E-Governance: A Glimpse in The Northeastern States of Assam

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Abstract:

"E- Governance" has emerged as an integral instrument for attaining efficiency, accountability, and transparency in governance as a result of the quick development of information technologies (ICT), which has completely changed the government's operational environment. With an emphasis on the State of Assam and the Northeastern area, this piece of literature examines the conceptual underpinnings, implementation frameworks, and real- world applications of e-governance in India. It investigates at how national programs like the National e- Government Plan and the Digital India campaign have improved service delivery through e- District, Sadhbhavana, Kritagyata and Darpan and enabled the digital transformation of government institutions.

The research study identifies enduring issues such as poor ICT infrastructure, digital illiteracy, and connectivity gaps in rural and distant locations, while also highlighting the benefits of e-governance, such as increased accessibility, public participation and administrative efficiency. This study highlights the significance of capacity- building, infrastructure investment and inclusive policy design in achieving the full potential of e- governance by examining Assam's advancements and technological limitations. In the culmination, the study concludes that in Northeast India, efficient e-governance can act as a stimulant for long- term socioeconomic growth and democratic participation.

Keywords: *E-governance, Government, Digital India, Northeast, ICT.*

Introduction

Digital technology's emergence has had an immense effect on social and economic real world and changed public administration, particularly public governance, in observable ways. 'Digital Era Governance' (DEG) is a kind of new public administration model that stresses how modern technologies are the engines of creative, competitive governance and sustainable. More precisely, the Internet's transformative role has had an enormous effect on not only internal government operations but also the relationship between the government and businesses as well as citizens. Nevertheless, during the past 20 years, the terminology that is used to describe this quickly expanding phenomenon has changed, frequently making it harder to distinguish between different notions.[3]

The terms "e-government", "digital government", "e-governance", and "digital governance" have consequently been frequently used to refer to Digital Era Governance (DEG). The e-governance concept, also referred to as e- government, is the forerunner of the more general notion of 'digital government', which encompasses open, intelligent, and reformed government, according to the European Commission.[4] Although encouraging efforts to provide a clear

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[3] Dejan Ravselj, Lan Umek, ET. AL., A Review of Digital Era Governance Research in the First Two Decades: A Bibliometric Study, 14 FI 126 (2022).

[4] Ibid.

distinction between these ideas, definitions of these notions are still up for debate. Based on the adoption of various current technologies, DEG can therefore be seen as an advanced blanket word for all recent efforts 'to modernize governance in public administration'. The technical terms of these notions have become more complicated for two primary reasons: These are the immigration to information and communication technology is called (ICT) sector, which tends to rebrand 'technologies for marketing' purposes, as well as legislators who use these trendy labels for specific contexts, particularly in reports on popular science and policy research.

In the academic literature, the phrases "e-government" and "e-governance" are frequently used interchangeably, however some scholars have distinguished between the two (e.g., Bannister and Connolly, Rossel and Finger[5], Larsson and Gronlund).[6] The concept of e-governance is more comprehensive and entails the use of ICT for support to "e-democracy, e-government, and e-business". This contrasts with e-government, which is the simple deliberation of government information and services to the citizens and business through the electronics resources. Simply putting it another way, that e-governance is the application of electronics devices to facilitate communication between the 'government' and corporate entities, as well as underneath government operations, in order to streamline and enhance democratic, corporate, and governmental facets of governance. This, in turn, leads to increased efficiency, accountability, and transparency.[7]

In 2005, the UNDP described e-Government as "the use of ICT to enhance the delivery of information and services, promote citizen participation in the decision-making process, and make government less secretive, liable, and efficient." UNESCO states that the objective of e-governance implementation is to enhance good governance. The internet and recent advancements in communication technologies present opportunities to completely change how citizens and governments interact, which will help achieve the goals of sound governance.[8]

