
The Role of E-Governance in making Self-Reliant India

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Abstract

E-governance has become a crucial part of India's governance architecture as a result of the expansion of the internet and the rising uptake of digital technologies. In India, E-Governance has advanced significantly in recent years. The Digital India programme, which aspires to make India into a knowledge-based society and economy, is one of many efforts the Indian government has made to support digital governance. For India, E-Governance offers a number of advantages and citizens no longer need to physically attend government offices because they may now obtain services online. India has taken many important initiatives like The Direct Benefit Transfer programme, e-NAM, The MUDRA etc. E-government in India is not without its difficulties, though. With many people lacking access to digital technologies and internet connectivity, the digital divide continues to be a significant concern. The requirement for effective cyber security protection is highlighted by the enormous risk that cybersecurity attacks also present. By offering effective, open, and citizen-focused services, E-Government has the ability to completely alter India's governance system. To reach this potential, however, a number of obstacles must be overcome. These difficulties include a lack of proper infrastructure, low levels of digital awareness among the populace, threats to cyber security, a lack of interoperability across various E-Governance systems, and a lack of financing for both deployment and upkeep.

Hence, this paper is aiming to highlight the policy, act and method adopted by India towards E-Governance. This paper will study the concepts and prospects of E-Governance in India. This paper will also discuss the challenges of E-Governance in India. This paper will also focus on Evolution of E-Governance in India and Role of E-Governance in India's progress.

Keywords: Good Governance, E-Governance, Self-Reliant

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Introduction

In terms of economic and social growth, India is moving quickly in the direction of becoming a significant global actor. The development of E-Governance is one of the crucial areas on which India is concentrating its efforts. The use of digital technology to change how governments provide services to their citizens is known as E-Governance. It is a method for updating governmental processes and making them more effective, open, and customer-focused. In India, E-Governance is not a brand-new idea. Since the start of the 2000s, it has been in usage. But, the Digital India programme, which was introduced in 2015, gave it momentum during the past ten years. The three main elements of the programme were digital literacy, digital services, and digital infrastructure. Since its inception, the programme has significantly improved digital infrastructure and offered citizens digital services. E-government has the power to fundamentally alter India's governance structure. It can improve accessibility, effectiveness, and responsiveness to citizen requirements in governance. E-governance can also aid in lowering corruption, enhancing accountability and transparency, and boosting citizen participation in the political process. Moreover, by making government services available to underserved communities, it can aid in closing the digital gap and fostering social inclusion.

E-government in India is not without its difficulties, though. Inadequate digital infrastructure, poor levels of digital literacy, and a lack of standardisation of digital services are other issues India must deal with. Furthermore, there is still a big problem with the digital divide between urban and rural areas. The protection of data privacy and security is a major issue for Indian E-Governance. Digital technology is being used more and more, which has increased the potential of cyberattacks and data breaches. The security and privacy of people's data are seriously jeopardised by the absence of sufficient data protection legislation and regulations. Despite these difficulties, E-Governance in India has a bright future. A favourable environment for the development of E-Governance is created by the nation's sizable pool of highly skilled IT experts as well as government initiatives to upgrade the country's digital infrastructure and encourage digital literacy. A huge market for digital services has also been created by the growing popularity of cellphones and the Internet, which the government may leverage to offer services to residents. The government's initiatives to promote digital literacy and build the digital infrastructure are important steps towards accomplishing this objective.

To fully realise the potential of e-governance in India, it would be essential to address the issues of inadequate digital infrastructure, low levels of digital literacy, and protecting data security and privacy.

E-Governance

The use of digital technology to change how governments provide services to citizens is known as E-Governance, also referred to as electronic governance. To deliver public services, exchange information, and interact with residents, it entails the use of electronic platforms including the Internet, mobile devices, and other digital technology. E-governance attempts to increase responsibility and responsiveness in the provision of public services as well as efficiency, transparency, and citizen-centricity in government processes.

