
UNIT 4 E-GOVERNANCE

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4.0 OBJECTIVES

After studying this unit, you should be able to:

- understand the fundamentals of e-government and e-governance;
- differentiate between e-government, e-governance and e-commerce;
- appreciate the advantages of employing digital technologies in governance;
- trace the evolution of application of digital technologies in governance by applying Gartner's evolution model of e-governance;

- list the chronological growth of application of digital technologies in governance; and
- appreciate some of the latest digital initiatives by Government of India.

4.1 INTRODUCTION

The introduction of new information and communication technologies (also called digital technologies) and changing demographics and political requirements are trying to redefine the role of governments and public sector organizations. To better serve the citizens by fulfilling their requirements that they represent, governments and the public sector in general, are looking for more competent and effective ways to respond to newer challenges of public service delivery and governance. The global shifts towards increased positioning of information communication technologies by the government and related public agencies became most visible in early 1990s, especially with the arrival of user-friendly World Wide Web (www) of Internet. This led to the popularity of the terms ‘e-government’ and subsequently ‘e-governance’.

4.2 MEANING OF E-GOVERNANCE

The term ‘e-Government’ (for electronic government) could formally be defined as “the use of information and communication technologies including Internet, as a tool to be a better government”. For example, applying online for public service such as applying for a passport / *rashan* card / railway ticket (or) payment of public utilities using its website/ respective app, digital payment of public utilities such as water and electricity. E-Government also encompasses the automation of processes in the public sector in general, for example, creation and implementation of digital identity cards that speed up citizens’ identification processes.

All these public services are made available to the citizens by creating a dedicated website as well as a mobile app and could be accessed by citizens using their own digital devices, desktop, laptop, mobile phones and / or using established public kiosks including Common Service Centres (CSCs).

There is another similar word, ‘e-governance’. E-Governance is a bigger concept than e-government. It refers to the digital means of giving power to democracy and supporting development. It is not merely about application of digital technologies to the functioning of government, but it is also about implementation of electronic/digital means the way citizens relate to governments and to each other.

It is important to mention to the reader here that despite this fine conceptual difference between both the terms, ‘e-government’ and ‘e-governance’, majority of the generic references to both the terms has been found to be interchangeable. However, in this unit, we would differentiate this clearly in our next section.

4.3 DIFFERENCES BETWEEN E-GOVERNMENT AND E-GOVERNANCE

As already suggested in the previous section, the terms ‘e-governance’ and ‘e-government’ are used interchangeably, but e-governance has a greater scope and connotation than e-government. e-Government mainly refers to the automation of services managed by the government, and delivery of public services and administrative information to the citizens using information and communication technologies (ICTs) including computers, mobile phones, information kiosks, Internet, community radio, digital TVs etc. Examples of e-government include online availability and submission of application forms for various public services such as grievance redressal, passports, ration cards, as well as facilitating electronic utility payments and access to land records.

e-Governance, on the other hand, enables new ways of involving citizens and communities in online debates on issues of public concern. Online polling, digital democracy and e-participation are some other applications of e-governance. Therefore, e-governance, refers to all the digital possibilities of engaging, enabling and empowering the citizens so that ‘good governance’ is achieved. It is an exercise to better and efficiently manage affairs of a country at all levels, with equal emphasis on citizen inclusion.

It is because of these sharp differences (Table-4.1) that the word ‘e-governance’ is considered as a bigger concept than ‘e-government’.

Table 4.1: Differences between e-Government and e-Governance

Key Points	e-Government	e-Governance
Objectives	1. e-Government focuses on improving and accelerating administrative efficiency.	1. e-Governance focus on to increase citizens’ interactions within themselves, as well as with government agencies.
Benefits	2.Improving service delivery 3. Increasing Operational Efficiencies by reducing consumer time, efforts and costs. 4. Increasing Outreach of public services	2. Increasing modes of Citizens’ Participation. 3. Improving Public Policy Formulation 4. Redefining Democracy and Communities with citizens’ participation.

4.4 DIFFERENCES BETWEEN E-COMMERCE AND E-GOVERNANCE

The term ‘e-commerce’ denotes the process of buying and selling of products, services, or other commodities using information and communication technologies (ICTs)/ digital technologies. The prime

purpose of implementing e-commerce is to ensure ease of conducting and delivery businesses – making any commercial product / services available to the consumers at their doorsteps and for maximising commercial gains. On the other hand, ‘e-government’ and ‘e-governance’ are primarily focussing on application of ICTs for better public service delivery and for ensuring wider participation of citizens in public affairs. The purpose of implementing digital technologies in public domain is to improve governance processes so that public service delivery is easy, inclusive and responsive and governance becomes transparent and participatory. The motivation, objectives and deliverables etc are very different in both the instances. (Table 4.2).

