4. E-Governance in India

The evolution of e-governance in India has reshaped governance from a top-down administrative model into a participatory, transparent, and citizen-centric ecosystem.

E-Governance in India - Transforming Citizen-State Interaction Introduction

E-Governance represents a fundamental transformation in the way governments interact with citizens, businesses, and other arms of the state. India has leveraged Information and Communication Technology (ICT) to make governance transparent, efficient, inclusive, and citizen-centric. It moves beyond mere digitisation of processes to creating a digital ecosystem that empowers citizens, enhances accountability, and optimizes service delivery.

Core Objectives of E-Governance

Transparency - Digital trails reduce corruption and ensure clear auditability of government processes. **Efficiency -** Streamlined workflows, automated approvals, and real-time data access reduce

Inclusivity - Bridging urban-rural divides, enabling marginalized communities to access services.

Accountability - Monitoring mechanisms, feedback portals, and public dashboards facilitate better governance.

Affordability - Digital services minimize costs for both citizens and government, optimizing resource utilization.

Evolution of E-Governance in India

Phase I - Till 2000 — Laying the Foundation

National Informatics Centre (NIC), 1976 - Introduced computerisation to government departments and developed early digital communication networks.

NICNET, 1987 - India's first satellite-based network, linking national, state, and district-level offices, enabling faster government-to-government communication.

Early Digital Projects -

bureaucratic delays.

- 1. Computerized Railway Reservation System Streamlined ticketing and reduced congestion.
- 2. Digital Income Tax Records Improved record management and reduced errors.
- 3. Computerised Electoral Rolls Enhanced transparency and voter verification.
- E-Seva (Andhra Pradesh, 1999) Multi-service single-window model enabling citizens to access government services efficiently.

Phase II - 2000-2014 — Expansion and Rural Outreach

- Gyandoot (Madhya Pradesh, 2000) Rural cyber kiosks providing access to government services in tribal areas.
- Bhoomi (Karnataka, 2001) Digitised land records, reducing disputes and facilitating easy property management.
- 3. **FRIENDS (Kerala) and Lokvani (Uttar Pradesh) -** Demonstrated adaptability of digital governance across diverse socio-economic contexts.
- 4. Institutionalisation of E-Governance -
- National e-Governance Plan (NeGP, 2006) Systemic rollout of e-governance across the country, including -
 - 1. State Wide Area Networks (SWANs) Connectivity backbone.
 - 2. Common Service Centres (CSCs) Citizen service access points, especially in rural areas.
 - 3. State Data Centres (SDCs) Centralised infrastructure for hosting applications and services.
- 5. **Aadhaar (2010) -** The world's largest biometric identity system, enabling verifiable digital identity for over a billion people and powering welfare transfers, financial inclusion, and service delivery.

6. **Challenges -** Many projects suffered from connectivity issues, pilot project syndrome, and financial unsustainability, preventing nationwide scaling.

Phase III - 2015-2019 - Digital India and Ecosystem Creation

Digital India Initiative (2015) - Shift from mere service delivery to building a holistic digital ecosystem. **Key Building Blocks -**

- 1. JAM Trinity (Jan Dhan, Aadhaar, Mobile) Enabled direct benefit transfers and financial inclusion.
- 2. DigiLocker & BHIM Secure platforms for document storage and digital payments.
- 3. India Stack Open APIs for Aadhaar authentication, e-KYC, e-Sign, and UPI, facilitating innovation.
- 4. **Unified Payments Interface (UPI) -** Rapid growth from 0.01 million transactions in 2016 to 18 billion monthly by 2025, revolutionizing payments.

Platformisation of Governance

- 1. **UMANG** Unified platform providing access to 100+ government services via mobile/web.
- 2. **e-Kranti -** Focused on transforming e-governance into good governance.
- 3. DigiLocker Secure cloud storage for digital documents.
- 4. **Mobile Seva -** SMS, IVRS, USSD, and mobile app-based service delivery.
- 5. Common Service Centres (CSCs) Serve as rural access points for e-services and digital literacy.
- DigiYatra Facial recognition-based airport service, streamlining citizen experience and demonstrating state-citizen digital integration.

Related Concerns and Challenges

1. Digital Divide and Literacy

Urban-Rural Gap - Rural areas face connectivity deficits and lack of digital awareness.
 Low Digital Literacy - Many citizens, especially elderly populations, struggle to navigate e-platforms.
 Language Barriers - Predominantly English-centric platforms limit accessibility for non-English speakers.

2. Infrastructure Limitations - Unreliable electricity, poor internet connectivity, and hardware scarcity hinder effective service delivery, especially in remote regions.

3. Cybersecurity and Data Privacy

- 1. Rising cyber frauds, phishing, and identity theft pose risks.
- 2. Weak KYC norms and limited cyber police infrastructure exacerbate threats.
- 3. Protecting Aadhaar and other citizen data remains critical.
- **4. Interoperability and Bureaucratic Resistance -** Siloed department databases hinder data sharing and integrated governance. Resistance to change Lack of training and bureaucratic inertia slow adoption of new digital systems.

Policy Framework and Institutional Support

Ministry of Electronics and Information Technology (MeitY) - Formulates policies to ensure scalability, security, and sustainability of digital governance initiatives.

Key policy measures include -

- 1. Open Source Software Adoption for cost efficiency and flexibility.
- 2. Cloud-Ready Application Development for scalable services.
- 3. Open APIs to ensure departmental interoperability.
- 4. Email and data security policies to protect citizen information.

Conclusion

E-Governance in India reflects a paradigm shift toward citizen-centric, transparent, and accountable governance. Through programs like Digital India, India Stack, JAM Trinity, DigiLocker, UMANG, and CSCs, India has created a robust digital infrastructure enabling inclusive service delivery. However, challenges such as digital literacy gaps, cybersecurity threats, linguistic diversity, and infrastructure deficiencies require sustained policy focus and innovative solutions. By addressing these challenges,

India can achieve comprehensive digital empowerment, enhancing governance efficiency and citizen engagement at scale.

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