Concept of E-Governance in india

The use of electronic tools to improve the delivery of public services to citizens is known as “E-Government” in India. It uses information and communication technologies to improve governance’s transparency, effectiveness, and accountability (ICTs). Initiatives for E-Governance have been started in India at the central, state, and municipal levels of government.

Service Delivery: By making government services available online, E-Governance in India seeks to enhance service delivery to residents. These services are accessible to the public 24/7 from any location and device. The government offers online services like voter registration, income tax filing, and passport applications.

Transparency: By giving public access to information, E-Governance in India encourages transparency in government. Citizens can access information about government activities, plans, and policies through internet portals. This promotes transparency and lessens corruption.

Efficiency: E-governance in India seeks to use technology to increase the effectiveness of government procedures. Automation of procedures like data entry, record-keeping, and

document verification falls under this category. This aids in lowering administrative expenses, enhancing accuracy, and accelerating service delivery.

Evolution of E-Governance in india

Global governance has been profoundly changed by the arrival of digital technologies. E-governance is the use of digital technologies to change how citizens, businesses, and other stakeholders access government services. In India, E-Governance has emerged as a vital tool for boosting transparency, accountability, and efficiency in the public sector. E-Government in India started to take shape in the early 1990s when the government introduced a variety of technology-based schemes to improve the delivery of services to citizens. *The National Informatics Centre* (NIC) was established in 1976 to provide information technology services to government organisations. However, the NIC didn't begin to play a substantial role in India's E-Governance growth until the 1990s.

The government introduced the *Computerization of Land Records* (CLR) programme in 1991 with the goal of digitising land records and making them freely accessible to the public. The Tax Information Network (TIN), which sought to expedite the tax collection process, was one of many E-Governance projects that were introduced as a result of the CLR scheme's success.

The launch of India's *National e-Governance Plan* (NeGP) in 2006 marked a significant turning point in the country's E-Government growth. Information and communication technology (ICT) was a tool employed by the NeGP to alter the way government services are provided. The plan included a number of initiatives to provide citizens with access to a range of government services, including the State Wide Area Networks (SWANs) and Common Service Centres (CSCs).

To focus on certain aspects of governance, the government also launched a number of *Mission Mode Projects* (MMPs) under the NeGP. The National Agriculture Market (eNAM) and the National Scholarships Portal were two of the more significant MMPs (NSP). These programmes aimed to increase the agriculture industry's efficiency and transparency and, in the case of the scholarship programme, to simplify the selection procedure.

Direct Benefit Transfer program

The government of India started the Direct Benefit send (DBT) program in 2013 to send different government subsidies and benefits directly to beneficiaries' bank accounts. The plan aims to decrease leakages in the delivery of subsidies and benefits and to guarantee that they reach the intended beneficiaries in a timely and efficient way. The Direct Benefit Transfer Program's main elements are:

Aadhaar Card: The government of India issues inhabitants with the Aadhaar card, which has a special identification number. The DBT scheme links beneficiaries' bank accounts to their Aadhaar IDs and uses their Aadhaar cards to identify them.

Jan Dhan Yojana: The Jan Dhan Yojana is a government initiative that aims to promote financial inclusion by giving all households in the nation bank accounts. The Jan Dhan Yojana is used by the DBT program to connect recipients' bank accounts to their Aadhaar numbers.

Public Financial Management System: The DBT program is supported by the Public Financial Management System (PFMS), an online platform. The PFMS gives the government the ability to manage the flow of money and keep an eye on how they are being used by various implementing agencies. It also allows the government to pay subsidies and benefits directly into the bank accounts of recipients.

Payment Gateway: The Payment Gateway is an internet platform that makes it easier for the government to send money to beneficiaries' bank accounts.

