

# **INFORMATION TECHNOLOGY-A REVOLUTION IN GOVERNANCE AND ADMINISTRATION**

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## **INTRODUCTION**

Globalization and privatisation tendencies are accelerating, resulting in far-reaching technical advancements. To deal with a shifting circumstance, the benefits and drawbacks must be carefully considered. India, like many other developing countries, can reap the benefits of information technology (IT) provided it is made available to as many people in urban and rural regions as feasible. We currently live in an information-based society, which is aiming to turn government employees into knowledge workers. Citizens have benefited from the knowledge explosion as well. They have a slew of demands on the administration. - Despite being constrained by a lack of resources, infrastructure, and appropriate capability, or the will to provide the goods, the administrator is working hard to meet these rising expectations. This article discusses the country's ever-increasing IT inflow and the government's response to it. It examines how the government can make the administrative system more visible, efficient, and responsive.

In the 1970s, India pioneered the notion of information technology, focusing on the creation of in-house government applications in the areas of economic monitoring, planning, and the use of IT to administer data-intensive operations such as elections, tax administration, and censuses. In 1970, the Indian government formed the Department of Electronics. The National Information Centre (NIC) was established in 1977 as India's first move toward e-government. The NIC's efforts in the 1980s to connect all of the district headquarters were a big step forward. The launch of NICNET in 1987 paved the way for e-Government, a nationwide computer network, which was followed by the District Information System of the National Informatics Centre (DISNIC) programme, which aimed to computerise all district offices across the country and provided state governments with free hardware and software.



Several governmental and private sector projects in sectors like as land management, transportation, education, grievance, health, and others were launched in numerous states throughout the 1990s. With the installation of kiosks at the village level, larger sectoral applications were made possible. People can use them as a "One Stop Shop" for quick access to essential services at the village level, as well as critical information. International donor organisations have been increasingly involved in e-Governance for Development to catalyse the development of governance legislation and technology in poor nations.

The National Governance Programme was launched in 2006 as a result of all of these changes. In recent years, the focus of E-Government has shifted to state governments across the country, with the majority of them now having some level of departmental computerization and an IT strategy on governance-related problems. A centre concentrating on E-Governance solutions and services has been established by the Union Ministry of Information Technology. E-Government is rapidly growing as Indian state governments become more conscious of IT, resulting in a significant improvement in government policies aimed at providing one-stop services to residents.

## INFORMATION TECHNOLOGY APPLICATION

The use of information technology results in a smoother interface between the government and citizens, which has an impact on day-to-day life. Though it is believed that technology will not be able to completely replace manual governance, even a limited implementation will change the way the government runs, implying a new set of obligations for the executive, legislature, and citizens. To achieve excellent governance, IT may be used in the following ways:

**Urban Services:-** Development of an online integrated information and monitoring system for the delivery, accounting, legality, and payment of services such as water, electricity, and telephones, among others. Citizens should be able to acquire and submit all paperwork for government services and clearances electronically.

**Filing of Complaints:-** Citizens will be less likely to be harassed if they can register a complaint or a FIR electronically at any police station.

**Transparency in Appointment and Transfer of Personnel:-** IT may be utilised to assure objectivity and openness in staff appointments, postings, and transfers. The regulations governing them should be made public on government websites so that everyone can see them and keep track of them.

**Payment of taxes and Duties Electronically:-**Return filing for income tax, sales tax, and other taxes should be made easier with the use of technology. This will save time and cut down on bureaucracy and corruption.

**Developmental Projects:-**Planning and executing developmental projects using IT-based models can reduce time and cost overruns while enhancing output and market access.

**Monitoring and Traffic Violations:-** The electronic synchronisation of traffic signals on highways will make traffic flow more orderly. Speeding may be monitored using electronic speed sensors. To keep an eye on offenders, electronic cameras should be placed in strategic locations.

**Electronic smart cards or citizen cards:-**People will be given electronic SMART cards with all of their personal information on them, such as their driver's licence, voter I-card, income tax number, ration card, and so on; having all of this information on one electronic card will be incredibly easy.