Table 4.2: Differences between e-Commerce and e-Governance

Elements of Comparison	E-Commerce	E-Governance
Motivation	Make profit	Maximise social utility, create e-participation
	Cost reduction of service delivery	Cost reduction of service delivery
	Automation of internal processes	Automation of internal processes
Objectives	Sale of products and services	Optimisation of services quality to citizens
	Information provision	Information provision
	Online Customer service	Online service to citizens
Priority	Safe & secure transactions	Minimise digital divide
Technology	Internet, Web Based platforms, Back Office Systems	Internet, Web based platforms, back office systems
Decision Making Authority	Centralised	Dispersion of authority
Target Group	customers, potential customers	Any Citizen
Legislation	Freedom	Laws and regulation restrictions and complexity
Services	Primarily transactional	Primarily informational

Source: https://www.researchgate.net/figure/Similarities-and-differences-between-e-commerce-and-e-government_tbl2_265140668

4.5 ADVANTAGES OF EMPLOYING DIGITAL TECHNOLOGIES IN GOVERNANCE

By now, we have already understood that there are several advantages of implementing digital technologies in governance, e-government, and e-governance. World over, countries are embracing digital technologies to increase the efficiency of their internal processes, to deliver better and more integrated services to citizens and businesses, invite citizen and stakeholder participation in planning decisions, improve communication, and sometimes even enhance democratic processes and so on.

Some of the advantages of employing digital technologies in governance are summarised herewith: -

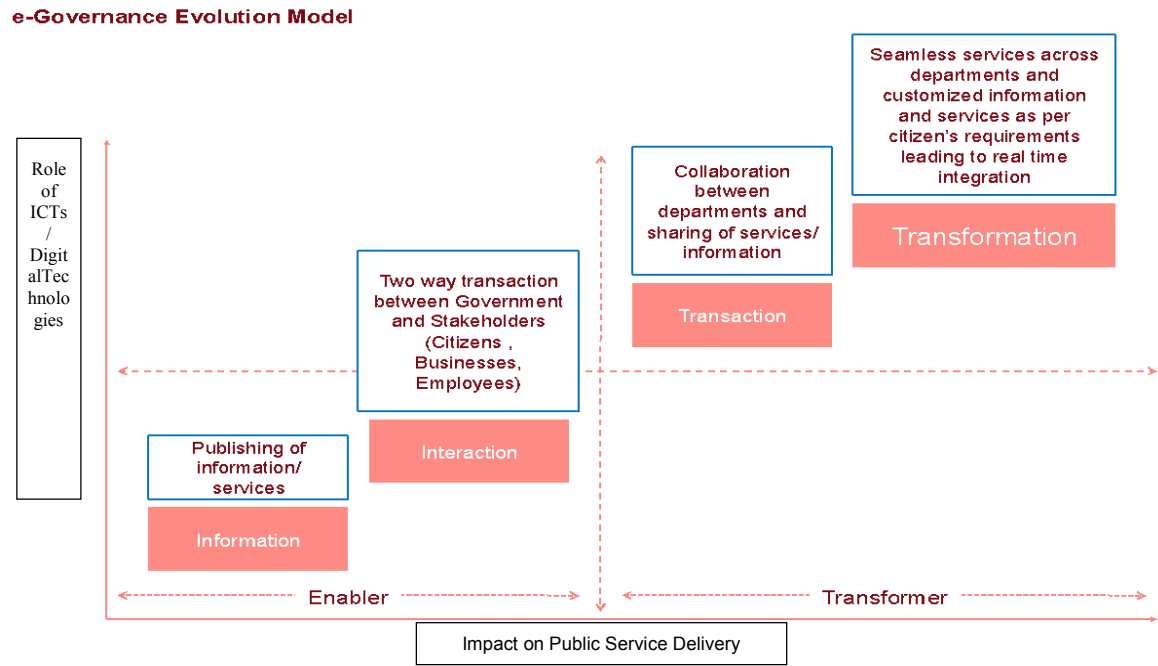
- 1. Fast and convenient service to citizens:** Citizens can have easy and quick access to the related information regarding to all the public services by applying for any service online on web portal/ apps developed by the government. Further he/she can get documents easily in electronic form or hard copy as per the requirement, so there is no more waiting in the long queues. In other words, citizens can take advantage of many other online services just on a click of mouse and the public services are available to them at their doorsteps by minimising their transaction costs and travelling costs.
- 2. Reduction in delays, red tapism, and corruption:** Implementation of e-government and e-governance lowers several other related bureaucratic problems such as long processes, personal grudges of the delivery officers and so on. With implementation of digital technologies, there is improvement in transparency in public processes and clear accountability of the government functionary in charge of that process. It not just fastens the processes but also reduces corruption that could come up in manual processes.
- 3. Effective utilization of resources:** Resource utilization is optimised through effective implementation of digital technologies in public domain due to the speed and efficiency provided by digital technologies. This kind of utilization is not possible with manual paperwork and manual processes, otherwise used in government organisations.
- 4. Enhanced citizen participation:** In a democratic system, citizen participation is one of the key components of decision-making process. The use of Internet based technologies raises the possibility for large-scale citizen participation in policy making process of government, despite the distances and diversity of the population.
- 5. Integration of public services of offered by different departments:** By using digital technologies, different departments and different functions could be connected. This integration of public services offered by state and central government provides ease of access of public services to the citizens.

