Unit – 5 **E- Governance for India**:

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Introduction: Need of E-Governance applications

- Electronic governance or e-governance is adopted by countries across the world. In a fast-growing and demanding economy like India,
e-governance has become essential.

- The rapid growth of digitalization has led to many governments across the globe to introduce and incorporate technology into governmental processes.

- Electronic governance or e-governance can be defined as the usage of Information and Communication Technology (ICT) by the government to provide and facilitate government services, exchange of information, communication transactions and integration of various stand-alone systems and services.

- In other words, it is the use of technology to perform government activities and achieve the objectives of governance.
- Through e-governance, government services are made available to citizens and businesses in a convenient, efficient and transparent manner.
- Examples of e-governance include Digital India initiative, National Portal of India, Prime Minister of India portal, Aadhar, filing and payment of taxes online, digital land management systems, Common Entrance Test etc.

E-governance can take place in four major types of interactions:

- **Government to Government** (G2G) where information is exchanged within the government i.e. either, between the central government, state government and local governments or between different branches of the same government.

- **Government to Citizen** (G2C) where the citizens have a platform through which they can interact with the government and get access to the variety of public services offered by the Government.

- **Government to Businesses** (G2B) where businesses are able to interact with the government seamlessly with respect to the services of the government offered to businesses

- **Government to Employees** (G2E) where interaction between the government and its employees occurs in an efficient and speedy manner.

The objective of E-governance?

- To support and simplify governance for government, citizens, and businesses.

- To make government administration more transparent and accountable while addressing the society's needs and expectations through efficient public services and effective interaction between the people, businesses, and government

- To reduce corruption in the government.

- To ensure speedy administration of services and information

- To reduce difficulties for business, provide immediate information and enable digital communication by e-business.

•While e-governance provides the advantages of convenience, efficiency and transparency, it also has problems associated with it. They are as follows:

- Lack of computer literacy: India is still a developing country and a vast majority of the citizens lack computer literacy which hinders the effectiveness of e-governance.

- Lack of accessibility to the internet or even computers in some parts of the country is a disadvantage to e-governance.

- E-governance results in a loss of human interaction. As the system becomes more mechanized, lesser interaction takes place among people.

-It gives rise to the risk of personal data theft and leakage.

- E-governance leads to a lax administration. The service provider can easily provide excuses for not providing the service on technical grounds such as "server is down" or "internet is not working" etc.

E-Governance in the Indian Context

- E-governance in India is a recently developed concept. The launch of National Satellite-Based Computer Network (NICENET) in 1987 and subsequent launch of District Information System of the National Informatics Centre (DISNIC) programme to computerize all district offices in the country for which free hardware and software was offered to the State Governments provided the requisite impetus for e-governance.

- E-governance thereafter developed with the growth of technology. Today, there are a large number of e-Governance initiatives, both at the Union and State levels.

- In 2006, the **National e-Governance Plan** (NeGP) was formulated by the Department of Electronics and Information Technology and Department of Administrative Reforms and Public Grievances that aims at making all government services accessible to the common man, ensure efficiency, transparency and reliability of such services at affordable costs to realise the basic needs of the common man.

- The NeGP has enabled many e-governance initiatives like:

- **Digital India** was launched in 2015 to empower the country digitally. Its main components are:Developing a secure and stable digital infrastructure

  -Delivering government services digitally

  -Achieving universal digital literacy

- **myGov.in** is a national citizen engagement platform where people can share ideas on and be involved with matters of policy and governance.

- **UMANG** is a Unified Mobile Application which provides access to central and state government services including Aadhar, Digital Locker, PAN, Employee Provident Fund services etc.

- **Digital Locker** helps citizens digitally store important documents like mark sheets, PAN, Aadhar, and degree certificates. This reduces the need for physical documents and facilitates easy sharing of documents.

- **PayGov** facilitates online payments to all public and private banks.
- **Mobile Seva** aims at providing government services through mobile phones and tablets. The m-App store has over 200 live applications which can be used to access various government services.
- **Computerization of Land Records** ensures that landowner gets digital and updated copies of documents relating to their property.
- In addition to the above, State level e-governance initiatives include:

- **Khajane Project** (Karnataka) digitalized the treasury system of the state.

- **FRIENDS** (Kerala) is a single-window facility to pay taxes and other financial dues to the State government.

- **Lokvani Project** (Uttar Pradesh) is a single-window solution relating to the handling of grievances, land record maintenance and providing a mixture of essential services.

E-Governance portal

- The Indian e-governance portal is https://nceg.gov.in. On this portal, one can get comprehensive information regarding National Conference on E-governance and reports on earlier conferences.