## **INFORMATION TECHNOLOGY APPLICATION-STATES INITIATIVES**

The national, state, and municipal governments in India have all worked hard to make their public service delivery systems more accessible to the general population. To improve the quality of life of its residents, every state must achieve greatness in the information age. It also supports the widespread use of information technology to improve service efficiency and competitiveness. Andhra Pradesh, Tamil Nadu, Karnataka, and other states have risen to the top of the e-government application rankings by executing a complete strategy and policy to better serve residents.

Andhra Pradesh is integrating IT into administration and rapidly expanding as a centre of e-governance through its use in service delivery. The Computer-aided Administration of Registration Department is one of the most ambitious and popular projects (CARD) It is intended to alleviate the difficulties people have in registering their properties by requiring all



registration services to be delivered electronically. It has slashed the time it takes to sell registrations from over an hour to under an hour. The previous system lacked transparency in property value, allowing brokers and intermediaries to thrive in collusion with government authorities. The previous and conventional registration system was regulated by lengthy procedures that involved time-consuming document copying and filing. The goal of this project is to replace the manual indexing, accounting, and reporting systems with a sophisticated document management system that employs imaging technology and introduce electronic document writing. The goal of CARD is to de-mystify the registration process, enhance registration speed, efficiency, consistency, and reliability, and significantly improve the citizen interface. It has also reduced the time it takes to register such purchases from ten days to less than an hour. CARD's idea would significantly reduce paperwork and improve the efficiency of the rural lending system. Since almost two-thirds of the documents, encumbered certificates and certified copies relate to agricultural properties, so it would greatly benefit the rural people.

The Government of Andhra Pradesh launched and developed E-Seva, which is a large and important initiative. It is a project that has begun with the establishment of citizen utility centres known as E-Sevacentres. These are one-stop or single-window stores where you can pay for water, power, telephone, property tax, sales tax, and get birth and death certificates, among other things. In Andhra Pradesh, the I WINS initiative has been started, which unifies 19 services relating to 10 six departments for delivery on a one-stop basis, ranging from information and facilitation to certificate issuance and utility bill/tax payments. The Twin Cities Network Services (TWINS) is a high-profile IT initiative that was launched in December 1999 in Hyderabad to provide citizens of Hyderabad and Secunderabad with computerised targeted Citizen Services Centers (ICSC) to handle a variety of services such as facilitating common transactions such as change of addresses, vehicle ownership transfer; issuing permits and licences; issuing certificates (birth, death, caste, and income); payment of utility bills and property taxes.

In Karnataka, the e-governance project "Bhoomi" was established, which allows for online updating of land records, which is in stark contrast to land records systems developed elsewhere in India, which update databases in an offline fashion, rendering them less current

and hence of limited utility. Initially, 140 sub-district offices were equipped with computerised land record kiosks from which farmers could receive RTC copies online.

FRIENDS (Fast, Reliable, Instant, Efficient Network for the Disbursement of Service) was introduced in Kerala to provide a one-stop, front-end IT enabled payi counter facility for citizens to make all types of government payments for effective delivery services.

Haryana's state government is dedicated to provide better services to its inhabitants through efficient, quick, simple, and cost-effective governance. The D project, which comprises information kiosks, Citizen Services Centers interactive-Voice Response System (IVRS), and other tools, was established for this purpose. Birth/death certificates, caste residency certificates, weapons licences, passport application collecting, learner/permanent driving licences, and other e-disha services are available. Similarly, Tehsil has begun using computerised Nakal Services 6 of Revenue Records (Jamabandi).

The Rajasthan government has initiated a variety of programmes, including as Lok Mitra and Jan Mitra, to offer residents with public services via IT and e-governance. Lok Mitra is the state's first of its sort of electronic service. Its goal is to use information technology to benefit the public. It's a one-stop, citizen-friendly computerised centre with locations around Jaipur. It is an e-government project in which a computer server is connected to several departmental servers through a dedicated leased line and dial-up network, with numerous e-counters capable of handling all services. It allows customers to pay with cash or a credit card over the internet. Payment of water bills, power bills, home tax and other fees/charges, birth certificate issuance, and online bus reservation and booking are among the services provided by Lok Mitra.

Jan-Mitra is an integrated e-platform that allows rural residents to obtain requested information and services from several government offices at kiosks located near their homes. This initiative started in the Rajasthani district of Jhalawar. Public grievance redressal system, online filing of application forms and land and revenue records, public information services, public awareness services, MIS for District Collectorate and District level personnel for effective monitoring of information flow, drinking water resources, power priority connection, village schemes, ongoing development works, Public Distribution System, BPL List are just a few of the services offered by Jan-Mitra.