Indeed, the growth of e-governance and e-government has been one of the most striking and noticeable developments in governance and it would be interesting to understand how different public organisations or even a country evolves from the most basic stage of employing digital technologies in governance to the higher stages. This is explained in the next section by referring to the Gartner's evolution model of e-government.

4.6 GARTNER'S EVOLUTION MODEL OF E-GOVERNANCE

In the year 2000, the Gartner Group Inc presented a conceptual framework to measure the progression of e-government in an organisation in four

critical phases of e-government evolution, viz., information, interactions, transaction and transformation (Figure -4.1).



Source: <https://www.gartner.com/en/doc/3713917-the-gartner-business-value-model-a-framework-for-measuring-business-performance>

Fig 4.1: Gartner’s Model on Evolution of e-Government and e-Governance

- **First Phase- Information:** In the first ‘Information’ phase of governance, information pertaining to various aspects of public service delivery are made available to the public through use of websites, portals etc to all the stakeholders, that is, citizens, businesses and government. This information being reflected on the government website could also be related to the functioning of various government entities, roles and responsibilities, thus making government more transparent and also resulting in convenience to citizens and businesses. This phase has been attained by almost all government entities in our country.
- **Second Phase – Interaction:** In the second phase of ‘Interaction’ there could either be a limited one-way engagement between government (agencies) and citizens or there could also be a vibrant and dynamic two-way exchange between the government (agencies) and the citizens using digital interfaces including a website or mobile app.. As an example of one-way exchange, citizens and the government agencies can exchange emails, download all sorts of forms and applications using a website / app, upload and submit forms using this interface, which work essentially on ‘anywhere, anytime’ basis, consequently saving stakeholders’ time and making life easy. In the second variation (two-way exchange), the citizens could engage in dynamic dialogues with the respective government agency, using the digital interfaces, to know about the status of the reserved ticket, seat in a particular train etc. Therefore, in this phase, a significant part of government processes is done online but the citizens still must visit the relevant government offices for the balance processes may be - payment of fees or

submission of support documents, required to complete the rest of the transaction(s).

- **Third Phase - Transaction:** Any transaction constituting public service delivery where money is involved, becomes a complex process. In the third phase of ‘Transaction’, the financial part could also be undertaken online without the need of a physical visit to the respective government agency. Examples of such transactions are paying utility bills online, all online banking and financial transactions, filing of income or property tax, visa/passport related online services, extension/renewal of licenses and so on.
- **Fourth Phase – Transformation:** In the last phase of Gartner’s model, referred as ‘Transformation’, all the related back-end sections of the entire government department are digitally interconnected so that one virtual counter is available on the website / app to the citizens and businesses to avail all public services. This end-to-end digitilisation of public service delivery requires complete change in the current way of functioning of the various government departments and it also insists liberal use of emerging technologies like Artificial Intelligence / Machine Learning, Internet of Things (IoT), Augmented Reality and so on. Therefore, instead of conventional norm of these departments functioning as silos, these departments are reengineered to function in an integrated, coordinated and are digitised in a seamless manner. This obviously leads to more complexity in implementation of digital technologies but also assures enhanced citizen/business satisfaction.

This four phase Gartner’s model is applicable in not just an organisation but could be equally valid in explaining a country’s evolution of e-government and e-governance.

Check Your Progress A:

- 1) “E-government and E-governance lowers several other related bureaucratic problems.” Comment..

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- 2) Write a short note on first phase of E-Governance.

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3) “E-governance and E-government has been one of the most striking and noticeable developments in governance.” Comment.

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4) Discuss how the use of Internet based technologies raises the possibility for large-scale citizen participation in policy making process of government.

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4.7 E-GOVERNANCE IN INDIA

Over the last two decades, there has been continual development and renewal of strategies and practices surrounding e-governance around the world. In every country governments around the world have embraced new information and communication technologies to increase the efficiency of internal processes, deliver better and more integrated services to citizens and businesses, invite citizen and stakeholder participation in planning decisions, improve communication, and sometimes even enhance democratic processes.

As other countries in the world, in India too digital technologies are becoming the main driving force in every sector of Indian economy. The governments at the National, State, and local levels, are increasingly adopting e-government technologies in public service delivery.

Most of the past or ongoing e-governance initiatives have been undertaken as part of the conventional planning and implementation framework. However, owing to the federal structure of governance in the country, leads to the complex interplay of situation, actors and processes influenced by multiple organizations operating at different layers.

In view of this, let us try to understand the journey of the country in e-government and e-governance spaces, by covering various milestones, explained in two parts – firstly from the year 1970s to 1990s when the basic digital infrastructure and the related organisations were established and then 1990s onwards when the country achieved major software and legal steps.

