E-Governance

LEARNING OBJECTIVES

In this Chapter, you will learn about:

- Introduction
- Types of Interactions in e-Governance
- E-Governance Brings SMART Governance
- Benefits of e-Governance
- Limitations of e-Governance
- Recent e-Governance Initiatives
- Critical Conditions for Success of e-Governance
- Steps Needed to Be Taken
- Practice Questions

11.1 INTRODUCTION

According to the World Bank, 'E-Governance refers to the use by government agencies of information technologies (viz., wide area networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth and/or cost reductions'.

11.1.1 e-Governance as per UNESCO

> *Governance refers to the exercise of political, economic and administrative authority in the management of a country's affairs, including citizens.*

11.2 TYPES OF INTERACTIONS IN E-GOVERNANCE

As per the second administrative reforms committee's report, e-Governance facilitates interaction between different stakeholders in governance. It states that there are four types of interactions in e-Governance as follows:

(i) Government to citizens (G2C)
(ii) Government to business (G2B)

(iii) Government to government (G2G)
(iv) Government to employees (G2E)

These interactions may be described as follows:

G2G (Government to Government): With this mode of interaction, besides restructuring the governmental processes involved, information technology and communication (IT&C) helps in improving the flow of information and services within and between the different stakeholders involved, such as, departments within and across ministries. The interaction can happen in both horizontal and vertical directions. The key objective and outcome of e-Governance in this relationship is the need to increase efficiency, performance and productivity.

G2C (Government to Citizens): The purpose of any initiative that would improve governance will result in better delivery of services to citizens. In this respect, e-Governance enables the creation of a digital liaison between the government and citizens. This will enable the latter to benefit from efficient delivery of a wide range of public services. In addition to expanding the availability and accessibility, e-Governance also improves the quality of services as well. It seeks to make the government citizen-friendly. Additionally, it also raises the credibility of government in the minds of people.

Through e-Governance, citizens have several advantages as follows:

a. They can access services round-the-clock over the Internet.
b. They have a variety of access points, such as common service centres, e-kiosks or from their home/workplace.

G2B (Government to Business): The ease of doing business is a critical element in the healthy development of a country. For this purpose, it becomes imperative that the government–business interactions are maintained in a seamless manner. Reduction of red tape, time consumption, operational costs and the need for transparency are the most essential requirements to enable a competitive and congenial business environment. Transactional interactions, such as licensing, permits, procurement and revenue collection, etc., can be accelerated through the deployment of e-Governance initiatives. Such measures are sure to aid businesses to perform better and expand their operations.

G2E (Government to Employees): Every government depends highly on its workforce. Thus, it is vitally important to interact with its employees on a regular basis. This interaction has to happen on a two-way basis. On one hand, the government can send its circulars, notifications and memoranda to its employees across departments, with the push of a button. Similarly, by using IT&C tools, the government can also get to know and address the needs and concerns of its employees, on a faster and efficient manner, thereby satisfying them, which will lead to a much better functioning of the government machinery.

11.3 E-GOVERNANCE BRINGS SMART GOVERNANCE

The purpose of implementing e-Governance is to raise the level of performance and ensure the proper delivery of services to all who deserve them. This will be possible through five main characteristics of e-Governance SMART system.

11.3.1 S Implies Simple

What was carried out through several forms and documents would now be reduced and simplified with the help of IT&C tools. Through e-Governance, citizens will feel more comfortable to approach the government authorities to avail their services.

11.3.2 M Implies Moral

The entry of a novel system will instil a new system of ethical values in the administrative machinery. Through the implementation of technology, the scope for mismanagement or corruption could be greatly reduced.

11.3.3 A Implies Accountable

By imparting a robust framework in the management of information and processes, the performance at both individual and departmental levels can be effectively monitored. This results in a sense of accountability among the functionaries concerned.

11.3.4 R Implies Responsive

The streamlining of service delivery makes the system more responsive.

11.3.5 T Implies Transparent

Information that was until now confined to archives of the government department will now be available in the public domain through e-Governance. This will ensure transparency and will practically lessen the threshold for corruption.

