

## 3. ICT and Governance in India

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**Abstract:**

*The revolution in the Information and Communication technology has brought a new agenda for governance in India. The advent of budget smart phones and availability of data packages in cheapest price has given a greater scope for the citizens as well as government machineries to utilize the benefits of e-Governance. With the introduction of Digital India scheme, India is witnessing a transformational digital revolution with the promises to reshape the social, economic, cultural and political landscape of the country. It promises to transform India into a digitally empowered society by focusing on digital inclusion, digital literacy, and easily accessible digital services.*

*However, the e-governance could not reach to all the sections of people especially in rural India. In rural India there are certain infrastructural as well as cultural barriers to achieve the goals of e-Governance.*

*Therefore, the government needs to address those issues and also it should make the service transfer machineries user friendly among those people. For the success of e-governance through ICT, the government needs to create a work culture of maintaining, processing and retrieving the information through an electronic system and use that information for decision making. In this paper we will discuss ICT and Governance in India.*

**Keywords:**

*Information, Communication, Technology, Citizens, Government, Digital India Scheme, Country, Digital Inclusion, Digital Literacy, People, Rural, E-Governance, Decision Making, Economic.*

### 3.1 Introduction:

ICT in Governance:

Information and Communications Technology is a key aspect when it comes to e-governance. It has the potential to make life easy (or difficult) for the common populace if adapted in the right manner. For now, this article will focus on the limitations and the benefits of ICT in Governance.

### **3.2 Overview of ICT in Governance:**

Information and Communications Technologies play a key role in e-governance. Through a careful analysis of data, political, socio-economic decisions can be taken up by the government. A successful implementation of ICT will be a one-stop solution for most if not all of India's governance woes.

In India, e-Governance applications in the recent past have demonstrated their positive impact in minimizing the processing costs, increasing transparency and supporting economic development by income generating ventures, increase in agricultural production, and improvements in health and education sectors, all of which promote the overall quality of life of the Indian people.

#### **The benefits of ICT in Governance are as follows:**

- Better transparency as it allows the public to be informed on government decision and policies
- Efficiency of the current system as it would have the same money and time. Better facilitation of communications between governments and businesses will be possible.
- The society is moving towards the mobile connections and the ability of an e-government service to be accessible to citizens irrespective of location throughout the country brings the next and potentially biggest benefit of an e-government service as we live in what is now termed as the Knowledge era. [1]

#### **E-Governance:**

The term e-governance focuses on the use of new ICT by governments as applied to the full range of government functions. Thus e-governance is the application of information and communication technology for delivering government services, exchange of information, communication, transaction, integration, various stands alone systems and services between government and citizens, government and business as well as back-office process and interaction within the entire government frame work.

ICT acts in speeding up the flow of information and knowledge between government and citizen and transforming the way in which government and citizen interact.

#### **Types of Government Interaction in e-governance.**

G2G: Government to Government

G2C: Government to Citizen

G2B: Government to Business

G2E: Government to Employee [2]