4.7.1 From 1970s to 1990s - Establishment of IT based Organisations

1. **Establishment of DoE in 1970** - First and foremost, the key milestone in this journey has been the establishment of Department of Electronics (DoE); understanding the increasing importance of electronics, the Government of India had established DoE in the year 1970 for better governance of technology implementation in the country.
2. **Establishment of NIC in 1977** - The successive formation of the National Informatics centre (NIC) in the year 1977 on the recommendations of Planning Commission of Government of India was the next major step in India as it brought 'information' into the national priorities.
3. **Use of Office Automation Software in Government Offices from 1977s- 1980s**
 - By the next decade, use of computers had spread to significant number of government offices but primarily for 'word processing'.
 - Slowly and gradually, by early 1980s, with the increasing use of database software used for storage and retrieval of data, and with the development of networking technology, many government departments had started using IT for other government to government related activities such as payroll processing or inventory management.
4. **Establishment of NICNET and VSAT in 1987** : The main thrust for implementation of digital technologies in governance was spurred by the launching of NICNET in 1987 – the national satellite-based computer network. MeitY (erstwhile DeitY; then the Department of Electronics) launched the national satellite-based computer network NICNET and installed V-SAT terminal at almost every district of the country. NICNET supported district information system of the National Informatics Centre programme to computerize all district offices in the country for which free hardware and software was offered to the state governments. For the next few years in 1980s and early 1990s, as the tele-connectivity and Internet connectivity progressed, a large number of e-government initiatives such as maintenance of land records, utility payments etc started mushrooming (but in isolation with each other), both at the central and state levels. (we would cover this aspect in details in the subsequent subsection)
5. **Establishment of DISNIC**: This was continued with the launch of the District Information System of the National Informatics centre (DISNIC) program to computerize and digitalize all the districts and their offices in the country for which free hardware and software was facilitated to make governance in the district easier and it was provided to the State Governments as well.
6. **Extension of NICNET in 1990s** - Also, NICNET was extended through the State capitals to all the district headquarters by 1990.

4.7.2 Growth of e-governance in India from 1990s to till Now

- 1990s: Railways & other initiatives:** It was in early 1990s, that the application of information communication technologies had started in government workplaces - both for internal automation as well as for public service delivery. Online railway reservation system (irctc.co.in) became the most prominent initiatives.
- Establishment of NTF :** A National Task Force (NTF) on Information Technology and Software Development was also constituted in May 1998. Information Technology was now being recognized as the frontier area of knowledge and Government of India (GoI) took a conscious decision to utilize ICT as an enabling tool for all concerns confronting government functioning.

After we have traced the genesis of some of the important milestones related to the establishment of digital infrastructure in the country, it is equally relevant to trace the growth of digital initiatives and related software advants of Government of India in public domain, particularly from 1990 onwards, in the subsequent subsection (Fig- 4.2).

- Year 2000- Information Technology Act:** In the year 2000, Indian government announced the 'IT Act 2000' of India that provided a legal framework to the digital initiatives in the country.

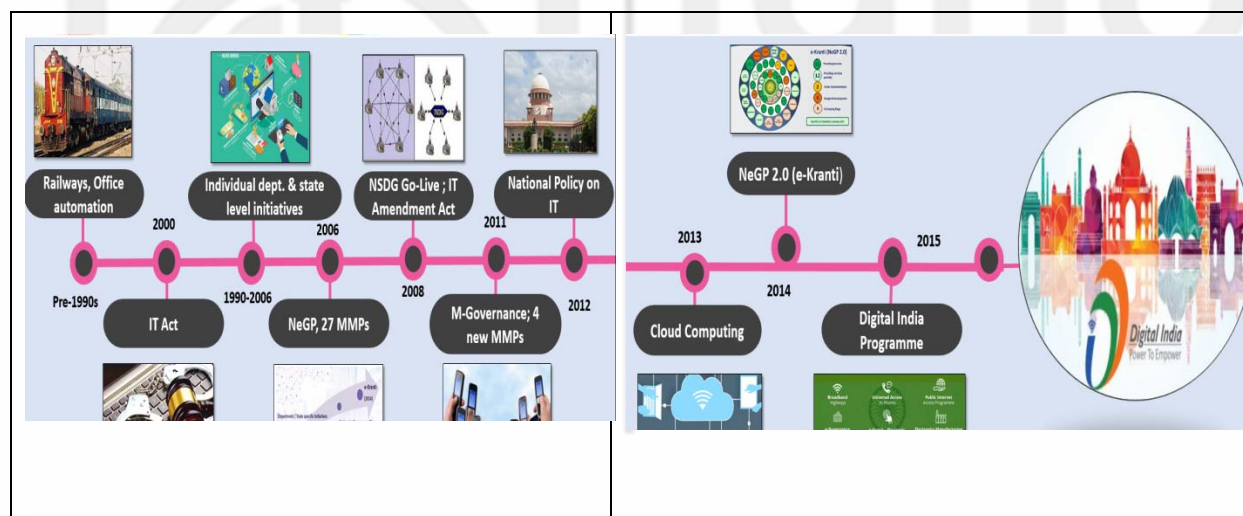


Fig 4.2 : Growth of e-Government & e-Governance in India (1990s onwards till now)

- Year 2006- National e-governance Plan (NeGP):** GoI announced National e-governance Plan, referred as NeGP, in the year 2006. It comprised of twenty-seven Mission Mode Projects (MMPs) and eight components to “make all Government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs to realise the basic needs of the common man.”

Some of the mission mode projects, conceived under NeGP have been enhanced and made relevant for present times. One such example is Passport Seva Project.

