digital India Programme, wherever required.

e. **Expenditure Finance Committee (EFC)/Committee on Non Plan Expenditure (CNE)** to financially appraise/ approve projects as per existing delegation of financial powers. The EFC/ CNE headed by Secretary Expenditure would also be recommending to the CCEA the manner in which MMPs/ eGovernance initiatives are to be implemented, as well as the financial terms of participation for States. A representative of the Planning Commission would also be included in both the EFC and CNE.

f. A **Council of Mission Leaders on Digital India** headed by Secretary, DeitY would be established as a platform to share the best practices in various existing and new eGov initiatives under Digital India and also to sensitize various government departments about ICT projects of DeitY. While the inter-departmental, integration and interoperable issues of integrated projects / eGovernance initiatives would be resolved by the Apex Committee on Digital India headed by Cabinet Secretary, the technical issues of integrated projects would be resolved by the Council of Mission Leaders.

g. Further, considering the scope of the Digital India Programme and the need to look at issues such as overall technology architecture, framework, standards, security policy, funding strategy, service delivery mechanism, sharing of common infrastructure etc. at a programme level, it is proposed that the technical appraisal of all Digital India projects be done by DeitY, prior to a project being placed before the EFC/ CNE. This appraisal would cover issues relating to inclusion of adoption of Standards, utilization of Cloud and mobile platforms, consideration of security aspects, etc. The Secretary, DeitY or his representative may also be included as a standing special invitee to all EFC/CNE meetings, which are appraising/approving MMPs. It may be mentioned that the DeitY has already set up a Programme Management Unit, namely National eGovernance Division (NeGD) to provide support to departments in conceptualizing, developing, appraising, implementing and monitoring respective MMPs / eGovernance Initiatives.

h. Institutional mechanism of Digital India at State level would be headed by **State Committee on Digital India** by the Chief Minister. **State/UT Apex Committees on Digital India** headed by Chief Secretaries would be constituted at State/UT level to allocate required resources, set priority amongst projects and resolve inter-departmental issues at State level.

C. For effective monitoring of Digital India, usage of Project Management Information System would be mandatory in each new and existing Mission Mode Projects to capture the real or near real time details about the progress of the project. This tool should be proficient enough to capture the parameters for each stage of project namely, conceptualization and development, implementation and post implementation. The parameters could be decided in consultation with various line Ministries / Departments and DeitY.
D. Since the “e-Kranti: National eGovernance Plan 2.0” is already integrated with Digital India Programme, the existing programme management structure established for National eGovernance Plan at both national and state level has also been decided to be integrated appropriately with the programme management structure being envisaged for Digital India Programme at national and State/UT level.

Institutional Mechanism at National Level

Current Status
The Apex Committee on the Digital India programme headed by the Cabinet Secretary and the Digital India Advisory Group chaired by the Minister of Communications and Information Technology has been constituted.
The first meeting of the Apex Committee on the Digital India programme was held on 26.11.2014. The second meeting of the Apex Committee on the Digital India programme was held on 09.02.2015. The actions on decisions made by the Apex Committee are being worked out.

Summary:-
Digital India is innovative and technological, as India is developing nation becoming world leader in various sectors. Our Prime minister wanted it to make digital. The creation of digital infrastructure of nation. Delivering services digitally to all people of nation. Creating Digital literacy. Aim of creating Digitally Empowered Society, Digital Infrastructure, Broadband Highways, E-Governance, E-Kranti, Electronic Development Fun etc....... Its dream of every Indian that nation should become powerful in all aspect. This is the dream of first person of India i.e. Mr. Narendra Modi and all citizen of nation. Its platform for the growth and development of nation and its people digitally.
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