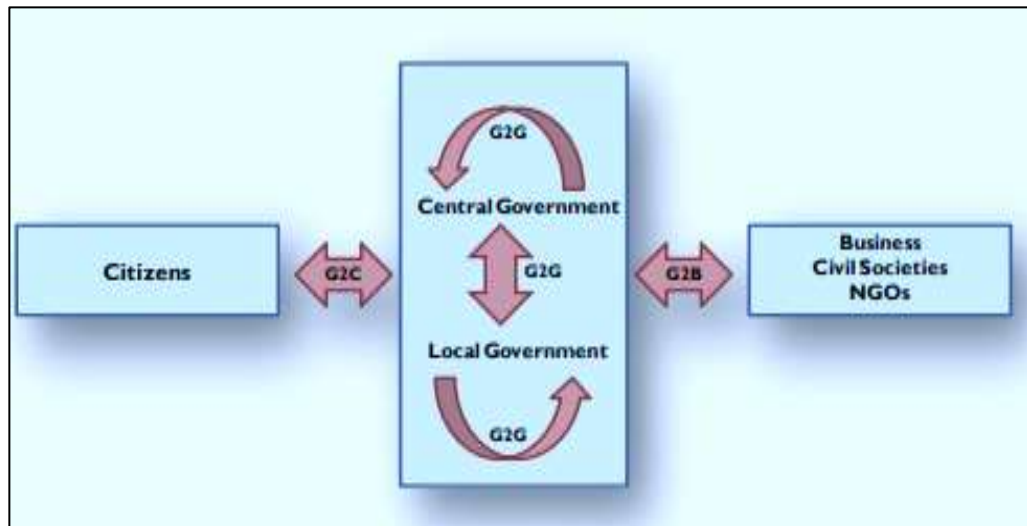


Figure 3.1: Government Interaction in e-governance

### Benefits/ Outcomes of E-Governance

- Enhanced Transparency and Accountability.
- Expanded reach of Governance.
- Improved Public Administration.
- Enables Environment for Promoting Economic development.
- Improved service delivery in the form of better access to information and quality services to citizens.

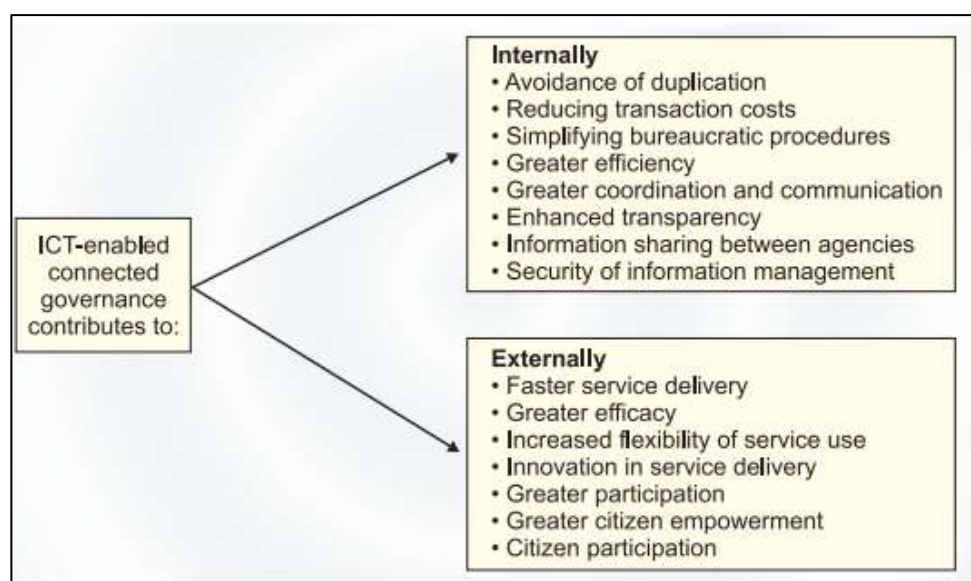


Figure 3.2: Benefits/ Outcomes of E-Governance [3]

### **3.3 Principles of ICT and Governance:**

ISO/IEC 38500 launches six propositions for good corporate ICT and governance. These propositions talk about the behavior which is preferred for the guidance of the decision-making process.

The first principle is accountability. Individuals and groups within the organization are aware of and accept their roles in terms of both ICT supply and demand. Those who are in charge of actions also have the authority to carry them out. This is an important principle of ICT and governance.

The second principle is strategy. The existing and future capabilities of ICT are addressed in the organization's business strategy, and the strategic ICT plans ensure that the current and ongoing needs of the organization's business strategy are met. This is a crucial principle of ICT and governance.

The third principle is acquisition. ICT acquisitions are made for a variety of reasons, based on suitable and continuing analysis and decision-making that is clear and transparent. In both the short and long term, a proper balance has been incorporated between rewards, opportunities, expenses, and dangers. This is a principle of ICT and governance that holds a lot of importance.