"E-Government," or "E-Gov," signifies the utilization of electronic media, specifically the internet, for delivering public services and information. Programmes for e-government enable citizens and businesses to do governance-related transactions online that would traditionally need "a trip downtown." Agencies also gain from better databases, less paperwork, and more productivity. In this case you can bend your pen to four uses: increasingly perfect our governance of geographical services for citizens; transform our economy and industrial relations; open on-line access via information empowerment to decision making by citizens; and also bring effective information management blended with greater efficiency into e-governance's practices of good governance. E-Governance is not just about implementing new technology or utilizing existing tools; it is about changing people's mindsets and workplace cultures to better serve citizens by integrating governance roles and procedures. It is essential to this process that the governance's ability to accept criticism and the implementation of the new social compact amongst all parties involved affirm their shared accountability for the improvement processes. A governance office serves as a venue for interactions between citizens and governance agencies. Emerging information and communication technologies make it feasible to identify service centers that are closed to customers. The public typically seeks out

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[5] Rossel, Pierre, ET. AL., International Conference on Theory and Practice of Electronic Governance, 399-407 (Association for Computing Machinery) (2007)

[6] Larsson, Hannu, Ake Gronlund, Future-oriented eGovernance: The sustainability concept in eGov research, and ways forward, 31 *GIQ* 137-149(2014)

[7] Dejan Ravselj, Lan Umek, ET. AL., A Review of Digital Era Governance Research in the First Two Decades: A Bibliometric Study, 14 F.I (2022)

[8] Ibid.

information and services that meet their needs in all these situations, and in these situations, excellence, usefulness, as well as effectiveness are crucial. As such, the implementation of e-Government necessitates a thorough understanding of the demands that society has and that ICT can provide. ICT efficacy in governance is directly linked to governance's ability to transform its culture by promoting networks throughout the organization as essential to openness, knowledge generation, and interchange.[9].

E-governance, also known as "electronic governance, is the utilization of information and communication technology (ICT) to deliver government services, conduct transactions, communicate and integrate different stand-alone systems and services. With e-governance, citizens can access government services in a convenient, efficient, and transparent way. The three main selected groups that can launch a war against injustice are government, common people, and business groups".[10]

E-Governance utilizes internet technology to its fullest potential in order to communicate and inform both entrepreneurs and the general public. Bills for water, power, phones, and other services can now be paid for online. All of this is used and carried out by citizens and the Government. Everyone depends on the internet, and when citizens rely on online services for governance, e-governance is the only outcome.[11]

The Concept of E-Governance Application in India

India has taken the lead in creating innovative digital initiatives and comprehensive programs that would allow ordinary people to benefit from a range of services and encourage digital inclusion. The Department of Electronics in India marked the first significant step towards e-governance in 1970, emphasizing information and communication. Launched in 1977, the National Informatics Center (NIC) initiated the District Information System (DIS) effort to computerize all district offices across the country. In 1987, NICNET, the National Satellite-Based Computer Network, was set up, which served as the main catalyst for e-governance in India. In the year 2006, the National e-Government Plan (NeGP) was released.[12] This plan's goal was to "make all government services available to the common citizen in his locality through common service delivery outlets, and guarantee accuracy, openness, and consistency of such services at affordable costs to realize the basic needs of an ordinary person."[13]

India's digital economy has the capability to grow at the most rapid pace in the world with the backing of favorable policies, an emerging startup ecosystem, and public-private collaborations. The e-governance platform UMANG, the accessible India campaign, Bharat Net, Digital Locker, the Agri Market app, the My Gov platform, the CPGRAMS (online public grievance platform), DIKSHA Portal (PM e-Vidya), e-SHRAM (a national database for unorganized workers), Jeevan Praman (biometric enabled digital service for pensioners), and many additional projects are part of the Indian government's digital campaign and its follow-up proposals.[14]

With the development of projects such as Digital Agri Stack and the National E-governance Plan for Agriculture, India's e-governance is rapidly expanding in particular the agricultural

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[9] Prof. Manjula. H. Pujar, E- Governance In India: Concept, Initiative and Issues, 6 IJCRT 262, 262-264 (2018)

[10] e- Governance, PUDUCHERRY DISTRICT, https://puducherry-dt.gov.in/e-governance/, (last visited Oct. 28,2025)

[11] Supra note 9.