11.4 BENEFITS OF E-GOVERNANCE

1. Citizens will be able to access information easily and can receive a higher quality of service.
2. E-governance would bring in timely and reliable information on the different aspects of governance and administrative actions.
3. It helps in reducing time, effort and money by automating processes and establishing online accessibility of public services. By bringing in short turnaround times, the organization and its processes can be controlled and managed much more effectively.
4. It helps in the simplification and rationalization of processes, which leads to efficient and accountable governance.
5. It provides an interface for the people to interact with the government. Such measures that enable participation will reinforce the faith of the people in democracy.
6. E-governance can provide effective solutions to end red tape, unwarranted delay, etc., by using modern tools, techniques and instruments of e-Governance.
7. E-governance assists in reaching out to the corners of the country, even to places where it is physically impossible to reach in person.
8. By following a 'citizen-first policy', e-Governance empowers them.
9. It will open up innovative methods in service delivery.
10. Within the governmental departments, it will help in:
    a. avoiding duplication
    b. reduction of transaction costs
    c. simplify procedures
    d. better communication and coordination
    e. secure information management

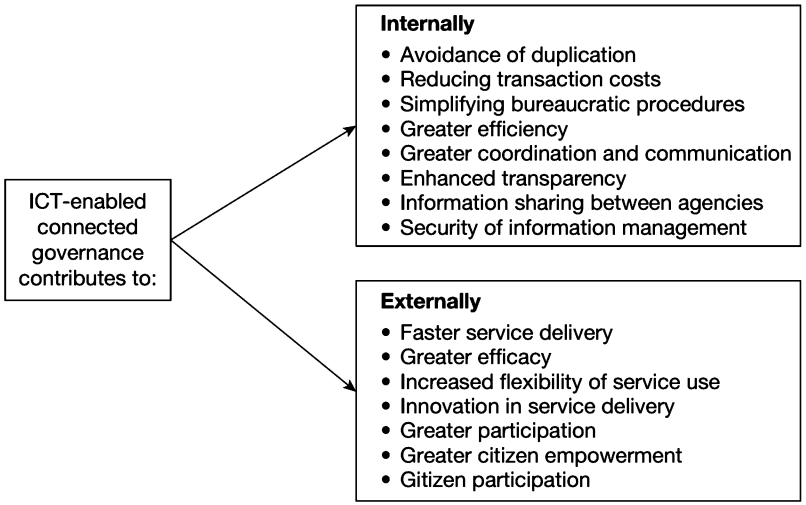

FIGURE 11.1 Benefits of e-Governance

11.5 LIMITATIONS OF E-GOVERNANCE

1. At present, there is no institutional agency to oversee the speedy and effective implementation of the scheme.
2. There is a lack of universal e-Governance architecture at the national level, which could cause problems in the universal implementation of certain central-sector schemes among two or more states at the same time.
3. Integration of sections of users and institutions becomes difficult, when there is no common model.
4. Adequate training to officials is a must, while introducing any new system in governance. A lack in this domain will result in an incomplete effort, thereby defeating the purpose of the process.
5. E-governance initiatives are not receiving a warm welcome from the employees of government organizations.
6. Most of the time, e-Governance initiatives are done with a process-centric mind set instead of a citizen-centric approach.
7. In countries such as India, there is a limited penetration of electronic communication. A sizable proportion of the population is yet to get access to computers or electronic gadgets in their villages and towns. Mere setting up of service centres in these areas would help little towards making it a success. Also the very knowledge base for accepting this new system of governance has not been prepared. People know little about how electronic devices work and would certainly feel difficult to adapt to the new system.
8. Proper e-Governance functioning requires a complete revamp of the conventional process. Retrofitting technological devices to existing workflows alone would entail inefficient output.

9. The limited Internet connectivity at present means that a large section of the population will not be able to access public services.
10. Resources are scarce and unavailable at right time.