The fourth principle is performance. ICT is appropriate for supporting the organization, offering the services, levels of service, and service quality required to satisfy current and future business requirements. This is an important principle of ICT and governance.

The fifth principle is conformance. ICT operates in line with all applicable laws and regulations. This is a crucial principle of ICT and governance.

The sixth principle is Human Behavior. ICT policies, practices, and decisions foster human behavior respect, taking into account the existing and evolving needs of all "people in the process." [4]

### **3.4 Information and Communication Technology Initiatives in India:**

There were many measures taken to support the growth of ICT in India. In 1970, the Government of India (GOI) has established Department of Electronics and subsequently in 1977, GOI has taken the first major step towards implementation of e-governance by establishment of National Informatics Centre (NIC).

By 1980, most of the government offices were equipped with computers but their role was confined to word processing. [5]

Within the span of time and advent of ICT, the GOI has taken a remarkable step for fostering e-governance by launching the national satellite-based network (NICNET) in 1987 followed by District Information System of the National Informatics Centre (DISNIC). [6]

NICNET was the first government informatics network across the world equipped with advanced database services. India's e-governance transformation initiatives started in the 1990s. Since then, the country has made considerable progress in the information and communication technology sector. To improve ICT performance and productivity, the Government of India approved the National e-Governance Plan (NEGP) on May 18, 2006 which seeks to improve delivery of government services to citizens and private sector with the vision of making all government services accessible to the citizen in his/her locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs to realise their basic needs'-governance has become the basic requirement of governance at the local, regional, national or international levels. [7]

The National e-governance Plan (NEGP) comprises 27 Mission Mode Projects (MMPs) and 8 components. The MMPs are implemented by various central ministries and state governments. The major core infrastructure components include State Wide Area Networks, Common Service Centers, and Governance Service Delivery Gateway etc. [8]

With the cost of communication and IT infrastructure going downwards and demand going upwards, the e-governance initiatives took shape in the decade of 2000s. Thus, the government sponsored e-governance projects took a big leap to provide the impetus for long-term growth of e-governance within the country. Demands generated from political leadership, capacity building needs, and perceived citizen expectations have contributed to IT innovations. At the state level, many state governments started their initiatives in the same period by taking up projects to serve their people through ICT. [9]

India has played a major role in the context of ICT for development from the early 1980s at various levels. The National Policy on Information Technology formulated in 2012 focuses on application of technology-enabled approaches to overcome developmental challenges in education, health, skill development, financial inclusion etc. The policy outlines strategies to achieve the following aims:

- Creating an ecosystem for a globally competitive IT industry
- Human Resource Development
- Promotion of innovation and Research and Development in IT sector
- Enhancing productivity and competitiveness in key sectors through ICT
- Enabling service delivery through e-governance
- Development of language technologies
- GIS based IT services Information and Communication Technology and Governance
- 114
- Security of cyber space.

There have been an increasing number of ICT initiatives in India. Projects such as e-seva, FRIENDS, computerisation of land records, Bhoomi project, Lok Mitra and so on are aimed at bringing government services closer to citizens. The E-procurement project introduced in 2003, aims to streamline government activities that impinge upon business organisations. It aims at transparency in government procurement and reduction in tender cycle time. [10]

### 3.5 E-Governance in India:

India has done a remarkable start in terms of using ICT for improving government business. Several states in India – Andhra Pradesh and Karnataka being the pioneers – have been attempting e-governance solutions to improve information management and governance (see Appendix 3 for brief description of some e-Governance projects). States have set up Information Technology and Communication (IT&C) Departments to guide and coordinate the implementation of e-governance programmes and projects. [11]

These Departments also provide guidance for procurement of hardware and software by government agencies. IT&C Departments have made commendable progress in the development of e-governance applications (e.g., Bhoomi in Karnataka and e-Seva in Andhra Pradesh). The IT&C Department, Government of Andhra Pradesh has taken up exemplary e-governance initiatives like e-Seva, e-Procurement, CARD (Computer-aided Administration of Registration Department), and Fully Automated Services of Transport Department (FAST). [12]