[12] Trivedi, D., Bhatt, A., Trivedi, M., & Patel, P. V. (2021). Assessment of e-service quality performance of university libraries. Digital Library Perspectives, https://doi.org/10.1108/dlp-07-2020-0072

[13] Dikumoni Hazarika, Bhawna Gupta, Digital Assam: Reshaping Governance for Efficiency and Transparency, 2 IMPRJ 30, 31-34 (2024).

[14] Supra note 12.

domain. A 2019 assessment of how to further this e-government realm and improve state performance in digital government projects came into being that year. This is when the 'Department of Administrative Reforms and Public Grievances (DARPG) started the National e-Governance' Service Delivery Assessment (NeSDA), Hence, a greater number of e-services are being offered 'through centralized portals' because of governments throughout placing a greater focus on integrated service delivery. Accessibility and usability are enhanced by these portals' consistent access to services. Important developments in information technology have fueled the expansion of digital governance in India, particularly since the inception of the Digital India Campaign in 2015.[15] A network of Common Services Centers (CSC) has been built by the "Ministry of Electronics and Information Technology (MeitY) as part of the Digital India Initiative. In order to provide citizens with a range of Government-to-Citizen (G2C) and other citizen-centric e-services", the nation has one CSC in each of its 2.50 lakh Gram Panchayats (GPs). Operated by Village Level Entrepreneurs (VLEs), it is an independent business structure.[16]

There are certain pillars of E-Governance: -

Pillars upon which the digital India is putting its command upon, which includes:

- Expressways with Connectivity of internet

- Accessibility to wireless connection for All

- Initiative for Universal access to the internet

- e-Governance: Transforming Government through Technology

- E-Kranti: Delivering services electronically

- Detailed information for all individuals all over the country

- production of electronic devices

- The use of information technology for employment

- Early Harvesting initiatives[17]

E Governance Applicability

1. Web-based scheduling for recreational fields and facilities

Online interactive maps show city streets and neighbourhoods, including ball fields, tennis courts, and other parks & recreation facilities. Coaches, players, leagues, schools and individuals can visit the departmental web site from home or office, at any hour, weekends & weekdays. Users of the online system can locate facilities by name, neighbourhood or street address. They can query the database to find available fields, courts, etc. for specific times and dates. The interactive map can have color-coded facilities, based on availability, simplifying the process of finding an available facility that is also nearby. Interactive maps are easily printed directly from the e-Gov web site. Advanced systems can accept reservations online, and collect appropriate fees paid via credit card.

2. Online land ownership maps and tax valuation

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[15] Ibid
[16] Ibid
[17] Ibid

Online maps showing real estate maps, including streets, property boundaries and property descriptions. To find a parcel, citizens type a street address or navigate using an interactive Yahoo-like map. By zooming in on a street or parcel, users can see property boundary lines and descriptive information drawn automatically from public databases. Print a map and/or report about the parcel.

3. **Auto-notification of road repair & construction**

Online interactive maps showing up-to-date locations of current and projected road or other construction projects. This list and map are updated automatically as city staff add to or edit an online database. Advance notice can lead travellers to pick alternative routes, avoiding the annoyance, delays & pollution related to unexpected road congestion. Option: "Opt-in" auto-emails to alert nearby citizens/business if construction might affect them.

4. **Quality Monitoring and Online Stream**

Currently a variety of volunteer's survey stream or other waterway conditions. An interactive map system could collect their observations using online forms, then immediately update interactive maps. Turbidity, debris, and/or other stream conditions would be symbolized or coloured differently based on survey values in the online database. The web based interactive maps would illustrate stream conditions, helping stream "stewards" manage their waterways and helping educate young people about environmental affairs. Data-driven web map software would update the maps automatically, as database records are added or updated.