11.6 RECENT E-GOVERNANCE INITIATIVES

1. Computerisation of Land Records (Department of Land Resources, Government of India)

A Conference of the Revenue Ministers of States/UTs had advocated such computerization as early as in 1985. Based on the recommendation, the Union Ministry of Rural Development selected eight districts in eight states for a pilot project on Computerization of Land Records, which was 100% centrally-sponsored. From 1994 to 1995 and afterwards, it was implemented in collaboration with the NIC.

The main objectives of the scheme were as follows:

(i) Ensuring that landowners get computerized copies of ownership, crop and tenancy and updated copies of Records of Rights (RoRs) on demand.
(ii) Realizing low-cost and easily-reproducible basic land record data through reliable and durable preservation of old records.
(iii) Ensuring accuracy, transparency and speedy dispute resolution.
(iv) Facilitating fast and efficient retrieval of information for decision making.
(v) According legal sanctity to computer-generated certificates of land records after authentication by the authorized revenue official.
(vi) Setting up a comprehensive land information system for better land-based planning and utilization of land resources.
(vii) Focusing on citizen-centric services related to land and revenue administration.

Due to the unsatisfactory implementation of the scheme, the Union Ministry for Rural Development constituted a Committee to suggest practical steps to implement the scheme. The Committee on Computerisation of Land Records submitted its Report in April 2005.

This Report suggested that the following:

(i) In addition to computerizing Records of Rights, all States must computerize the details of crops, cultivation, soil classification, irrigation, etc. Scanning of basic land records and digitization of cadastral maps/village maps may also be taken up under the Scheme of CLR.
(ii) Village/cadastral maps/tippan should be digitized under the scheme of CLR for integration, updation and preservation of maps, which will enable a landowner to get a computerized copy of the Records of Rights along with plot boundaries. Due to variations in the system of maintenance of cadastral map, States may adopt the strategy suitable to their requirements. However, priority for digitization should be given to those districts, which have successfully completed computerisation of textual land records.
(iii) Integration of computerisation of land records and computerisation of land registration should be initiated at the earliest on pilot basis in some States

without waiting for amendments suggested in the provisions of the Registration Act, 1908.

Funds for setting up of computer centre in the office of the Sub-Registrar may be given under the scheme of CLR equivalent to funds provided to sub-divisions. (The Committee also suggested making amendments to the Registration Act, 1908, to simplify registration and its integration with the land records).

(iv) There should be a time frame for the implementation of this scheme.

(v) According legal sanctity to computer-generated certificates of land records after authentication by the authorized revenue official.

(vi) Setting up a comprehensive land information system for better land-based planning and utilization of land resources.

(vii) Focusing on citizen-centric services related to land and revenue administration.

Lessons:

(i) The scheme failed to address the main problem in case of land records in India, that is, the land records do not reflect the factual ground reality.

Computerisation of existing land records without corroborating it with the actual field position only led to perpetuation of existing loopholes and errors.

(ii) Complex e-Governance projects have various components all of which need to be implemented for which a holistic approach is needed during implementation.

2. Admission to Professional Colleges—Common Entrance Test

With the rapid growth in the demand as well as supply of professional education, the process of admission to these institutions became a major challenge in the early 1990s. Recourse was then taken to Information and Communication Technology (ICT) to make the process of admission transparent and objective. One of the pioneering efforts was made by Karnataka. The State Government decided to conduct a common entrance test (CET) based on which admission to different colleges and disciplines was made. The allocation of seats in different colleges/disciplines is done through a process of 'computerized counselling' where the student can choose the discipline he/she wants, based of course on merit. Use of ICT in the admission process has helped in making the admission process totally transparent, fair and objective. Many institutions have now switched over to similar ICT-based admission process.

Lesson:

(i) ICT initiatives which bring tangible benefits to citizens are always sustainable.

3. Digital India

Digital India scheme which intends to transcend India into a digital economy has the following features:

(i) Governance and services on demand: Seamlessly integrated departments, services through online/mobile, services for ease of doing business, making financial transactions electronics and cashless, leveraging Geographic Information System (GIS).

(ii) Infrastructure as a core utility to citizens: High-speed Internet, Cradle to Grave Digital Identity, mobile phone and bank account, common service centres, private space on public cloud, safe and secure cyber space.
(iii) Digital empowerment of citizens: Universal digital literacy, universally accessible digital resources, digital resources in Indian languages, collaborative digital platform, citizens not required to submit physical documents.