Passport Seva Project: The Passport Seva Project one of best e-governance project of Government of India. It is well known in the world for smooth delivery of passport to Indian Citizens. The project has been implemented by the Ministry of External Affairs in Public-Private-Partnership with Tata Consultancy Services as the Service Partner. The project demonstrates how innovative use of Information and Communication Technology (ICT) can transform the way citizens receive services from government institutions. The entire process of citizen service delivery has been automated. Services are delivered through a country-wide networked environment integrating Passport *Seva Kendras* (PSKs), Passport *Seva Laghu Kendras* (PSLKs), Passport Offices and external stakeholders involved in the process viz. Police, India Security Press and India Post

5. Year 2008 to 2013 - IT Act Amendments, NSDG, National IT Policy, Implementation of Public Cloud and Mobile Seva Framework:

- The year 2008 saw amendments in the IT Act 2000. These amendments include enabling central government to issue rules time to time related with electronic signature as per the evolution of technology and penalized sending "offensive messages, pornography, child porn, cyber terrorism and voyeurism. It also gave authorities the power of "interception or monitoring or decryption of any information through any computer resource".
- In the same year, 2008, National Service Delivery Gateway-NSDG was launched as a standards-based messaging switch to provide seamless interoperability and to help in tracking and time stamping all transactions of the Government.
- The National Policy on IT was approved in the year 2012 to encourage adoption of ICTs to create a pool of 10 million additional ICT skilled manpower, to adopt Open standards and with several such IT focused national goals.
- In the year 2013, Government of India announced "GI Cloud" by the name of 'Meghraj'. It was rolled out to utilize and harness the benefits of Cloud Computing in governance domain.
- In the year 2013, Mobile Seva (the national mobile-governance initiative) was also formally launched with the aim of making India a world leader in harnessing the potential of mobile governance for inclusive development. Mobile Seva provides an integrated platform for all Government departments and agencies for delivery of public services to citizens and businesses over mobile devices using SMS, USSD, IVRS, CBS, LBS, and mobile applications. It is easily accessible through Mobile Applications Store (m-App Store) and the Mobile Governance Portal (<https://mgov.gov.in/>).

6. Year 2014 & 2015- Inception of MyGov and e-Kranti:

- Indian citizen engagement platform called 'Mygov.in' was established in the year 2014.

MyGov (<https://www.mygov.in/>) is a citizen engagement platform of Government of India that was launched on July 26, 2014. MyGov aims to establish a link between government and citizens to promote the active participation of Indian citizens in country's governance and development.

MyGov initiates dialogue with citizens to provide real contribution and not just sharing of theoretical ideas. The portal has around 70 Groups of various Government Departments and Ministries each designed around three modes of participation namely Do, Discuss and Disseminate. The 'Do' section consists of "Online and On-ground Tasks" that the citizens can undertake based on their interests. The Discuss section helps citizens to express their valued insights and views on theme-based discussions to improve government's policy initiatives. Citizens can participate in "group-centric" "online discussions in the form of public consultations, open forums, etc and can share their thoughts and ideas. Any idea shared by a contributor is expected to be discussed on these discussion forums, allowing feedback and interaction among all the stakeholders. The third mode of citizen engagement, i.e., Disseminate, consists of information being categorized and spread through Blogs, Talks, Newsletters and a host of MyGov Microsites. Through Talks, defined on MyGov as "Dialogue with decision makers", citizens get an opportunity to connect and engage with government representatives through live chats. MyGov offers several avenues to the citizens to volunteer for various creative activities such as designing a slogan, participating in related contests, etc.

- In the year, 2015, e-Kranti : National e-governance Plan ver 2.0, was initiated with the vision of "Transforming e-governance for Transforming Governance" and had 44 Mission Mode Projects (MMPs)
- Further, Government of India announced its umbrella programme called Digital India in the year 2014 and formally launched it in the year 2015 with an aim to "transform India into a digitally empowered society and knowledge economy" for deriving economic, social, and environmental benefits from digital technologies.

4.7 DIGITAL INDIA

Digital India is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. It covers multiple Government Ministries and Departments.

Three vision areas of Digital India Programme (DIP) are as below:

1. **Infrastructure as a Utility to Every Citizen:** All the Indian citizens are available with high speed internet and a secure cyberspace as core

utility along with mobile connectivity and bank account to ensure citizens’ participation in digital as well as financial spaces.

2. **Governance and Services On-Demand:** Government is providing all the possible public services as well as all the citizen entitlements (such as documents, certificates) in real time using/cloud and/or mobile platform.
3. **Digital Empowerment of the Citizens:** The third key vision area of DIP is based on the basic principle of “citizen centricity” that insists that the needs and aspirations of the citizens should help to chalk the design of digital interventions and to successfully ensure that citizens must be educated and sensitised about digital technologies.

4.7.1 Nine pillars of Digital India:

These vision areas of Digital India are expected to be achieved by nine pillars of Digital India viz. 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.