5. **Online harvest area maps and health warnings**

Create an online web map application, based on a database of fish or shellfish harvest areas. The web map system would allow users to interactively zoom in to see shoreline details, boat facilities, etc. or zoom back for a wider-area views. The data-driven map could use colours or symbols to graphically flag areas where the season is "open" and also areas affected by "red tide", "industrial pollution, etc. Season and harvest conditions can change rapidly. The online system makes it possible to communicate changes immediately and efficiently. To maintain the map, Fish & Game or Health staff would update values in data tables in background database. The interactive web map software automatically refreshes the map based on the new information. Option: Auto-notification by email, for bait shops, boat rentals, license holders, public safety agencies, and any others who choose to sign up for optional alerts.

6. **Online Block Watch & Crime incidence maps**

Online maps let citizens navigate to their neighbourhood by typing an address, intersection, community name, or zip code. Users display maps of recent burglaries, car prowls, or other community safety events. The data-driven mapping system may automatically color-coded event locations by type of event, date/time, or modus operandi. Neighbours may print maps from their web browsers for offline use or to post at the corner store. Optionally, residents could register to receive auto-emails if, for example, there was an attempted break-in near them. Similarly, neighbours could use online forms to quickly share information about everything from suspicious events to abandoned vehicles, to neighbourhood yard sales."

7. **E-Payment**

Any e-commerce website can accept electronic payment methods thanks to the E-Payment. Any web application can use this service to let its users make payments online. Among the features are:

- Governance-focused design
- Major credit cards and electronic checks accepted
- Flexible information batching and updating
- Offline payment processing
- Address verification services

Kinds of E-Governance

There are four types of E-governance

1. **Government-to-Citizen (G2C):**[18] The Government-to-citizen mentions the government services that are acquired by the familiar people. Most of the government services come under G2C. Similarly, the primary aim of Government-to-citizen is to supply facilities to the citizens. It also helps ordinary people to minimize the time and cost to carry out a transaction. A citizen can retrieve the facilities anytime from anywhere. Similarly, spending the administrative fee online is also possible due to G2C. The facility of Government-to-Citizen allows the ordinary citizen to outclass time limitations. It also focuses on geographic land barriers.

2. **Government-to-business (G2B):**[19] Government-to-business is the interchange of services between Government and Business firms. It is productive for both government and business firms. G2B provides access to pertinent forms needed to observe. It also contains many services interchanged between business sectors and government. Similarly, Government-to-business provides timely business information. A business organization can have easy and easy online access to government agencies. G2B plays an important role in business development. It upgrades the efficiency and quality of communication and transparency of government projects.

3. **Government-to-Government (G2G):**[20] The Government-to-Government mentions the interaction between different government departments, firms, and agencies. This increases the efficiency of government processes. In G2G, government agencies can share the same database using online communication. The government departments can work together. This service can increase international discretion and relations. G2G services can be at the local level or at the international level. It can be conveyed to both global government and local government. It also provides a safe and secure inter-relationship between domestic and foreign governments. G2G builds a universal database for all members to upgrade service.

4. **Government-to-Employee (G2E):**[21] The internal component of the G2G portion is government-to-employee. It seeks to enhance knowledge sharing and foster camaraderie among staff members. It gives its staff access to internet resources. In a similar manner,

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[18] Hari Srinivas, Four Kinds of E-Governance: A Stakeholder Analysis, The Global Development Research Centre (Oct. 28, 2025)
[19] Supra note 17.
[20] Ibid.
[21] Ibid.

requesting leave, examining pay records, and determining remaining vacation time. Training and development of human resources are produced by the G2E sector. Thus, the relationship between workers and government agencies is often known as G2E.

