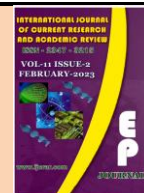




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E-Governance in India: Initiatives and Challenges

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Abstract

India is a developing country. Yet, it needs to fill the socio-economic objectives with effective governance of the Govt. In the era of ICT, all most all nations in the world adopted ICT in their administration, providing essential goods and services to its masses on time. In the context of Indian economy, every sector is being impacted by e-governance. Consequently, Govt. of India has launched the initiatives of e-governance; providing all services electronically as much as possible. In spite of this process, yet, there are some challenges regarding implementation of e-governance. This research paper highlights the evolution, initiatives, issues-challenges and future prospects of e governance in India.

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Introduction

E- Governance is becoming a buzzword. The Electronic Governance is basically associated with carrying out the functions and achieving the results of governance through the utilization of ICT (Information and Communications Technology). While Governance relates to safeguarding the legal rights of all citizens, an equally important aspect is concerned with ensuring equitable access to public services and the benefits of economic growth to all. It also ensures Government to be transparent in its dealings, accountable for its activities and faster in its responses as part of good governance. E Governance is in essence, the application of Information and communications technology to government functioning in order to create “Simple, Moral, Accountable, Responsive and transparent” (SMART) Governance. E-Governance is the use of Information and Communication Technology at all the level of the

Government in order to provide services to the citizens, interaction with business enterprises and communication and exchange of information between different agencies of the Government in a speedy, convenient, efficient and transparent manner.

Governments all over the world have been using ICTs such as internet, websites, computers and mobile phones to provide various government services in an efficient, equitable and transparent manner with less corruption. In the context of Indian economy, every sector is being impacted by e governance. Consequently, Govt. of India has launched the initiatives of e-governance; providing all services electronically as much as possible. When it dates back with regard to e-governance, it usually started from seventy decades on wards. Since different initiatives are taken in terms of e-governance. Meanwhile, Govt. of India launched several projects in support of e-governance, like e-seva, smart govt, digital

India, e-kranthi and etc. Each of these projects seems to be benefitting the citizens to a greater extent. In spite of this process, yet, there are some challenges regarding implementation of e governance. The purpose of this paper is to examine the challenges encountered in e-government as well as the potential opportunities available in the context of Indian society. The study reveal India is still lagging behind in utilizing information and communication technologies for delivering government services online.

Overview of E-Governance in India

E- Governance began in India in the 1970s with a concentration on internal government applications for planning, economic monitoring, defence, and the use of ICT to handle data-intensive tasks for elections, censuses, and tax administration. Initial steps taken by the Department of Electronics establishment in 1970 was India's first major move toward e-governance since it focused attention on "information" and its conveyance. The District Information System initiative was started by the National Informatics Center (NIC), which was founded in 1977, in order to computerise all district offices across the nation. The establishment of NICNET, a national satellite-based computer network, in 1987.

The Eleventh Plan for E-Governance had explored a spectrum of subjects. These comprised 27 areas for the implementation of e-technology and reforms, as well as changes to the Ministry of Corporate Affairs.

The Department of Customs has had extremely favourable prior experience with reservations on the railways and refunding customs duty. 60,000 common service centres will be operational by the end of the Eleventh Plan to supply public services across the nation. The optical fibre network will be expanded, and broadband access will be extended to all Panchayat levels, according to new plans. The public would benefit from having access to all e-mode services offered at the grassroots levels due to this.

Major Initiatives Taken for E-Governance in India

Major Initiatives Taken for E-Governance in Tamil Nadu

Tamil Nadu e-Governance Agency (TNeGA) was established as a State Nodal Agency to support and drive the e- Governance activities of the Government of Tamil Nadu.

Tamil Nadu Government has launched 'E-Munnetram (E-progress)' to monitor progress of various projects undertaken by the Tamil Nadu Government and 'IT Nanban (IT friend), an interactive platform for IT/ITeS industry in the state to be aware of various Government tenders that are floated for procuring services of the industry as the exports from IT/ITeS sector in Tamil Nadu has been growing at 10% YoY (Year-over-Year).

Uzhavan predictor: AI-Pest and Disease detection

Uzhavan predictor is an innovative crop diagnosis system that can find the pests and diseases hurting a crop. It's a way to send corrective measures for Maize and Paddy via SMS based on a photo sent by the farmer through the app. This AI-powered mobile app has assisted over 150,000 farmers.

ePaarvai: AI-Based Cataract Detection System

Another game changing initiative from TNeGA is ePaarvai. ePaarvai is a smart mobile app that uses AI to figure out if a person has cataracts in their eyes. TNeGA researchers used computer vision and its most advanced object detection model, with Multi-class classification, to figure out how to solve the problem.