4.7.2 Key Initiatives of Digital India

Some of the key initiatives of Digital India are summarised herewith (Fig 4.3)

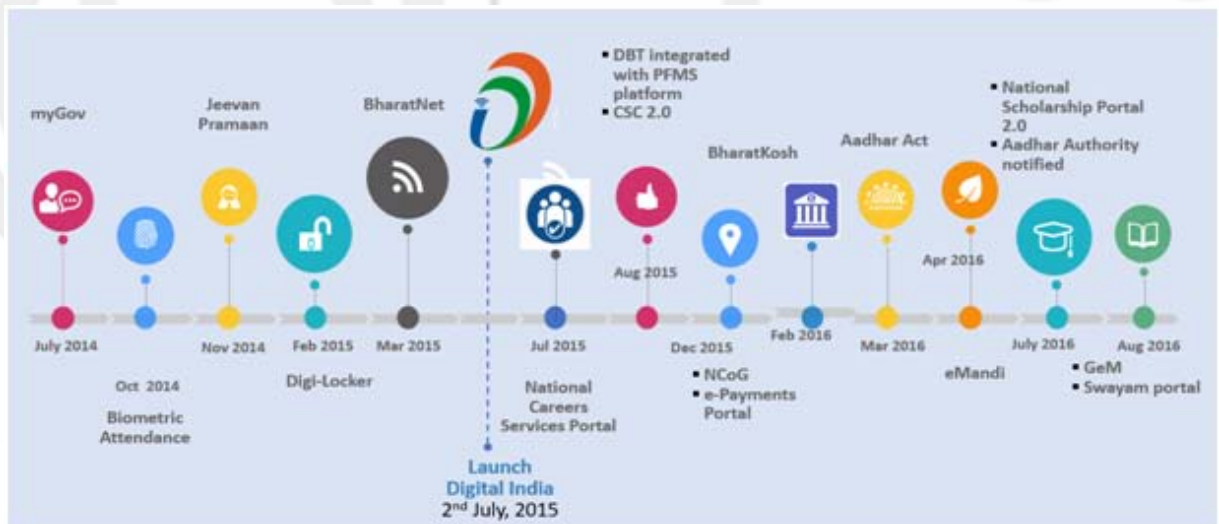


Fig 4.3 : Some Interesting Digital India Initiatives (2014-2016) (Source : MeitY)

Without any specific order or preference, we shall proceed to give you a crisp glimpse into some of the interesting Digital India initiatives.

1. **‘e-National Agriculture Market- e-NAM’:** eNam serves as an electronic trading portal that has aggregated all the existing Agriculture Produce Marketing Committee (APMC) *mandis* (market places) across the country. e-NAM serves as a unified national digital marketplace with a single window access for all the agricultural commodities.

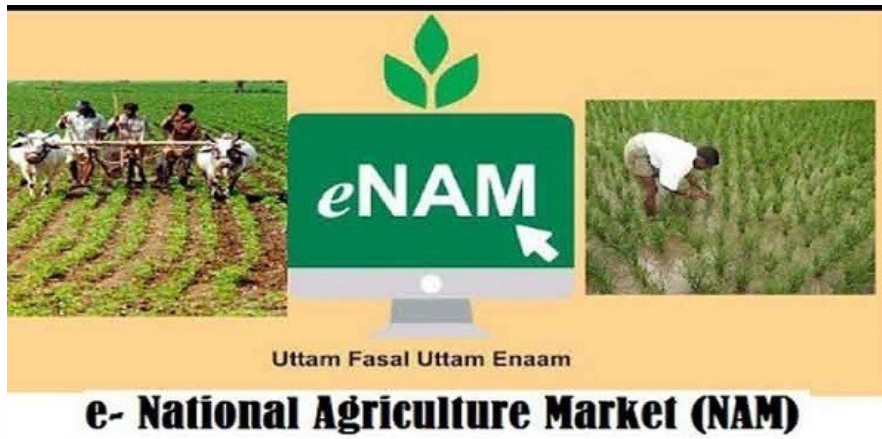


Fig 4.4: e-NAM

It provides information about commodity arrivals and their prices; purchase and selling trade offers; provision to respond to trade offers, etc. Hence, eNAM ensures that farmers are not exploited due to lack of knowledge and are able to make sound economic decisions.

2. **Fertilizer Monitoring System (FMS):** FMS checks for fake claims, pilferages, etc., and thus aims to create an ecosystem where the subsidized fertilizers are delivered to the actual farmers and proposes to generate substantial savings to the tune of several thousand crores every year.
3. **Soil Health Card:** The Soil Health Card Scheme was launched in the year 2015 to promote Integrated Nutrient Management (INM) of the soil through judicious use of chemical fertilizers. It provides tailored information on secondary and micronutrients present in the soil in conjunction with organic manures and bio-fertilizers to help provide customised soil test-based recommendations.
4. **GeM:** GeM is a short form of one stop 'Government e-Marketplace' hosted by Directorate General of Supplies and Disposals (DGS&D) under Ministry of Commerce and Industry, Government of India, where common user goods and services can be procured. GeM is dynamic, self-sustaining and user friendly portal for making procurement by Government officers. Public procurement forms a very important part of Government activity and reform in Public Procurement is one of the top priorities of the present Government. Government e-Marketplace (GeM - gem.gov.in) is a very bold step of the Government with the aim to transform the way in which procurement of goods and services is done by the Government Ministries and Departments, Public Sector Undertakings and other apex autonomous bodies of the Central Government.
5. **DigiLocker:** DigiLocker is a key initiative under Digital India, the Government of India's flagship program aimed at transforming India into a digitally empowered society and knowledge economy. Targeted at the idea of paperless governance, DigiLocker is a platform for issuance and verification of documents & certificates in a digital way, thus eliminating

the use of physical documents. The DigiLocker website can be accessed at <https://digitallocker.gov.in/>.