These projects have become role models and have been emulated by other states in the country. The Government of Andhra Pradesh has also recognized the need for e-governance standards to ensure interoperability among e-governance applications. Metadata Standards and Operational Specifications titled “e-Thesaurus for Good Governance” and Data Standard Definitions titled “e-Data Dictionary for Good Governance” have been developed through the Centre for Good Governance (CGG), Hyderabad. In spite of good progress, the power of e-Governance for good governance is yet to be harnessed in India to a significant degree. States differ substantially in terms of their e-readiness and approach to e-Governance due to several factors.



Figure 3.3: Status of e-Governance in India [13]

### 3.6 National e-Governance Action Plan (NEGAP):

The recently formulated National e-Governance Action Plan of India attempts to address many of the key issues of e-Governance in India with a view to harnessing the power of ICT to improve governance for the common citizen. The structure of NEGAP (2003-07) encompasses a set of core policies to provide integration and support, a set of integrated projects or cross-cutting initiatives, a set of Mission Mode Projects at national and state levels.

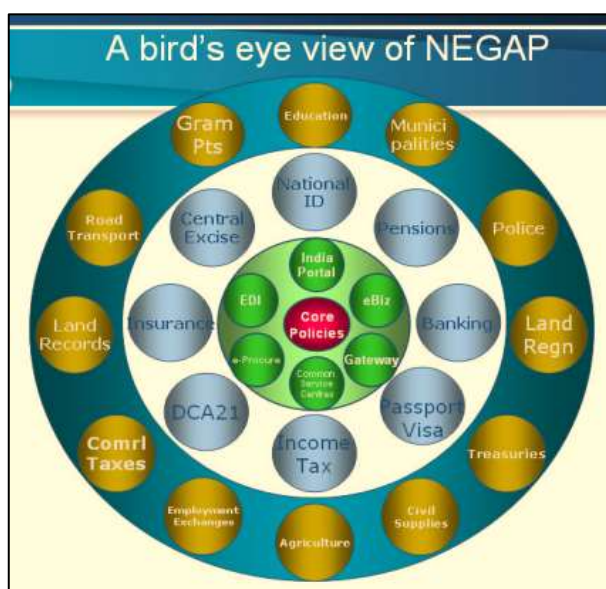


Figure 3.4: A Bird Eye View of NEGAP [14]

Table 3.1: Design of NEGAP:

Central Government Projects	State Government Projects (Sub Programme)	Integrated Projects
<ul style="list-style-type: none"> <li>National ID</li> <li>Central Excise</li> <li>Income Tax</li> <li>DCA 21</li> <li>Passport/ Visa &amp; Immigration</li> <li>Pensions</li> </ul>	<ul style="list-style-type: none"> <li>Land Records</li> <li>Property Registration</li> <li>Transport</li> <li>Agriculture</li> <li>Municipalities</li> <li>Gram Panchayats</li> <li>Commercial Taxes</li> <li>Treasuries</li> <li>Police</li> <li>Employment Exchange</li> </ul>	<ul style="list-style-type: none"> <li>EDI</li> <li>e-BIZ</li> <li>Common Service Centres</li> <li>India Portal</li> <li>EG Gateway</li> <li>e-Procurement</li> <li>e-Courts</li> </ul>
<b>Programme Components</b>		
<ul style="list-style-type: none"> <li>Core Policies</li> <li>Core Infrastructure</li> <li>Support Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Integrated Services</li> <li>Technical Assistance</li> <li>HRD &amp; Training</li> </ul>	<ul style="list-style-type: none"> <li>Awareness &amp; Assessment</li> <li>Organization Structures</li> <li>R &amp; D</li> </ul>

The National e-Governance Action Plan demands wide-ranging reforms in governance processes. Simple automation of processes does more harm than benefit. The syndrome of “garbage in – garbage out” will operate if complicated processes are automated without simplification and establishing their usefulness for the people. Thus, process reforms hold the key to successful e-Governance. This is where the NCGG can play a key role. Moreover, NCGG will be the national center of knowledge on governance with significant application of ICT for networking with state and international knowledge centers and governments. It would make effort to document and propagate e-tools for good governance while addressing capacity building and change management issues.