The ePaarvai has checked out over 10,000 people from 38 districts in Tamil Nadu. So far, more than 1,000 people have had surgery on their cataract eyes.

FRAS: Face recognition-based attendance system

TNeGA made the Image Analytics Device (IAD) for a facial recognition-based attendance system. The goal of FRAS is to solve the problems of manual attendance systems and save time without adding any complexity. A low-cost, lightweight edge computing system runs on its own and is connected to a secure network through a camera built into the system. More than 3,500 users access this application to automate attendance systems in government organizations and institutions.

e-Sevai

Government is working with the vision to deliver all services online to the Citizens even in the remotest corner of the state through Arasu e-Sevai centres. Arasu e-Sevai centres are functioning with the objective of providing unified access to e-Services of different Government Departments on a common platform across the State. The Arasu e-Sevai centres are run by agencies

like Primary Agricultural Co-operative Societies (PACCS), Village Poverty Reduction Committee (VPRC), Tamil Nadu Arasu Cable TV Corporation Ltd (TACTV), TACTV Franchise, International Fund for Agriculture Development (IFAD) and Village Level Entrepreneurs (VLEs). Currently there are 12,649 Centres with 13,088 counters functioning across the State.

State Family Data Base

SFDB is a single source of resident data for Tamil Nadu. SFDB will be maintained in a digitized, centralized and secure manner for the purpose of seamless beneficiary identification to disburse benefits provided by different welfare schemes to eligible Citizens.

Major Challenges of E-Governance in India

Trust

Citizens nowadays who use e-governance services generally have some faith in its advances. Additionally, there may be certain dishonest operations carried out by any other organization for the purpose of money, important information, or even personal information, etc. Additionally, important departmental information is occasionally overlooked or left out of government offices, which seriously undermines individuals of all economic classes' confidence in e governance.

Infrastructure

It is basically required for India to implement e-governance as much as possible. Electricity, internet access, and a lack of technology adaptability will impede the development of e-governance. To enhance e-governance in developing nations, there will be enough basic facilities accessible.

Cost

One of the biggest obstacles to the introduction of e-governance is cost, particularly in developing nations like India where the majority of people lives in poverty. Politicians and elected officials don't take any interest in establishing e-governance into existence.

Security and privacy

The government should implement appropriate measures to protect citizens' private and confidential information.

Population

Because India has a large population, implementing e-government is challenging. However, the government's efforts to provide residents with unique identification have minimized this impediment.

Loss of Interpersonal Communication

The main disadvantages of e-governance are the loss of interpersonal communication. Interpersonal communication is an aspect of communication that many people consider vital.

Review of Literature

Dawes(2009), E-governance as "E-governance comprises the use of information and communication, technologies to support public services, government administration, democratic processes, and relationships among citizens, civil society, the private sector and the state". Sanjay Kumar Dwivedi and Ajay Kumar Bharti (2010), the challenges faced by the Government and public sector organizations all over the world in the administration of E-Governance and to making it efficient and cost effective.

Effective use of Information, Communication and technology (ICT) for e-governance for to providing proper services to citizen has also been studied. The findings of their research are that E-Governance has been considered as a high priority agenda in India and it was also found out that E-governance is Good governance. Nikitha Yadav and Singh (2012) on their paper sheds light on different type of technology adopted by Government of different countries. For e-governance and also pointed out that, E Governance has made the working of government more efficient and more transparent to its citizens. It is concluded by providing a mechanism for improving E-Governance by including technologies such as Open Source and Cloud Computing.

Shrinivas Meghashyam Athalye (2013) This paper focuses on some issues and challenges of e-governance and also suggests some remedies for e-governance failures in India. Benival and Kapil Sikka, (2013) This article highlights about future prospects and challenges in India. Besides, what initiatives taken by govt. discussed as well. It concludes that, India still lagging behind in properly utilizing ICT for delivering govt. services.

Poonam, Priyanka and Verma (2014) This paper throws light on initiatives of e governance in various states of India, and it includes challenges, failures of e-governance projects, solutions for good governance, etc. And also discussed the targets set out for e-governance under twelve five year plan.

Intekhab Khan, Nadeem Khan and Nazia (2015) This paper discusses the reforms of e governance regarding issues, challenges and strategies of e-governance in India. Suneel Kumar, (2016): his article pointed out that position of India in the world in using ICT against developed countries.