6. **PMGDisha:** The Pradhan Mantri Gramin Digital Saksharta Abhiyan is a dynamic and integrated platform of digital literacy awareness, education and capacity programmes that will help rural communities fully participate in the global digital economy. Focus is on making technology central to enabling change.
7. **e-Granthalya:** e-Granthalya is a Digital Platform developed by National Informatics Centre, Ministry of Electronics and Information Technology, Government of India. It is Web-based Integrated Library Management Software for Government Libraries for Automation of in-house activities as well as member services and Networking for resource sharing. On this platform, complete ICT solution with Digital Library Module, Cloud hosting environment and a Library Portal (OPAC) with NICSI empanelled Roll-out Services and support. It is useful to transform traditional libraries to e-Library with Digital Library Services and to provide various online member services using Single Window Access System. Latest version of e-Granthalya (Ver.4.0) is a 'Cloud Ready Application' and provides a Web-based solution in enterprise mode with a centralized database for cluster of libraries.

e-Granthalya Ver.4.0 (eG4) will only be available in NIC Data Centre/National Cloud for Ministries and Government Departments libraries, from both Central as well as State Governments, and other Government funded organizations / autonomous bodies. Indian Army / Indian Navy and other Para-military Organizations will host the application and database in their own Network which is generally INTRA with their maintenance and support.

List of organizations eligible to get implementation of e-Granthalya 4.0 include Government Libraries under Ministries/Departments/Organizations of Central /State Governments, Government Public Libraries, Kendriya Vidyalayas and Jawahar Navodaya Vidyalayas / MHRD, Central /State Government Schools/Colleges/Polytechnics/Universities, Autonomous Bodies / Councils / Research Organizations / National Laboratories/IITs/IIMs/NIITs / PSUs of Centre and States, Other Government Academic Institutions funded by Government, Indian Embassies, Indian Army / Navy / Air Force Libraries

List of Organizations Not Eligible for Software include Private Institute/Colleges/Schools/Universities and aided/autonomous Institute/Colleges/Schools/Universities

8. **UMANG:** UMANG (Unified Mobile Application for New Age Governance)- A single mobile platform for all Indian citizens to access central, local and other government services that provides seamless integration with popular customer-centric services including Aadhaar and Digilocker. It has been made available through mobile application, web, IVR and SMS and is expected to revolutionize the way how an

Indian citizen avails government services today. (<https://web.umang.gov.in/web/#/>).

9. **TDIL:** The Ministry of Electronics and Information Technology initiated the ambitious programme of TDIL (Technology Development for Indian Languages) with the aim of developing Information Processing Tools and Techniques to facilitate human-machine interaction without language barrier; creating and accessing multilingual knowledge resources and integrating them to develop innovative user products and services. The primary objectives include developing and promoting Software Tools and Applications for all 22 officially recognized Indian Languages, contributing to collaborative development of futuristic technologies leading to innovative products and services, acting as a catalyst for proliferating Language Technology products and providing solutions and standardization across all levels.
10. **NKN:** National Knowledge Network (NKN) is a multi-gigabit national research and education network, whose purpose is to provide a unified high speed network backbone for educational institutions in India. The network is managed by the National Informatics Centre.

The initiatives mentioned above, have been primarily undertaken by Central / Union Government of India. At present there are 44 such mission mode projects in e-Kranti pillar of Digital India, some of which are to be exclusively initiated by Centre, some by state and some of them jointly.

4.9 STATE E-GOVERNANCE INITIATIVES

Majority of the states too have independently (or with the support of Central government) implemented digital technologies in their respective states. Two of the same have been presented here.

- a. **Akshaya in Kerala:** One of the initial and popular initiative by Government of India is Akshaya in Kerala. Approximately 5000 multipurpose community technology centres called Akshaya e- *Kendras* were set up in the state of Kerala. Managed by private entrepreneurs, each e-Kendra was set up within 2-3 kilo-meters of every other household, to cater to the requirements of around 1000-3000 families to try and make available the power of networking and connectivity which is possible within a group of people and common man. Akshaya had aimed to ensure social and economic equity in the state by providing focus on the various facets of e-learning and e-government.
- b. **Real Time Performance Monitoring in Andhra Pradesh:** Government of Andhra Pradesh launched “Real Time Governance-RTG” (on November 26, 2017) through CM Office Real-time Executive Dashboard (CORE Dashboard- launched in December 2016). CORE is an integrated dashboard to display category-wise key performance indicators- KPIs of various departments/schemes in real time of various departments/schemes/programmes, which are expected to be updated by each department every one hour. The dashboard displays current

situation and department reports (e.g. agricultural land area sown, rainfall status, demand/supply of power, irrigation) to both public and officials alike.