Components of digital India:

Online Service Component

(i) Aadhaar
(ii) Digital Locker
(iii) E-Sign

Financial

a. PayGov
b. Jan Dhan Yojana

Mobile Enablement

a. Mobile Seva
b. Mobile-Based Digital Identity

E-participation

(i) E-Taal, MyGov, e-Sampark and Social Media

Mission Mode Projects

(i) Delivering more than 400 million e-Transactions per month.
(ii) CSCs, e-Districts, IncomeTax, MCA21, eBiz, Road Transport, eCourts, etc.

Open Data Initiatives

(i) National Portal of India Details India in e-Governance Development Index.

Telecommunication Infrastructure Component

(i) Public Internet Access Programme
(ii) NOFN and BharatNet
(iii) Mobile Connectivity

Human Capital Component

(i) National Digital Literacy Mission
(ii) e-Bhasha

4. Digital Locker

Objectives:

(i) Providing online facility for government and other agencies to send the electronic documents of citizens, storing legacy government certificates/documents.

(ii) Providing accessibility from anywhere and at any time basis, verification from the source in case of government-issued documents.
(iii) Providing facility to share the documents with service providers.
(iv) Getting rid of physical possession of documents and physical visits for availing services .
(v) Safe and secure authentication through Aadhaar (UID).
(vi) Coverage e-District, Educational Certificates.

E-Sign

Digital Signature Certificate treated on par with physical signature as per IT Act, 2000.

Gap in Operational Aspects of Digital Signature Certificate:

(i) Dongle based
(ii) Time-bound validity
(iii) Prone to misuse like impersonation
(iv) Limited adoption

Advantages with E-sign:

(i) Safe and secure and biometric-based authenticated.
(ii) Lifelong, issued each time.
(iii) Cannot be impersonated
(iv) Hassle free as it cannot be misplaced, misused or lost
(v) Cost effective as business model could be based on transaction.

11.7 CRITICAL CONDITIONS FOR SUCCESS OF E-GOVERNANCE

(a) *Adequate Infrastructure*

For reaching the benefits of e-Governance, more e-Governance projects have to be implemented by building adequate e-infrastructure particularly in rural and backward regions. Dependence on ICT has increased compared to other instruments of service delivery for the obvious reasons of cost effectiveness, equity, participation and increased responsiveness and accountability of the service providers. As dependence has increased, we need to have 'e-readiness' for promoting effective e-Governance.

World Economic Forum Consultation Report on e-readiness defines as the ability of the ICT networks to effectively adopt itself to the social and economic advancement can be achieved through building adequate e-infrastructure, bringing awareness among the leaders of government, civil society and market organizations. By building adequate e-infrastructure and initiating more rural-centric e-Governance projects keeping in mind the requirements of the larger section of the population, e-Governance can be promoted more effectively in India.

(b) *Sound Policy and Legal Framework*

New regulations and laws are essential with regard to the application of ICT in promoting governance to ensure accountability and supply of quality goods and services by the private and public sectors without harming the larger society. Removal of obsolete laws and discretionary powers, simplification of procedures to avoid administrative bottlenecks and constitution of single windows ensure speedy disposal of cases. For the successful application

of electronic governance, a range of legislative regulations is required covering the aspects of electronic signatures, electronic archiving, data matching, freedom of information, data protection, computer crime and intellectual property rights. Already the Government of India has IT Act and Convergence Bill. The following policy and legal initiatives are to be taken for strengthening e-Governance in India.

(i) Accountability law for making public servants accountable and responsive for non-performance and malfunctioning of their departments
(ii) Law for privacy ensuring that the information about the citizen is not misused
(iii) A law in the line with the US Government Paper Elimination Act (GPEA) to promote use of electronic media
(iv) Amendments to Consumers Protection Law, Tariffs and Taxation Laws, Intellectual Property Regulations, etc., are required
(v) Preparing guidelines for content, technological standards, electronic payments
(vi) Setting standards for electronic publishing, archiving, e-mails, etc.