And focused on issues and challenges of e-governance in India. Nagaraja (2016) in his article titled “E-Governance in India: Issue and Challenges” stated that there are several issues in e-governance like technological issue, Economic Issue and Social issue are hindrance to the e-governance.

Javid Arsheed and Chinnathurai (2018) in their research paper titled “E-Governance in India: Issue and Challenges” gives an overview of recent initiatives in e-project in Indian states and deals with the challenges and future prospects of E-Governance.

Statement of the Problem

The existing literature describes about e-governance related to strategies, new technologies, implementation mechanism, issues and challenges and future prospects, etc. In fact, those literatures didn't focus on evolution, recent initiatives of e-governance, Therefore, this paper focuses on evolution and recent initiatives of e-governance.

Objectives of the Study

To provide an overview of E-Governance in India.

To focus on the initiatives taken in E-governance in India.

To examine the major issues and challenges of E-governance in India.

Materials and Methods

Secondary data is used to collect the information related to the study. Various Indian Government websites, magazines and researches done in this area have been

used to collect the data related to E-Governance. The main aim of this paper is to discuss about E-governance in India with its objectives.

Effectiveness of E-Governance Service Delivery System

Department of Administrative Reforms & Public Grievances (DARPG) had constituted the National e-Governance Service Delivery Assessment (NeSDA) in 2019 as part of its mandate to boost the e-government endeavours and drive digital government excellence. The biennial study assesses States, Union Territories (UTs), and focus Central Ministries on the effectiveness of e-Governance service delivery. NeSDA helps the respective governments improve their delivery of citizen centric services and shares best practices across the country for all States, UTs and Central Ministries to emulate. The NeSDA 2021 Portal was formally launched in June 2021 to conduct the entire assessment process online. NeSDA 2021 covers services across seven sectors – Finance, Labour and Employment, Education, Local Governance & Utility Services, Social Welfare, Environment and Tourism sectors. The assessment covered 56 mandatory services for each States & UTs and 27 services for the focus Central Ministries.

The portals assessed were classified into one of two categories. State / UT / Central Ministry Portal, the designated portal of the respective government that provides a single window access to information and service links, is the first category. These portals were assessed on four parameters, viz., Accessibility, Content Availability, Ease of Use, and Information Security & Privacy. The second category comprises of the State / UT / Central Ministry Services Portals which focus on the digital delivery of services and provide service-related information. The Services Portals were assessed on an additional three parameters, viz., End-service Delivery, Integrated Service Delivery, and Status & Request Tracking.

NeSDA has followed the Good Governance Index 2021 grouping of the States and UTs. North-East and Hill States make up the first group while Union Territories make up the second group. The remaining states of India have been classified into two states as Remaining States – Group A and Remaining States – Group B.

NeSDA 2021 has shown clear progress for e-Governance services across the country. The integrated State/ UT portal was established to enhance the number of services

provided in their service portal. Further, governance in the times of the pandemic necessitated operationalization of security measures such as VPNs, flexible working policies including work-from-home, and development of several new apps that brought citizens and governments closer through use of technology inter alia providing timely services at the doorstep.

Among the North-East and Hill States, Meghalaya and Nagaland are the leading State Portals with an overall compliance of more than 90% across all assessment parameters. Among Union Territories, Jammu & Kashmir ranked the highest with an overall compliance of nearly 90%. Among the Remaining States, Kerala, Odisha, Tamil Nadu, Punjab, Karnataka and Uttar Pradesh had a compliance of more than 85%. Amongst all the States and UTs, Kerala had the highest overall compliance score.

Among the Services Portals for North-East and Hill States, the highest-ranking states of Meghalaya and Tripura showed improvement across all six sectors compared to NeSDA2019. In the Union Territories category, Jammu & Kashmir was assessed for the first time in NeSDA 2021 and scored the highest amongst all UTs for six sectors.

Among the Remaining States, the overall score of Tamil Nadu increased the most in 2021 compared to 2019. Andhra Pradesh, Kerala, Punjab, Goa, and Odisha also improved the compliance of their Services Portals by 100%. Punjab, Tamil Nadu, and Rajasthan are the leading states with compliance of more than 75% across all parameters for their Services Portals.

Findings

According to report of NeSDA 2021, 1400 services across all States and UTs were assessed as compared to 872 in 2019, an increase of over 60%.

The e-Services of Finance and Local Governance & Utility Services sectors were the most widely used by citizens.