- Additionally, the portal provides links to the following important pages:

  -Digital India

- National Portal of India: It is developed to provide access to information and services being provided by the government

- PM India Website: provides information relating to the Prime Minister's Office.

  -United Nations e-governance website

Evolution of EGovernance

- The notion of e-governance evolved in India during the seventies with a focus on development of in-house government applications in the areas of defence, economic monitoring, planning and the deployment of information technology to manage data intensive functions related to elections, census, and tax administration.

- In Indian scenario, there was great efforts of the National Informatics Center (NIC) to join all the district headquarters during the eighties.

- In the beginning of nineties, IT technologies were improved by ICT technologies to extend its use for broader sectoral applications with policy emphasis on reaching out to rural areas and taking in greater inputs from NGOs and private

- There has been an increasing involvement of international donor agencies under the framework of e-governance for development to catalyse the expansion of e-governance laws and technologies in developing nations.

- It is apparent in various research studies that e-Governance is fundamentally linked with the development of computer technology, networking of computers and communication systems.

- In developing nations such technologies and systems became available with observable time lag as compared to developed nations.

- The inception of e-Governance proceeded through four stages in India.

- **Computerisation**: In the first stage, with the availability of personal computers, majority of Government offices are well equipped with computers. The use of computers began with word processing, quickly followed by data processing.

- **Networking**: In this stage, some units of a few government organizations are connected through a hub leading to sharing of information and flow of data between different government entities.

- **On-line presence**: In the third stage, with increasing internet connectivity, a need was felt for maintaining a presence on the web. This resulted in maintenance of websites by government departments and other entities.

- Generally, these web-pages/ web-sites contained information about the organizational structure, contact details, reports and publications, objectives and vision statements of the respective government entities.

- **On-line interactivity**: A natural significance of on-line presence was opening up of communication channels between government entities and the citizens, civil society organizations etc.

  - The main objective of this stage was to lessen the scope of personal interface with government entities by providing downloadable Forms, Instructions, Acts, Rules.

- It has been observed that there was more emphasis on automation and computerization, state governments have also endeavoured to use ICT tools into connectivity, networking, setting up systems for processing information and delivering services.

- At a micro level, this has ranged from IT automation in individual departments, electronic file handling and workflow systems, access to entitlements, public grievance systems, service delivery for high volume routine transactions such as payment of bills, tax dues to meeting poverty alleviation goals through the promotion of entrepreneurial models and provision of market information.

Present global trends of growth in EGovernance: other issues

- **Create literacy and commitment to e-governance at high level**: The most important requirement in e-governance is training programme for policy makers, politicians and IT task force members. The training programme needs to be focused according to the requirements of the policy makers at the top.

- **Conduct usability surveys for assessment of existing e-governance projects**: There is a varying degree of development of e-governance among the different states. A few states have leapfrogged into a digital era, whereas a few are yet to start with any initiative. Therefore an e-awareness exercise should be carried out in all state government departments, to understand their level of acceptability of the e-governance.

- **Starting with implementation of pilot projects and replicating the successful ones**: The pilot projects taken in various states should be accessed for their achievement levels. They should be classified as success or failure according to the desired output written down before implementation of the projects. The successful projects should be replica over the nation with members drawn from the implementing team. The projects, which could not achieve the desired outcome, should be documented for possible causes of failure.

- **Follow the best practices in e-governance**: The study of the best practices will bring forward the best practices followed nationally and internationally. The national and international beat practices study will give a great momentum to the process of e-governance.

- **Build nation resource database of e-governance projects**: This would allow any organization planning an IT project to instantly ascertain whether any such project has already been implemented anywhere in the country. And intending implementers would know who the people in similar projects are and how to reach them.

- **How clearly defined interoperability policy**: The e-governance architecture needs to ensure that the components are scalable and adaptable to the future requirements. It has also to ensure that the local architecture fits into state level and the same into national and global architecture. Interoperability is a major criterion while defining the architecture.

E-Governance – The Way Ahead:

- With the great scope of Information Technology it can be very well said that it has a very bright and prosperous future.

- Government of every nation spends a good part of its GDP in e- Governance.

- Future e-Governance research agendas can be built around future visions for government and society Certain themes that will shape the future have world-wide import, but will play out and interact in both expected and unexpected ways in different places.

- Government of India is now beginning to realize that e-governance is the key to drive today's economy with an increased participation from citizens.

•Providing services online is no longer going to remain optional for local and central government, as demand for providing services at internet speed has been coming from citizens.

•The real challenge is how to develop and sustain successful e-governance projects and deliver state of the art e-services to citizens.

• Some of the requirements for implementing successful e-governance across the nation are as under.