Knowledge is power. Harnessing the power of ICT for e-governance has the power of transforming government and making knowledge-based good governance a reality. While the challenges faced by governments are colossal, the new technologies provide tremendous opportunities for enhancing the power of governments to handle data, take better informed decisions, and provide transparent, cost-effective and accountable solutions and services to citizens and business. Good governance requires process reforms and input-output-outcome-impact tracking. Automation of reformed processes and tracking systems can assist in the delivery of good governance to citizens in developing countries. As good governance is the single-most important factor for socio-economic development and poverty reduction, e-Governance can make a distinct impact on the development scenario, especially for the poor and weaker sections of society, including women. There is an urgent need to address the issues of using new technology for transformation of governance and leapfrogging development. [15]

E-governance is regarded as the ICT-enabled route to achieving good governance since it integrates people, processes, information, and technology in the service of governance initiatives. Information and Communication Technologies (ICTs) play a key role in development & Economic growth of the Developing countries of the World. Political, Cultural, Socio-economic Developmental & Behavioral decisions today rest on the ability to access, gather, analyze and utilize Information and Knowledge. [16] ICT is the conduits that transmit information and knowledge to individual to widen their choices for Economic and social empowerment. People around the Globe from few years from now will be carrying a handheld computer connected to the Web to get the information about the World at their fingertips. Government of India is having an ambitious objective of transforming the citizen-government interaction at all levels to by the electronic mode (e-Governance) by 2020. [17]

Information and communication technology (ICT) does not average the wireless computer connected Internet alone; it also includes radio, telephone, electronic brail writer, and a wide assortment of tools such as operating systems, databases, emails etc. They are not to be used alternatively of other tools, but complement what subsists to reach a goal, be it better e-Learning, amusement, etc. In today’s world, the most dominant Information and communication technology (ICT) device. [18]

Information and communication technology (ICT) is very utile for women are who has not literate and it is access the info of all types like computer, Agriculture, cooking etc... Government of India launched the many of projects for literacy in rural areas with the help of ICT. It is very useful for rural women also.



With the help of Information and communication technology government issue the many people educated in rural areas. It is very effectual for citizen in India. [19]

A lot of the substance on the Internet has not been highly-developed to reference the inevitably of female in developing and developed nation's nor is it usable in the linguistic communication they talk.

Technology has also been used for torment of women in the kind of erotica, vender and marauding e-mails. Patch sex raw men have through lots to advance gender just substance intent, full addressing this content can only be through when more women become software engineers, content manufacturer and enterpriser fill the big demand for these resources. There is a growth commercial market, yet importantly underserved in the development global. [20]

Educated women addition opportunities for their family unit. Information Communication and Technologies is a significant tool for e-learning, as well as a series of production about which one inevitably of learning. Facets to the E-Governance are Information Technology enabling the governing - something alike to Backoffice mechanization, Web-enabling the administration so that the peoples will hold a direct accession. Up Governance so that nakedness, accountability, truth, speeds of operations, effectivity and efficiency may be reached. The Government of India have adoptive some Strategies for increasing women Literacy. The primary strategies adoptive are National Literacy Mission for conveyance functional literacy, Universalization for simple Education and Non-Formal pedagogy. [21]

### **3.7 Conclusion:**

Corporate governance of ICT is defined by ISO/IEC 38500 as “the framework that directs and governs existing and future ICT usage.” This includes assessing and directing how ICT is used to help the organization, as well as monitoring how it is used to carry out plans. Therefore, the corporate governance of ICT is important to form good governance. The main purpose of the present research is to explore the possible effectiveness of information and communication technology (ICT), infrastructure development, exchange rate and governance on inbound tourism demand using time series data in India.

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