Advantages of E-Governance

Applications for e-government are advantageous to enterprises, government agencies, and citizens. The functionality of these services is enhanced by e-government apps, which give citizens, companies, and government agencies access to available government information around-the-clock. Through operational procedure reorganization and simplification, e-government implementation can lower organizational process levels and expenses. Additionally, because e-government technologies enable government agencies to provide public services to all clients in an effective and efficient manner, they can enhance government agencies' performance.[22] The ability to offer a wider range of governmental services to residents in a methodical and economical manner is the ultimate goal of e-governance. Because it enables the public to be aware of the government's efforts and the policies it is attempting to put into effect, it promotes government openness. Improving the efficiency of the current system will be the primary benefit of implementing electronic government. There are further benefits, such as improved public-civic authority interactions, cost savings, income growth, and more administrative transparency.

Disadvantages of E-Governance

The fundamental disadvantages for e-governance are the fairness absence under the public access to internet, of faithful access on the web and disguised outline of government groups that could have an impact and could bias public opinions[23]. The intricate connection between e-governance, public service, and information and communication technology in countries that are developing is one of the major issues.[24]

E- Governance and Legal Perspectives

One of the prime objectives of the Information Technology Act, 2000 is "the promotion of electronic governance. In the Information Technology Act, 2000, there are special provisions under Chapter III to grant legal recognition to electronic records, signature, and also encourage the government and its agencies to use them".[25]

Provisions for e-governance under the IT Act, 2000

These are the provisions under the IT Act, 2000 in the context of E-Governance:

1. **Legal Recognition of Electronic Records (Section 4)**[26]: Certain law requires a matter written, typewritten, or printed. 'Even in the case of such a law, the requirement is satisfied if the information is rendered or made available in an electronic form and also accessible for subsequent reference'.

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[22] Phonepaseuth Solinthone, Tatyana Rumyantseva, E- Government Implementation, 79 MATEC 2, 5 (2016)
[23] Ibid
[24] S Revathi Bai, Dr. Navitha Thimmaiah, Bridging Digital and Good Governance: A Review of E- Governance Frameworks and Challenges, EPRA 63, (2024)
[25] Electronic Record and E- Governance
[26] The Information Technology Act, 2000, § (4), Acts of Parliament, 2000 (India).

2. **Legal recognition of digital signatures (Section 5)**[27]**:** A person's signature is a prerequisite by law to verify details or an official document. Regardless of what is stated in the legislation, if the individual verifies it using a digital signature in a way that the Central Government specifies, he complies with the legal obligations. In this context, a signature is defined as an individual signing a paperwork by hand or using an identical mark.

3. **Use of Electronic records and electronic signatures in Government and its agencies** (Section 6)[28]

1) If any Law provides for-

   a) the filling of any form, application or any other document with any office, authority, body or agency owned or controlled by the appropriate Government in a particular manner,

   b) the issue or grant of any licence, permit, sanction or approval by whatever name called in a particular manner,

   c) the receipt or payment of money in a particular manner,

   Then, notwithstanding anything contained in any other law in force such as filing, grant, issue, payment, or receipt is satisfied even if the person does it in an electronic form. The person needs to ensure that he follows the Government-approved format.

2) With respect to the sub-section (1), may prescribe:

   a) the format and manner of filing, creating or issuing such electronic records

   b) Also, the manner and method of payment of any fees or charges for filing, creating or issuing any such records.

4. **Delivery of services by service provider (Section 6A)**[29]: (1) The relevant government may, for the intent of this chapter and for the effective provision of services to the general public via electronic channels, authorize, via order, any supplier of services to establish up, operate and improve the technological assets and provide any additional benefits that may be specified by publishing a notice in the Official Gazette.

(2) The relevant government may also entitle any service provider entitled through subsection (1) to collect, retain, and appropriate service charges from those who receive the service, as may be specified by the relevant government for delivering such services.

(3) The relevant government will outline the range of service fees that providers of services may charge and collect under this section by publishing a notice in the Official Gazette.