Digital India Program

The Government of India's flagship effort, Digital India, aims to make India into a society and knowledge economy that is empowered by technology. The initiative, which was started in 2015, aims to encourage digital literacy, entrepreneurship, and access to digital services for residents. The government's broader vision of encouraging inclusive growth and sustainable development is in line with the objectives of the Digital India program. Important Elements of the Digital India Programme mentioned below.

Digital Infrastructure: Through projects like BharatNet, which intends to connect all gram panchayats (village councils) with high-speed internet connectivity, the Digital India program seeks to give residents access to digital infrastructure, including high-speed internet connectivity.

Digital Literacy: One project within the Digital India plan that seeks to increase digital literacy among citizens, especially in rural areas, is the Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), which aims to offer training in digital literacy to six crore residents.

Digital Services: The National E-Governance Plan (NeGP), the Unified Payments Interface (UPI), and the Digital Locker are three projects that the Digital India programme has launched in an effort to make it possible for citizens to get digital services such as e-government, digital financial, and e-commerce services.

Innovation and entrepreneurship: Through programs like the Start-up India program, the Digital India Innovation Fund, and the Atal Innovation Mission, the Digital India program seeks to encourage innovation and entrepreneurship in the digital sector.

Micro Units Development and Refinance Agency (MUDRA)

The Government of India introduced its flagship program, the Micro Units Development and Refinance Agency (MUDRA), in 2015 to give the nation's small and micro firms access to financing. By offering funding to micro and small businesses, MUDRA hopes to encourage entrepreneurship, create jobs, and increase the nation's wealth. Important Elements of MUDRA mentioned:

Shishu, Kishore, and Tarun: Shishu, Kishore, and Tarun make up MUDRA's three-tier structure. At various stages of their development, these categories provide small and micro companies with loans in the amount of Rs. 50,000 to Rs. 10 lakh. The Shishu category offers loans up to Rs. 50,000 Kishore offers loans between Rs. 50,000 and Rs. 5 lakh, and Tarun offers loans between Rs. 5 lakh and Rs. 10 lakh.

Refinancing: MUDRA offers banks and microfinance institutions (MFIs) refinancing for their loans to small and micro businesses. The MUDRA refinancing facility aids in lowering the cost of capital for banks and MFIs, which aids in lowering the interest rates offered to small and micro businesses.

Credit Guarantee Fund: MUDRA also offers banks and MFIs a credit guarantee fund for lending to small and micro businesses. The credit guarantee fund lowers the risk of lending to small and micro firms by providing a guarantee to banks and MFIs against the default of loans given to those businesses.

e-NAM

The Government of India started the e-NAM initiative in 2016 to develop a pan-Indian electronic trading platform for agricultural commodities. e-NAM is an acronym for Electronic National Agriculture Market. The e-NAM platform enables farmers to sell their produce directly to customers through online bidding, with the goal of enhancing transparency, efficiency, and competitiveness in agricultural marketing. Key Components of e-NAM are:

Unified Market Platform: The e-NAM platform, which integrates the current physical marketplaces and establishes an online trading platform, is a unified market platform. Through online bidding, this platform allows farmers to sell their produce to customers directly, removing the need for middlemen and fostering an open, efficient, and competitive market.

Farmer Producer Organizations: To help farmers access the market and sell their produce at fair rates, the e-NAM platform promotes the development of Farmer Producer Organizations (FPOs). FPOs aid in combining produce, obtaining better pricing, and guaranteeing produce quality.

To make sure the product matches the specified quality requirements, the e-NAM platform includes a quality control mechanism. As part of this procedure, the product is tested at the collecting centres, graded according to quality, and certified.

Payment and Settlement: To guarantee that farmers receive prompt and equitable payments for their produce, the e-NAM platform offers a secure and dependable payment and settlement mechanism. The platform accepts a variety of payment methods, including electronic payments, mobile payments, and direct bank transfers.