The rising trend of e-Services delivery shifting from single silo departmental portals to integrated / centralized portals has resulted in higher citizen satisfaction.

The NeSDA 2021 findings demonstrate the journey of e-Services towards citizen centricity and benchmarking governance.

Governments across the country have put a stronger emphasis on integrated service delivery which has led to a greater number of e-Services being offered through integrated / centralized portals.

These portals also provide unified access to services, improving accessibility and usability.

They also provide a uniform digital experience to users, creating ease of use through intuitive navigation, uniform look and feel, improved content availability, robust information security, and privacy mechanisms. These factors have led to increase in scores across all assessment parameters.

An overall improvement has been seen in scores across all parameters and at all levels with Information Security & Privacy being the most improved parameter across all portals.

Among the Central Ministry Portals, scores have improved for 4 portals. Among the Central Ministry Services Portals, scores have improved for 6 portals. Among States and UTs, scores have improved for 28 of the State / UT Portals and for 22 of the State / UT Services Portals.

Suggestions

The present study may suggested to improve the assessment parameters and incorporate learnings from global digital government trends have also been included.

To encourage the alignment of e-Services delivery with global digital government best practices.

Table.1 Initiatives for E-Governance

SL. NO	STATE/UNION TERRITORIES	E-PROJECTS
1.	Andhra Pradesh	e-Seva, CARD, VOICE, MPHS, FAST, e-cops, Saukaryam, Online transaction processing, e-immunization Rural Health Call Center and Site Suitability for Water Harvesting, Professional e Pension, Prajavani.
2.	Bihar	BAAF, BSWAN, E-district, E-panchayat, E-procurement, Jankari Call Centres.
3.	Chhattisgarh	Chhattisgarh Info Tech Promotion Society, Treasury Office, E linking project, e-Shramik Seva.
4.	Delhi	Automatic Vehicle Tracking System, Electronic Clearance System, Delhi Slum Computer Kiosks, MIS, Bhagidari, Computerisation of Website of RCS Office.
5.	Goa	Dharani Project
6.	Gujarat	Mahiti Shakti, Request for Government Documents Online, Form Book Online, Census Online, Tender Notice , VMS, UGRMS, Whatsapp Bot.
7.	Haryana	Nai Disha, Treasuries (OTIS), Property Registration (HARIS), Land Records.
8.	Himachal Pradesh	Lok- Mitra, E-pension, HP-VAT-IT Project.
9.	Jharkhand	Vahan, Tender Notice
10.	Karnataka	Bhoomi, Kaveri, Khajane
11.	Kerala	RD Net, Fast, Reliable, Instant, FRIENDS, E-Srinkhala, K-FON.
12.	Madhya Pradesh	Gyandoot, Gram Sampark, Smart Card in Transport Department, Computerization of MP State Agricultural Marketing Board(Mandi Board), E-Choupal etc.,
13.	Maharashtra	SETU, Bhoomi Abhilekh, PDS, Online Complaint Management System Mumbai.
14.	Odisha	E-Shishu, Common Service Centers(CSCS) in Panchayats
15.	Punjab	SUWIDHA(Single User Window Disposal Help Line for Applicants), TISP, EEMS, PAWAN
16.	Rajasthan	Jan Mitra, Lokmitra, RajNidhi, Aarakshi-Online FIR, Rajswift
17.	Tamil Nadu	Sari, E-munnetram, IT Nanbhan, Common Service Centres, TN GIS, E-Seva.
18.	Uttar Pradesh	Lokvani, e-Suvidha, Bhulekh, E-Seva, PRERNA, Koshvani, JAN SUVIDHA KENDRA, Srishti, Bhulekh.
19.	Uttarakhand	Kisan Soochna Kutirs (KSKs), Village Information Centre(VICS), Computerization of Land Record Department
20.	West Bengal	Vehicle Registration, Land Records

Table.2 Ranking of State / UT Portals

Rank	North-East and Hill States	Remaining States – Group A	Remaining States – Group B	Union Territories
1	Nagaland	Kerala	Odisha	Jammu & Kashmir
2	Meghalaya	Tamil Nadu	Uttar Pradesh	Andaman & Nicobar Islands
3	Assam	Punjab	Bihar	Puducherry
4	Sikkim	Karnataka	Jharkhand	Delhi
5	Tripura	Telangana	West Bengal	Chandigarh
6	Himachal Pradesh	Goa	Madhya Pradesh	Ladakh
7	Uttarakhand	Haryana	Chhattisgarh	
8	Mizoram	Andhra Pradesh	Rajasthan	
9	Arunachal Pradesh	Maharashtra		
10	Manipur	Gujarat		