5. **Retention of Electronic Records (Section 7)**[30]: (1) When a law stipulates that records, papers, or information must be kept for a certain amount of time, it will be considered that the requirement has been met if the records, documents, or information are kept in an electronic format., when:

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[27] The Information Technology Act, 2000, § (5)
[28] The Information Technology Act,2000, § (6)
[29] The Information Technology Act, 2000, § 6 A
[30] The Information Technology Act, 2000, § 7

(a) The data in it continues to be available to be utilized as a reference in the future.

(b) The electronic record is kept in the manner in which it was created, transmitted, or received, or in a manner that can be shown to accurately depict the data in question.

a. The information contained therein is accessible and usable for a subsequent reference.

b. The format of the electronic record is the same as the one originally created, received or sent. Even if the format is changed, then it must accurately represent the original information.[31]

c. The electronic record contains details to facilitate the identification of the origin, destination, and also the date and time of the dispatch or receipt of the record.

This is provided that the clause does not apply to any information which is automatically generated primarily for the purpose of enabling an electronic record for dispatch or receipt.

(2) Nothing in this section applies to any law which expressly provides for the retention of records, documents or information electronically.

6. Publication of rules, regulations, etc., in Electronic Gazette (Section 8)[32]: Law requires the publishing of official regulation, rule, by-law, notification or any other matter in the Official Gazette. In such cases, the requirement is also satisfied if such rule, regulation, order, byelaw, notifications or any other matter is published in the Official Gazette or Electronic Gazette. However, the date of publication of the rule, regulation, by-law, notification or any other matter is the date of the Gazette first published in any form Official or Electronic.[33]

7. Section 6, 7 and 8 do not confer right to insist documents should be accepted in electronic form (Section 9)[34]: It is important to note that, nothing contained in Sections 6, 7, and 8 confer a right upon any person to insist either the acceptance, issuance, creation or also retention of any document or a monetary transaction in the electronic form from:

- Ministry or Department of the Central/State Government
- Also, any authority or body established under any law by the State/Central Government[35]

8. Power to make rules by Central Government in respect of Electronic Signature (Section 10)[36] **The IT Act, 2000 empowers the Central Government to prescribe:**

- Type of electronic signature
- Also, the manner and format of affixing the digital signature
- Procedures which facilitate the identification of the person affixing the digital signature[37]
- Control processes and procedures to ensure the integrity, security, and confidentiality of electronic payments or records
- Further, any other matter which is legally important for digital signatures[38]

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[31] The Information Technology Act,2000, § 7 (b)
[32] The Information Technology Act, 2000, § 8
[33] Ibid.
[34] The Information Technology Act,2000, § 9
[35] Ibid.
[36] The Information Technology Act,2000, §10
[37] Ibid.
[38] The Information Technology Act,2000, § 43A

Laws Relating to Data Protection

As per section 43A[39] of the Information Technology Act, 2000: A corporate entity that owns, controls, or manages a computer resource that contains sensitive personal data, or information is undoubtedly naive in putting reasonable security practices and procedures in place and keeping them up to date, which could result in an individual suffering an unjustified loss or gain. In these situations, the corporation may be required to compensate liabilities. Also, these liabilities can only be up to five crore rupees.[40].The Information Technology (Reasonable security practices and procedures and sensitive personal data or information) Rules, 2011 were issued as well by the Indian government in accordance with section 43A of the IT Act, 2000. These regulations, which apply to all body corporates in India, particularly address delicate sensitive data or information.[41]

E- Governance in Northeast India

In recent years, the prevalence of e-governance has grown, specifically in Northeast India, where issues with availability, connectivity, and technology have been noted. Since Northeast India is a rural and mountainous region, inhabitants typically experience difficulty getting government services. Access to essential government services, such as social assistance, healthcare, and education, can be streamlined through the use of e-governance technology, such as mobile applications and web portals.[42] These technological advancements are examples of e-government operations. The execution of this scheme could potentially reduce the inequalities in service delivery between urban and rural areas, boosting the average standard of life for people living in Northeast India. In northeastern India, incompetence, administrative processes, and illicit activity frequently impede government operations.[43]