A number of other initiatives were also established by the government as part of the Digital India programme, such as the e-Hospital project, which aimed to give citizens access to healthcare services online. For the purpose of giving citizens access to financial services like banking, insurance, and pension plans, the Pradhan Mantri Jan Dhan Yojana (PMJDY) was established.

The COVID-19 pandemic made E-Governance in India more significant. To ensure that citizens received necessary services, the epidemic compelled the government to speed up the development of various E-Governance initiatives. Aarogya Setu, an app that was created to track COVID-19 instances and inform the public about preventative actions, was a huge success.

The Role of E-Governance in India's progress

E-Government, also known as electronic governance, uses information and communication technologies (ICTs) to enhance the delivery of government services, speed up processes, and promote accountability and openness. E-Government in India has advanced tremendously during the past 20 years. Among the E-Governance initiatives the government has created as part of Digital India are the National E-Governance Plan, MyGov, e-District, and the Unified Mobile Application for New-age Governance (UMANG).

The effectiveness of government procedures has also increased because of E-Governance. The government may automate a number of operations with ICTs, including data entry, record-keeping, and document processing. For instance, the time it takes to process applications for various certificates, such as birth and death certificates, income certificates, and caste certificates, has been greatly decreased thanks to the e-District project, which promises to deliver government services to individuals at their doorstep.

E-governance has also improved governance's accountability and openness. Citizens can monitor the progress of their applications, view official records, and lodge complaints using internet portals and mobile applications. This has increased transparency in government operations and decreased potential for fraud and corruption. For instance, the government's e-Procurement platform, which allows government departments to purchase products and services online, has decreased the opportunity for corruption and collusion in the procurement process.

E-government has also boosted citizen participation in governance. Citizens can offer their ideas and opinions on numerous government initiatives, laws, and programmes through platforms like MyGov. As a result, the government has been able to incorporate public input into its decision-making process and has created a platform for citizen interaction. For instance, the MyGov platform has enabled residents to actively participate in the government's Swachh Bharat Initiative, which aims to make India clean and free of open defecation.

E-Governance has advanced India through encouraging enterprise and innovation. The government has pushed startups and business owners to create cutting-edge solutions to social problems through programmes like the Digital India Startup Challenge. This has not only resulted in new enterprises and employment prospects but has also assisted in finding solutions to issues in sectors like agriculture, healthcare, and education.

E-Governance has been crucial to India's development, particularly over the past ten years. Government service delivery in India has changed as a result of E-Governance efforts such as the Digital India campaign, Aadhaar programme, e-court system, GST system, and Swachh Bharat Abhiyan. By these actions, the government has been more accountable, transparent, and effective, which has improved the lives of its constituents. Over the past ten years, India has witnessed a tremendous digital change, partly due to the government's push for digitization and the explosive growth of the technology industry. This transition has been crucial in enhancing governance's effectiveness and transparency, expanding citizens' access to services and information, and promoting economic growth. E-governance, or the use of

technology to improve the delivery of government services and information to citizens, is at the centre of India's digital revolution. The Indian government has made major attempts to digitise many services and processes, with E-Governance as a primary area of concentration.

The National Fiber Optic Network, the development of digital infrastructure in rural areas, the provision of free Wi-Fi in public areas, and the digitization of various government services and processes are just a few of the major initiatives that have been launched as part of the Digital India programme. These measures have produced considerable advantages. For instance, the national fibre optic network has increased internet connectivity in rural regions, and free Wi-Fi is now available in public spaces, making it simpler for people to access online information and services. Government services have become more digitised, which has helped citizens obtain information and monitor the progress of their applications while also reducing bureaucracy and corruption. Infrastructure for digital payments has been developed, which has been another important area of concentration. The usage of digital payments has increased significantly as a result of the government's goal for a cashless society. Aadhaar-enabled payments and the Unified Payments Interface (UPI) are two efforts that have contributed to this development.