(c) *Socially Relevant Technologies and Integrated Management*

Lack of peoples' participation, fractured relationship between government agencies and citizens, lack of availability of local resources, limited integration with local Civil Society Organizations (CSO) and exogenous social and economic environment are the reasons which failed ICT to deliver the full range of services in governance matters.

Updating of data in local languages, standardization in all areas, such as encoding, application logic for common applications, user interfaces, preparing data dictionaries, making appropriate cyber laws, procedural and legal changes in the decision and delivery making processes as well as in the institutions, encouraging private–public partnerships can facilitate the successful application of the e-Governance projects in India.

Efforts are needed to incorporate local languages and local content in Internet in a massive way. Accessing Internet using keyboard may limit the use of Internet. So there is a need of developing voice-enabled Internet service with Indian languages, and applications should emerge out of India way of life.

(d) *Public–Private Partnership*

It is a fact that India needs huge amount of fund for the implementation of e-Governance projects. The governments do not have such huge amount of funds. In this regard, encouraging private investment seems to be the possible answer. Public Private Partnership (PPP) model can be encouraged to initiate the projects in order to meet the needs of the rising population. The Gujarat check post Project is an example of PPP model for promoting e-Governance in India.

(e) *Political and Administrative Leadership*

State governments with committed political and administrative leadership are mainly responsible for promoting e-governance in some states in spite of poor communication infrastructure facilities. State governments like Andhra Pradesh and Karnataka under the leadership of Chandrababu Naidu (in Andhra Pradesh) and S. M. Krishna, respectively, have taken major initiatives in popularizing e-Governance in the improving the quality of administration. They were able to overcome many barriers in implementation of e-Governance projects through a focussed and strategic approach aiming specified targets

and allowing reasonable time frame for attaining them. Specialized agencies have also come up within government to initiate innovative experiments. It is sometimes argued that given the low level of development of communication infrastructure in most Indian stats, the prospects of E-governance is bleak. Even in situations where the initial conditions for trying out e-Governance appear to be non-existent in terms of inadequate skilled personnel or weak infrastructure, a gradual, flexible and reflective approach can bring about drastic positive changes.

(f) *Role of Civil Society*

The Civil society bodies like citizens groups, associations and social activists are playing an active role in extending ICT for the empowerment of citizens and effective delivery. In a project of Cyber Grameen, a non-profit organization set up by Krishna Prasad Tripuraneni, a telecom entrepreneur in Chennai, wireless technology is used to offer digital entertainment, distance learning, tele-medicine and government services. NGOs are also making officials responsive and accountable through e-Governance projects. The Online Complaint Monitoring System (OCMS) in Mumbai Municipal Corporation (BMC) with the active involvement of an NGO, named Praja Foundation, to redress citizens grievances, can be mentioned in this regard. It enables the citizens to register complaints and receive information on the complaint status quickly and easily, without the need to visit or call the ward offices at restricted timings.

Scholars attribute the ineffective utilization of installed ITC potential to the absence of links with the civil society. And its participation in e-Governance projects initiated by the governments is, however, not encouraging. Civil society and its representatives have been kept out in most of the programmes. Even in cases where such participation is sought, the linkages are either weak or notional. The CARD experience of Andhra Pradesh suggests that until and unless civil society bodies are active in the delivery of services, the situation will not improve.

(g) *Human Resources Development and Capacity Building*

Non-availability of proper human resources and lack of appropriate strategy are some of the roadblocks in the path of using ICT in the governance purposes. The fragmented approach in implementing the e-Governance programmes and computerization has led to excessive expenditure without delivering desired results. ICT has failed to promote desired results in facilitating governance because of organizational technical and human reasons. Information systems are not technical systems, rather these are social systems and there is a need to emphasize at the operational level in their social perspective. Some studies point out that the official mismanagement, lack of favourable attitude and orientation on the part of the officials hinder the progress of the application of e-Governance in India. Some projects were not effectively managed due to the lack of skills and motivations among the administrative staff.