Additionally, the Northeast e-Government program has prioritized the enhancement of skills and capacity amongst residents and government workers. The initiative has trained more than 31,000 Northeastern government professionals in e-governance topics like project management, cyber security, and digital literacy. Additionally, more than 69,000 residents have received digital skills training so they can engage with government services online. In addition, there has been significant impact from the Northeast e-Government Scheme. The Ministry of Electronics and Information Technology reports that between 2018 and 2020[44], the program increased digital transactions in the Northeast by 160%. Furthermore, the program has improved the effectiveness and caliber of government services, which has increased citizen contentment. Despite its natural resources and incredible cultural diversity, this region has been struggling with governance, development of infrastructure, and financial growth. In the Northeast, the Indian government has launched several e-infrastructure projects to solve these problems. The "Northeast e-Governance Scheme" was introduced by the Indian government in 2018 to bridge the divide between the area and the rest of the nation. Using information and communication technology (ICT) techniques, this program's primary goal is to enhance the provision of government services while boosting accountability and openness in governance.[45]

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[39] Ibid.

[40] Ibid.

[41] Ibid.

[42] Shikha Sharma, E Governance in the North-East Region: A study of The 'E- Prastuti' Project in Assam, 11 IJCRT 481, 482-488(2023)

[43] Ibid.

[44] Ibid.

[45] Ibid.

Implementation of E Governance in Assam

In Northeast India, Assam is the region's most developed state. It is quickly emerging as a major commercial and economic center for future trade with Southeast Asian nations. Considering the Indian government's reliance on the "Act East Policy," it is anticipated that the state's importance in commerce and business will continue to grow. A significant proportion of individuals in Assam's major towns between the ages of 15 and 30 is proficient in the English language and are excelling in the IT field. Assam implemented a new IT and Electronics Policy in 2017 to expedite the State's digitalization effort and enhance "SMART" governance through digital platforms.[46] With the inauguration of the NIC Assam State Center in 1986, e-governance in Assam officially began in the late 1980s. In order to improve data sharing and communication, NIC introduced ICT into government offices and linked them via NICNET. Digital India's 2015 launch significantly accelerated the state's e-governance developments.[47]

The State Government's 2016 e-district (The Sugam) initiative is another noteworthy example of its digitization efforts. Prior to the establishment of the Assam e-district project, residents were required to commute to district headquarters and block offices or tahsil offices in order to get fundamental amenities like caste, income, birth and death certificates, and domicile certificates. However, the implementation of the e-district project makes it achievable to receive services electronically and does away with the need for applicants to walk into a public office. The IT Department of the Government of Assam implemented the e-district initiative. There are 53 citizen-centric services in Assam that will be provided through e-districts**.**[48]

The e-Prastuti program, launched by the Government of Assam's IT Department, is intended to standardize websites. With the launch of the Sadhbhavana portal in Guwahati on February 1, 2022[49], Assam made significant progress toward digitization. The Sadhbhavana portal aims to eliminate old records that have been in the Assam secretariat for several decades, some of which go all the way back to the 1990s. In order to allow seniors to electronically apply for pensions, follow sanctions, and keep an eye on payments, the Kritagyata portal was launched. For the purpose to serve retirees throughout the state, Assam established 27 Kritagyata Pension Seva Kendras (PSKs) as assistance centers under the Kritagyata portal in 2022. Assam's "Darpan," generated by the state, offers a visual depiction of data on Key Performance Indicators (KPIs) for its major projects and programs. Decision-making, transparency, and monitoring progress are all improved by this. The Smart Performance Appraisal Report Recording Online Window is another important project (SPARROW). In order to improve efficiency, transparency, and accessibility, the Assam government has implemented this system to digitize and streamline the performance review process for government personnel.[50]