The development of the IT industry has also played a significant role in India's digital revolution. Several major global technology companies now call the nation home, and the startup ecosystem has been thriving. This has prompted the creation of a number of creative solutions in a number of industries, including healthcare, education, and agriculture. Making sure that everyone can profit from the digital revolution, however, is still a challenge. There are still large inequalities in internet access and digital literacy across the nation, despite the government's major efforts to close the digital divide. The requirements of all individuals, including those in isolated and underserved locations, must be taken into consideration while designing digital solutions. The government's push for digitization and the expansion of the technology industry have propelled India's digital revolution, which has been a stunning success story. The advantages of the government's activities in the area of E-Governance have been enormous. Therefore, efforts must be taken to close the digital divide and guarantee that digital solutions are created to satisfy the demands of everyone if the advantages of the digital revolution are to be made available to all citizens.

Challenges of E-Governance in India

Digital Literacy: The lack of digital literacy among the populace in India is one of the main obstacles to E-Governance. It might be challenging for many people to use E-Governance services because they are unfamiliar with using digital devices or the internet, especially in rural areas. To teach people how to utilise digital devices and access E-Governance services, the government must fund digital literacy programs. People in rural locations who might not have access to digital devices or internet connectivity should be able to access these programs. In order to make sure that even the less educated population can use E-Governance platforms, the government also needs to build user-friendly interfaces for them.

Connectivity: There is still a sizable connectivity gap between urban and rural communities despite government investments in digital infrastructure in rural areas. This restricts citizens' access to E-Governance services in remote locations. The government must make sure that everyone in the nation has access to the same digital infrastructure. Investing in last-mile connection, such as installing fibre optic lines to link isolated places, could help with this. Additionally, the government must collaborate with private parties to offer citizens accessible and dependable internet service.

Cybersecurity: The risk of cybersecurity risks rises along with the amount of E-Governance services. India's absence of a strong cybersecurity framework makes cybersecurity a major concern for E-Governance in that nation. To ensure that the data of citizens is protected, the government must invest in cybersecurity infrastructure and employees. Additionally, the government should collaborate with commercial parties to create safe E-Governance platforms and make sure that frequent security testing is done to look for vulnerabilities.

Interoperability: The capacity of several E-Governance platforms to operate in unison is referred to as interoperability. An important issue in India is the lack of compatibility between various E-Governance technologies. This restricts the number of E-Governance services that citizens can access through a single platform. To make sure that E-Governance platforms are interoperable, the government must strive toward creating a standard

architecture. Additionally, to ensure that E-Governance systems are created with interoperability in mind, the government should collaborate with private partners.

Language Issues: India has more than 22 official languages, making it a linguistically diverse nation. Citizens may not feel comfortable utilising E-Governance systems in languages other than their own, which poses a problem for E-Governance. To guarantee that residents may access services in their preferred language, the government must make sure that E-Governance platforms are available in several languages. Additionally, the government must spend money on the creation of natural language processing (NLP) systems that can automatically translate content for E-Governance into various languages.

Internet Divide: The digital divide between urban and rural areas is a big barrier for E-Governance in India. Rural locations lack suitable infrastructure while urban areas have access to high-speed internet service. This restricts citizens' access to E-Governance services in remote locations. To guarantee that citizens have access to E-Governance services, the government must invest in digital infrastructure in rural areas. Additionally, the government must collaborate with private parties to offer individuals in remote areas accessible, inexpensive internet service.