Training for imparting skills (computer operation and content assessment) and including motivation among the officials are very essential for the effective utilization of ICT in governance. For instance, senior officers in Andhra Pradesh were trained in the Indian Institute of Management, Ahmadabad, for 4 months in hardware, software and special problems related to implementation of IT in government deportments with practical orientation. The government has been investing more than ₹2,50,000 to train each functionary. It spent ₹70 million on a 4.5 month training programme designed by the Indian Institute

of Management, Ahmadabad, to train 20 officers to function as chief information officers. The programme covered a wide array of interdisciplinary topics, such as technology assessment, process re-engineering, change management, information analysis and project management. The programme was offered as a sandwich of classroom training alternated with hands-on project work. Similar training programme should be undertaken for capacity building of the bureaucrats for better application of ICT in service delivery.

11.8 STEPS NEEDED TO BE TAKEN

Going with the information given above, we can infer that e-Governance has a huge potential to promote efficient, prompt, responsive, citizen-friendly services to the people. It is cost-effective and has the potential to serve citizens at their doorsteps. Most importantly, it can be used as a tool to minimize corruption. While it is certain that people have to be trained to use the respective interfaces when implemented, it will help in the long run in avoiding long queues at government offices and secretariats. The very characteristic of digitization ensures limited scope to deny or delay services by the concerned service providers.

(i) Public–private partnership can be forged to address fund constraints. This will help in funding the required e-infrastructure and training for government officers across the country.
(ii) Proper orientation training to the officials have to be provided through seminars, conferences, workshops, etc. This should be followed up with proper legislation on electronic governance, maintaining the required e-readiness, awareness programs targeting the general public, etc.

When the required ecosystem is created as above, it will be helpful in assessing the effectiveness of e-Governance in terms the level of interactions between government and citizens. This could be done by calculating the percent of citizens reached, the turn-around time for delivery of services, costs incurred for providing services, availability of services, citizen satisfaction, etc.

The following parameters are a must while delivering services through IT and e-Governance:

1. Swift response by civil servants to queries
2. Improved communication between the officials and beneficiaries
3. Online accessibility to administrative structure, chart, form
4. Online accessibility to reports and documents of the government
5. Provisions for the people to share opinions on legislation and budgeting
6. Online accessibility of government's budgets and expenditure reports
7. Delivering services to a larger proportion of the population
8. Improved responsiveness, accountability and transparency in the administrative institutions
9. Availability of online applications for recruitments
10. Online process of tendering, procurement, open to public access
11. Availability of electronic documentation and record keeping
12. Availability of online redressal of grievances through e-Ombudsman

Government officials have to be sensitized about the challenges posed by socioeconomic development. E-Governance can impact civil service in a positive way, and it may lead to excellence in the delivery of basic and essential services. That said, the primary issue that needs attention is the development of a system that is clear, transparent, responsive and sensitive to the socioeconomic conditions of the public.

It would surely reduce the amount of time spent in addressing requests, thereby reducing red-tapism. While being cost-effective, it makes the delivery of public services quicker and efficient by introducing competition amongst delivery channels and departments.

With respect to the attitude among people to use e-Governance services, efforts should be taken to make e-channels accessible and visible, with proper training and demonstration. In fact, not all services need to be made electronic from day one. Gradual introduction of e-Governance in certain areas will help in people getting attuned to the systems easily.

11.9 PRACTICE QUESTIONS

1. 'In developing countries like India, e-Governance cannot entirely replace manual governance, but even its limited applications in several areas can bring enough changes'. Explain with relevant examples with regard to prospective application of E-governance in our system.
2. The potential of e-Governance is limited in Indian administrative system. Analyse the reasons.
3. e-Governance is a panacea to alleviate the evils associated with the Indian administrative processes. Illustrate.
4. 'Good governance is at its core as a structural concept containing several components without which it would be inchoate and shapeless'. Discuss how e-Governance would help to bring about good governance in India.
5. 'The latest limitation of e-Governance in India is not technological but e-literacy'. Explain the statement and suggest measures to rectify the remedy.
6. Bring out the various e-Governance initiatives undertaken in Digital India programme.