Technical glitch of the Implementation of E- Governance in Assam

In Assam, e-governance has advanced to the procedural stage and provides rudimentary e-services; yet citizen-government interaction is still not yet at its best. E-commerce and the Assam unregulated sector have been empowered by the Digital India program. The region's growing recognition of ICT and e-governance as critical growth factors emphasizes the necessity of ongoing study and advancement in digital governance techniques. Despite the State's notable

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[46] Supra note 12.
[47] Ibid.
[48] Ibid.
[49] Ibid.
[50] Supra note 12.

advancements, issues with connection to the last mile, digital literacy, and rural internet adoption still exist. Further strengthening Assam's standing as a digital leader in the Northeast and in India can be achieved by sustained investment in ICT infrastructure, AI-driven services, and blockchain technology.

In addition to natural calamities, Assam is a state that is highly susceptible to landslides and floods, earthquakes, and storms. The main barriers to internet adoption in the state are inadequate development of infrastructure brought on by geographic isolation and inadequate network coverage. Additionally, current operators don't invest in creating amenities in remote regions since they don't generate enough income there. The digital divide was brought to light by the COVID-19 outbreak, when children in Assamese rural communities were excluded from online education. It might be challenging for kids to attend online classes because many schools lack computers, internet connection, and basic facilities. Many government offices in Assam lack adequate ICT infrastructure, which makes it challenging to offer online services, particularly in rural areas where power and internet connectivity are still erratic[51].

The staff members of ICT proficiency varied widely and is inadequate. Other officials lacked ICT expertise, except for the IT cell staff and those involved in online information management. As a result, there was a high need for programs of instruction that would familiarize them with ICT skills so they could use internet technologies even more efficiently for internal administrative management and public governance. Although there was a strong ICT infrastructure at the state secretariat, questions were raised about how robust the infrastructure was at various governmental levels.[52] Many other state government administrative agencies and offices lack the necessary ICT foundation to employ internet-based technologies for efficient governance. Most local government organizations don't consistently update their websites. As a result, a significant obstacle was the widespread use of websites across all tires of state government.

The implementation of e-government in the states presents several opportunities and obstacles. Opportunities included a paradigm shift in knowledge distribution, improved public supply efficiency, and time and cost savings in carrying out the tasks of administration, among others. A lack of adequate e-governance infrastructure at the foundational levels of administration caused issues with vertical integration of government institutions, and staff members were not trained in the necessary ICT capabilities. These difficulties are like the worries that emerging nations have when the ideal of e-governance becomes a reality. A survey of the body of research indicates several barriers to these nations' digital revolution in governance.[53]

Conclusion

Thus, it can be said that the best use of ICTs to improve the coherence, productivity, efficacy, transparency, and liability of informational and transnational exchanges within government, between government agencies at various levels, and between citizens and businesses is known as e-governance. Additionally, it grants citizens permission to access and utilize information. In general, e-governance improves governance by utilizing information and communication technology at different governmental and public sector levels. An important project of the Assam government, the e-Prastuti project aims to supply public services to citizens electronically. The project has greatly impacted citizens by enhancing openness, decreasing

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[51] Ibid.

[52] Parismita Bhagawati, Websites and Social media technologies as implements of E- Governance: A study of Northeast India, IJST 3188, 3189-3190 (2020)

[53] Ibid.

corruption, and making it simpler for them to obtain public services. While the project was being implemented, it also encountered a number of difficulties, but the government has taken action to address these issues. All in all, the e-Prastuti project is a step in the direction of Assam's greater e-governance objective. Even the most marginalized communities are being given access to opportunities in the digital age by the State through technology-driven policies that are shattering historical barriers. The future of digital Assam can be positively shaped by the government's proactive role, strong leadership, and collaboration with NIC Assam. The state of Assam can make development more effectively if the disparity in digital access between rural and urban residents is closed.

In conclusion, the crucial relationship between e-governance and good governance, stressing how the successful application of digital governance frameworks may greatly improve transparency, and public participation in the provision of public services as well as hold the service providers accountable for their mischiefs in providing services.