Over the last two decades, there has been continual e-governance development across almost all states of the country. These two initiatives (Akshayain Kerala and RTG in Andra Pradesh) are just examples of e-government/ e-governance initiatives undertaken at the state level in India to give a glimpse into such advents at the state level.

Check Your Progress B:

- 1) State the workings of Akshaya E- Kendras around Kerala.

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- 2) List the various organizations eligible to get implementation of E-Granthalaya 4.0.

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- 3) What are the nine pillars of Digital India.

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- 4) What is the National E-governance Plan?

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4.10 LET US SUM UP

The growth of e-governance and e-government has been one of the most striking and noticeable developments of the web world, the global shifts towards increased positioning of information technology by the government came up in the nineties, with the arrival of the world wide web.

Application of digital technologies in public domain propels public services to be fast and convenient service for citizens; it leads to the reduction in delays, red tape and corruption effective utilization of resources, enhanced citizen participation, integration of public services offered by different departments.

Though the terms e-governance and e-government are used interchangeably, the term 'e-governance' has a greater scope and connotation than e-government. The term, 'e-Government' is defined as the use of information and communication technologies by government in delivering public information, services, and public goods to its citizens. E-governance, on the other hand, enables new ways of involving citizens and communities in online debates on issues of public concern. E-governance is generally considered as a bigger concept than e-government, because it can bring about a difference in the way citizens relate to governments and to each other. Its main concern is to be able to engage, enable and empower the citizens.

Evolution of e-government could be understood by the model given by Gartner that has four phases namely as Information, Interaction, Transaction and Transformation.

The journey of India in e-government and e-governance spaces, could be best understood in two parts – firstly from the year 1970s to 1990s when the basic digital infrastructure and the related organisations were established and then 1990s onwards when the country achieved major software and legal steps. For example, in the year 2000, Indian government announced the 'IT Act 2000' of India that provided a legal framework to deal with cybercrimes related to digital initiatives and e-commerce. It was amended in the year 2008 to penalize sending "offensive messages, pornography, child porn, cyber terrorism and voyeurism. It also permitted public authorities to intercept, monitor or decrypt any information "through any computer resource".

In the year 2006, GoI had announced National e-governance Plan, referred as NeGP that had consisted of twenty-seven Mission Mode Projects. (MMPs) and eight components to "make all Government services accessible to the common man in his locality".

In the year 2014, Digital India Programme was announced as the flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. It covers multiple Government Ministries and Departments. These three main vision areas are 'infrastructure as a utility to every citizen', 'governance and services on-demand' and 'digital empowerment of the citizens. These three vision areas

are to be achieved through nine pillars viz. Provision of broadband highways, universal access to mobile connectivity, public internet access programme, e-Governance, e-Kranti, information for all, electronics manufacturing, IT for jobs and early harvest programmes. Digital India has led to the establishment of several e-government initiatives including Passport e-Seva, e-NAM, FMS, Soil Health Card, GeM, DigiLocker, PMGDisha, e-Granthalaya, UMANG, TDIL, NKN and many more. At present there are 44 such mission mode projects in e-Kranti pillar of Digital India, some of which are to be exclusively initiated by Centre, some by state and some of them jointly.

MyGov is an impressive e-governance initiative by Government of India that provides a digital platform and an app to the citizens of the country for participating in various public contests such as design of taglines, logos, slogans as well as to contribute their opinions in the public policy formulation process

4.11 KEYWORDS

Digital India: Digital India is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. It covers multiple Government Ministries and Departments.

E-governance: E-governance is regarded as an ICT-based tool for giving power to democracy and supporting development. It can bring about a difference in the way how citizens relate to governments and to each other. Its main concern is to be able to engage, enable and empower the citizens.

E-Government: E-Government is defined as the use of information and communication technologies, particularly the Internet, as a tool to be a better government. It mainly refers to the automation of services managed by the government, and delivery of public services and administrative information to the citizens using ICT.

Information Technology IT Act, 2000: In the year 2000, Indian government announced the 'IT Act 2000' of India that provided a legal framework to the digital initiatives in the country. It is the primary law in India dealing with cybercrime and electronic commerce. It was further amended in the year 2008.

National e-Governance Plan (NeGP): GoI announced National e-governance Plan, referred as NeGP, in the year 2006. It consisted of twenty-seven Mission Mode Projects. (MMPs) and eight components to "make all Government services accessible to the common man in his locality.

4.12 TERMINAL QUESTIONS

- 1) What do you understand by E-governance? State its importance.
- 2) State the evolution of E-governance with the help of Gartner's model.

- 3) State the role of E-governance in India.
- 4) What are the three main vision areas of Digital India Programme (DIP)?
- 5) Write a short note on the followings:
 - a) MyGov.in
 - b) E-Granthalaya
 - c) Digital India
- 6) State the difference between E-Commerce and E-governance.

**Note**

These questions are helpful to understand this unit. Do efforts for writing the answer of these questions but do not send your answer to university. It is only for your practice.



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