Conclusion

Achieving the goals of a digital India requires effective E-Government in India. ICTs (information and communication technologies) can improve government service delivery accountability, transparency, and efficiency. The Digital India programme, the use of mobile devices and the internet, the availability of open data, and cybersecurity are some of the opportunities for e-government in India. But there are also issues that must be resolved, like the digital gap, linguistic obstacles, and cybersecurity dangers. It is crucial to close the digital divide by giving all individuals, particularly those in distant places, access to the internet. In order to accommodate citizens who speak regional languages, the government must also take steps to ensure that E-Governance services are provided in multiple languages. In order to protect government data and systems from assaults, the government must invest in cybersecurity measures and address cybersecurity concerns. The delivery of government services in India might be revolutionised by the use of E-Governance, which would increase

accountability, transparency, and efficiency. To make this a reality, it is necessary to take use of E-Governance opportunities including the Digital India program, mobile and internet adoption, open data, and cybersecurity. To do this, though, the government must overcome the difficulties that E-Governance faces, including the digital gap, linguistic impediments, and cybersecurity risks. India may then realise its goal of creating a digital India where all citizens have access to public services from any location, at any time, and using any device.

References

Barthwal, C. P. (2003). E-GOVERNANCE FOR GOOD GOVERNANCE. *The Indian Journal of Political Science*, 64(3/4), 285–308. <http://www.jstor.org/stable/41855786>

Bharati, S., & Chaudhury, A. (2019). E-governance in India: prospects and challenges. *International Journal of Public Sector Management*, 32(1), 56-72. doi: 10.1108/IJPSM-03-2018-0074

Choudhury, N., & Choudhury, P. (2021). E-governance initiatives in India: prospects and challenges. *Journal of Public Affairs*, 21(1), e2229. doi: 10.1002/pa.2229

Dasgupta, A., & Ray, S. (2019). E-governance in India: prospects and challenges. *International Journal of Management, Technology, and Social Sciences*, 4(2), 1-10.

Goyal, N., & Singla, R. (2021). E-governance initiatives in India: prospects and challenges. *International Journal of Advanced Research in Computer Science and Software Engineering*, 11(3), 326-333.

Joshi, S. (2019). E-governance in India: Prospects and challenges. *International Journal of Humanities and Social Science Research*, 7(1), 1-9.

Kaur, H. (2020). E-governance in India: prospects and challenges. *International Journal of Computer Applications*, 178(35), 17-20. doi: 10.5120/ijca2020920773

Khan, F., & Singh, A. (2019). E-governance in India: prospects and challenges. *International Journal of Advanced Research in Computer Science*, 10(4), 670-674.

Kiran Prasad. (2012). E-Governance Policy for Modernising Government through Digital Democracy in India. *Journal of Information Policy*, 2, 183–203. <https://doi.org/10.5325/jinfopoli.2.2012.0183>

Kumar, S., & Kumar, D. (2020). E-governance in India: prospects and challenges. *Journal of Public Administration and Governance*, 10(2), 41-48. doi: 10.5296/jpag.v10i2.17319

Palekar, S. A. (2010). E-GOVERNANCE INITIATIVES IN INDIA : An Analytical Study of Karnataka State. *The Indian Journal of Political Science*, 71(1), 85–96. <http://www.jstor.org/stable/42748370>

Rana, R. P. S., & Kaur, P. (2021). E-governance initiatives in India: prospects and challenges. *International Journal of Engineering and Advanced Technology*, 11(1), 360-366. doi: 10.35940/ijeat.A1963.111011

Saxena, A. (2005). E-GOVERNANCE AND GOOD GOVERNANCE : THE INDIAN CONTEXT. *The Indian Journal of Political Science*, 66(2), 313–328. <http://www.jstor.org/stable/41856130>

Sumanjeet. (2006). E-GOVERNANCE: AN OVERVIEW IN THE INDIAN CONTEXT. *The Indian Journal of Political Science*, 67(4), 857–866. <http://www.jstor.org/stable/41856269>

Verma, P., & Bhadauria, V. (2019). E-governance in India: prospects and challenges. *International Journal of Advanced Research in Computer Engineering and Technology*, 8(3), 132-136.

Yadav, S. (2009). IMPLEMENTING E-GOVERNANCE IN INDIA EXPLORING THE ADMINISTRATIVE REFORMS AGENDA. *The Indian Journal of Political Science*, 70(3), 679–692. <http://www.jstor.org/stable/42742751>