Source: National E-Governance Service Delivery Assessment 2021 Report published on Monday on: 12 JUN 2022 1:59PM by PIB Delhi

Table.3 Ranking of State / UT Services Portals

Rank	North-East and Hill States	Remaining States – Group A	Remaining States – Group B	Union Territories
1	Meghalaya	Punjab	Rajasthan	Jammu & Kashmir
2	Tripura	Tamil Nadu	Uttar Pradesh	Andaman & Nicobar Islands
3	Assam	Haryana	Madhya Pradesh	Delhi
4	Uttarakhand	Telangana	Odisha	Chandigarh
5	Himachal Pradesh	Gujarat	West Bengal	Puducherry
6	Nagaland	Kerala	Jharkhand	Ladakh
7	Arunachal Pradesh	Karnataka	Bihar	Dadra & Nagar Haveli and Daman & Diu
8	Mizoram	Goa	Chhattisgarh	
9	Manipur	Andhra Pradesh		
10	Sikkim	Maharashtra		

Source: National E-Governance Service Delivery Assessment 2021 Report published on Monday n: 12 JUN 2022 1:59PM by PIB Delhi

In India, Increase in e-Service Delivery, Rise in use of Integrated / Centralized Portals for delivery of e-Services, Improvement across assessment parameter scores. At present, e-Governance is getting popular, but challenges like public awareness and the digital barrier must be addressed. High speed internet access is crucial for the delivery of e-Governance initiatives, and the upcoming nationwide rollout of 5G technology will enhance our commitment. Even though the Indian government spends a lot of money on e-Governance programs, not all of India benefits from them. The key issues that have prevented the successful adoption of e-Governance in India are lack of awareness among the population, the local language of that people in a

particular area, privacy concerns regarding the personal information of the populace, etc. The development of e-Governance in India can greatly benefit from public participation.

References

- Annual Report. (2015) – “e-Governance Policy Initiatives under Digital India”, Dept of Electronics and Information Technology, Ministry of Communication and Information Technology, Govt. of India.
- Beniwal, V.S., and Sikka, Kapil. (2013) -“e-

- Governance in India: prospects and challenge, International Journal of Computer & Communication Technology, Issn: 0975-7449, Volume-4, Issue.3.
- Khan Intekhab, Khan Nadeem and Nazia. (Jan, 2015)-“e-governance reforms in India: issues, challenges and strategies-an overview”, International Journal of Computer Science Issues, Volume.12, Issue: 12, No.2.
- Kumar, Suneel (2016) -“e-governance in India, Imperial Journal of Interdisciplinary Research, Volume.2, Issue-2, Issn: 2454
- Malik, Poonam, Dhillan, Priyanka and Verma, Poonam. (July, 2014) -“Challenges and future prospects for E-governance in India”, International Journal of Science, Engineering and Technology Research, Volume-3, Issue:7.
- Meghashyam Athalye Shrinivas. (Sep, 2013)-“e-Governance: issues and challenges”, epitome: an online interdisciplinary, multidisplinary journal, Volume 2, Issue. 2.
- Nagaraja K. E-Governance in India: Issues and Challenges IOSR Journal of Economics and Finance (IOSR-JEF) e-ISSN: 2321-5933, pISSN: 2321-5925. Volume 7, Issue 5 Ver. IV (Sep. – Oct. 2016), PP 50-54
- Nikithayadav, Singh, V.B (Sep.2012) -“e-Governance: past, present and future in India”, international journal of computer applications (0975-8887) volume .53, No.7.
- Pardeep Mittal, Amandeep Kaur E-Governance - A challenge for India ISSN: 2278 – 1323 International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Volume 2, Issue 3, March 2013
- Vibhuti, Ajay Kumar Tyagi. 2017. e-governance in india – concept, challenges and strategies international journal of science technology and management Vol.No.6,issue No.02,
- Vinti Parmar, Amit Kumar, Reena, Review Article: E-Governance Strategies - An Overview International Journal of Computational Intelligence Research ISSN 0973- 1873 Volume 13, Number 5 (2017), pp. 865-871 © Research India Publications <http://www.ripublication.com>
<http://indiaegovernance.blogspot.in/2008/03/e-go>
<http://vikaspedia.in/e-governance/national-e-governance-plan/concept-of-e-governance>
<https://en.wikipedia.org/wiki/E-governance>
<https://www.digitalindia.gov.in>

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