1. E-governance framework across the nation enough

2. Connectivity framework for making the services reaches rural areas of the country or development of alternative means of services such as

g. overnance kiosks in regional language.

3. National citizens database which is a the primary unit of data for all governance vertical and horizontal applications across the state and central governments.

4. A secure delivery framework by means of virtual private network connecting across the state and the central government departments.

5. Data centers in the state and the central government to handle the departmental workflow automation, collaboration, interaction, exchange of information with automation.

- Security and privacy of information is another serious technical challenge and is a well documented issue for e-government implementation all around the world.

- Participants feel that using websites to transfer their personal information (such as name, picture, and date of birth, ID number, and credit card details), sharing information with public agencies online or electronically is not safe.

- They are afraid that e-services websites are not secure enough to protect their private information from being misused or distorted by hackers.

- For e-government activities, service continuity is critical not only for the availability and delivery of services, but also to build citizen confidence and trust.

Model of Digital Governance:

- Models of Digital Governance are continuously evolving and improvising to harness the potential offered by the ICT and deal with new realities in the area of governance.

- **There are no rigid and finite models of Digital Governance.**

-    In fact several developing countries are putting into practice innovative e-Governance models that may technologically simple but are changing the way information is distributed in the society.

1. **Broadcasting - Wider Dissemination Model**

 -   The model is based on dissemination of governmental information already available in the public domain into the wider public domain through the use of ICT and convergent media.

2. **Critical Flow Model**

 -   The model is based on the principle of dissemination/ channelising of information of critical value to targeted audience or in wider public domain through the use of ICT and convergent media.

3. **Comparative Analysis Model**

- The Comparative Knowledge Model is one of the least-used but a highly influential model that is gradually gaining acceptance.

- The model, if used innovatively, can fully harness the potential and capacity offered by the rapidly expanding Information and Communication Technologies and aim it towards better governance.

- The model is based on exploring information available in the public   or private domain and comparing it with the known information sets to derive strategic learnings and arguments.

- Essentially, the model continuously assimilates new Knowledge Products and uses them as a precedence or benchmark to evaluate, influence or advocate changes in current policies and actions.

- The comparison could be made over a time scale to get a snapshot of the past and present situation or could be used to compare the effectiveness of an intervention by comparing two different situations.

4. **E-Advocacy / Mobilization and Lobbying Model**

- The e-Advocacy / Mobilization and Lobbying Model is one of the most frequently used Digital Governance model and has often come to the aid of the global civil society to impact on global decision-making processes.

- The model is based on planned, directed, strategic flow of information to build strong virtual allies to complement action in Real World.

- It takes up a pro-active approach of forming virtual communities which share similar values and concerns, promoting active sharing of information within and between these communities, and linking them with real-life groups/ activities for concerted action.

- The model creates synergies between real-world processes, and opinions and concerns expressed by virtual communities.

5. **Interactive - Service Model**

- The Interactive-Service model is a consolidation of the earlier model and opens up avenues for direct participation of individuals in the governance processes.

- Fundamentally, ICT have the potential to bring in every individual in a digital network and enable two-way / interactive flow of information amongst them.

- The potential of ICT for the governance is fully leveraged in this model and leads to greater participation, efficiency and transparency in functioning of the government as well as savings in time and costs relating to decision-making.

E-Governance initiatives in India:

e-Mitra

- Committed to quick and convenient delivery of citizen services, Government of Rajasthan set up the e-Mitra platform of e-Governance way back in the year 2004.

- Currently, Over 250 G2C and B2C services are being provided through this platform across all rural & urban areas in 33 districts of the State.

- These services include utility bill payment, application & digitally signed certificate services, banking, tele-medicine, e-commerce services, etc and new services are being added to its fold regularly.

IFMS (*Integrated Financial Management System*)

- The Government of West Bengal in Finance Department for some time past was considering restructuring the existing systems of fund allocation to the Administrative Departments and Drawing & Disbursing Officers (DDOs) and financial transactions including entire Treasury Management System to ensure transparency, accuracy, and efficiency in fund and financial management.

- Accordingly, the Governor is pleased to introduce the 'Integrated Financial Management System' [IFMS] for on-line real time management monitoring and control of all fund allocations and financial transactions in different Departments and their subordinate offices under the State Government.

IHRMS (Human Resource Management Software)

- iHRMS is our complete Human resource software to address the complicated requirements of businesses, offering total solutions that cover the entire Human Resource Management cycle, from recruitment to retirement.

- iHRMS offers fast and flexible Payroll Processing, with robust capabilities that can be expanded as needs evolve.

   -It gives real-time functioning and integration with attendance machines.

- iHRMS has an In-built data analysis tool, that supports policy decision making and comprehensive data reporting and consolidation.

- iHRMS is an online web-based, user-friendly integrated software solution with a centralized secure database.
- The Software offers maximum security for management of HR functions, with role-based access control.
- Employees can put in Travel Requests and avail Online Reimbursement.

  -It also provides Online Leave Applications.
- It is real-time, custom-made software that can be adapted to your business requirements, assisting you to manage people assets as per your organization's standards.

-It can be accessed anywhere and anytime.

- The software is a modular Cloud and Premise based offering or can be offered as a Managed Service.

- It incorporates additional features of Online Tax Declaration with Integrated TDS Module.

sampark

- Designing for a Senior citizens always requires a "human centred approach" as it is more important to discuss and debate about the technology and design with the people who are going to use them.

- This project was an attempt to create an alternative means of communication and information sharing for elderly keeping in mind the physical and technological constraints.

- The final design output was in form of a wearable device for the elderly people, to carry it whenever and wherever they feel like. It had all basic and essential features required for communication and information sharing.

e-Health

- E-health grew out of a need for improved documentation and tracking of patients health and procedures performed on patients, particularly for reimbursement purposes, such as by insurance companies.

- Traditionally, health care providers kept paper records on the history and status of their patients.

- However, rising health care costs and technological advances encouraged the development of electronic tracking systems.

- As e-health technologies continued to bedeveloped, thefield of telemedicine, in which telecommunication technologies are used to provide health care remotely, emerged.

Bhamshah

- On 15 August 2014, the government of Rajasthan introduced the Bhamashah Yojana for easy transfer of financial and non-financial benefits of government schemes to women recipients in a transparent manner.

- The Bhamashah Yojana is considered the first step towards digitization in the state.

- The scheme is named after Bhamashah, a famous minister, financier and army general who was a close aide of Maharana Pratap when he became financially weak to the extent that he reached the point of starvation.

- The Bhamashah Yojana ensures empowerment of women in the state of Rajasthan and intends to benefit the entire society from cash inclusion.

- The eligible candidates are delivered end-to-end financial and non-financial services and benefits.

  -The Bhamashah card is an access to-

  -Scholarship for education of the students

  -Loan for starting a new business

- Free medical treatment at selected hospitals for certain diseases and operations

  -Women who are seeking training to establish their professional

  careers

Passport

- Riding on the new wave of information dissemination, Ministry of External Affairs has brought the passport related services on the mobile for smartphone users.

- Users can now access these services on smartphones using mobile app **mPassport Seva**.

- **mPassport Seva** is a light weight, easy to use app that provides all the functions as available over the Passport Seva Portal such as New User Registration, existing User Login, Apply for Passport Services, Pay online, Schedule appointment, Know Location of Passport Centers, Fee Details, Application Status, Contact Information and other General Information.

- The app provides facility to Register, Apply, Pay and Schedule appointment for Passport related services
- The app provides information on various steps involved to obtain a passport related service and where to call in case of queries or concerns.
- The users are able to search for a Passport Seva Kendra (PSK) or District Passport Cell (DPC). Citizens living overseas can find out relevant information about the Missions/Posts abroad. For certain states and districts, the users can search for Police Stations as well.
- Fee Calculator feature of the application enables users to find out the required fee based on the service and mode of submission.

- Document Advisor helps users to find out the required documents they need to carry while visiting Passport Office for application submission.

- The users can track status of their passport applications using file number and date of birth. For dispatched passports, the delivery status can also be tracked

Police

- The Indian Police at Your Call App is a GIS Map based interface for the citizens to locate police stations near to their current location so that they can easily "reach" the police station in case of emergency.

- The App displays the current location of the citizen on the Map along with details such as name of places, roads and major landmarks.

- The App dynamically fetches details of all the police stations near the location of the citizen and can be refreshed at regular intervals.

- The App further provides the facility to "Tap" any of these police stations and know the route and road distance to reach there.

- Contact numbers of the Police Station, District Control Room and office of Superintendent of Police are also displayed.

- Citizens can select any of these numbers and make a call using the App to get immediate help.

- The App has facility to display the details of police stations at other locations also so that without visiting such location one can know details of nearby police stations.

Indian railways

-Single window interface for Indian Railway Mobile Applications.

- In order to provide better customer experience, there is a need for integrated application which will give a single window interface for these services.

- This app integrates various apps and provide additional features and fulfills Railways commitment towards providing better services.

- It provides end to end solution to our esteemed passenger from planning of journey to giving their feedback after completion of journey.

Income Tax

-Locate a Tax Return Preparer near
you

-Tools for calculating your taxes

-ASK IT - A ChatBot

-Tax Gyaan - A Game