The establishment of E-SamparkCentres in Chandigarh to expedite the payment of power bills, water bills, phone bills, and the issue of bus tickets, among other things, has made people's lives simpler. In addition, a variety of forms, such as income tax forms, may be purchased.

### **EMERGING CHALLENGES**

The IT inflow in emerging nations like India must be handled with prudence and constraint. The rewards of IT will elude the impoverished and underprivileged people unless the benefits arising from IT are backed by proper infrastructure, capital, and access. To address the challenges of globalisation and privatisation, the e-governance process must attempt to balance the aims of development, asset creation, social justice, and fairness. The following are some of the immediate difficulties that IT faces:

#### **Grievance Redressal Mechanism**

There is currently a widespread perception that there is no effective grievance redressal procedure available to them. Even those responsible with investigating relevant issues are either overloaded or indifferent. Corruption is pervasive in numerous administrative bodies, posing a barrier to solving people's issues. The use of interactive platforms on the internet may help to speed up the resolution of complaints. Concurrent steps, such as creating suitable authorities and a timeframe to resolve these issues, will be necessary. The Central Vigilance Commission has created a forum for citizens to report corrupt officials. Such occasional occurrences should be made more widespread and effective.

#### **Cyber-Laws**

The problem of 'free riders' is one of the most serious issues that public administrators confront. Some unscrupulous persons have devised methods of exploiting certain service offerings. As with any new field, there will be a slew of such issues at first. The government will need to pass proper legislation, which is especially important to facilitate Internet transactions. Consumers are hesitant to utilise the facilities that are now accessible due to worries about the safety of utilising credit cards or other forms of payment. MTNL is an example of a company that offers online bill payment, but just 1% of its customers take use





of it. Furthermore, IT systems and the information documents stored in them should be accorded legal sanctity right away.

## **Infrastructure**

The cornerstone of e-governance is built on telecommunication services, which necessitates a significant amount of infrastructure to allow end-users to access the services. 'The last mile' refers to broadband connections that cover the final part of the data pipeline. The National Task Force on Information Technology and Software Development recommended 'the last mi for IT Applications Service Providers (ASPs), Internet Service Providers (ISPs), and IT Nero age organisations either by fibre optics or radio communication in 1998 with the goal of 'boosting efficiency and enhancing market integration' through Internet/Intranet for sustainable regional development. The application's connectivity is its backbone. However, in India, the convergence of technology for conveyance and delivery systems is still a work in progress. Despite the fact that various options have been raised, little has really transpired. To enhance computer penetration, the cost of computers must also be lowered down.

## **Utility of Information**

The Indian government has created an e-governance vision paper. Similar papers have been prepared by certain state governments as well. However, if the information isn't relevant or entertaining, the first pleasure will fade quickly. People must have access to knowledge that empowers them. It's possible that Right to Information Acts will be necessary in all 50 states. Although many departments' Citizens' Charters are available on the Internet, more public awareness of such resources is needed to ensure that the public has access to the information they seek.

## **Human Resource Management**

Human resource management has yet to establish the capacity to construct, manage, operate, and maintain the technologies in question. The workforce has to be trained to produce, maintain, and offer the value-added goods and services that the knowledge-based society requires. Despite the fact that all government employees have received computer training, efficient usage of fundamental IT services has yet to be shown, with the exception of

a few situations. Only then can sophisticated e-governance capabilities be anticipated to be integrated into their operations.

### **Bringing Attitudinal Changes**

Public officials are increasingly looking for technological answers to social issues, conveniently forgetting that technology can only help with the solutions. It isn't a complete solution. Furthermore, they must evaluate their positions in light of changing conditions. Agents or functionaries of change must be made aware that their role is to serve customers in accordance with policy/programming visions. In order to foster a cooperative attitude among these bureaucrats, some sort of orientation or training programme for attitudinal adjustments may be beneficial.

### **Use of Vernacular Languages**

The availability of eservices in local languages is a crucial problem in making e-governance accessible to all sectors of society. English is currently the most extensively used computer and Internet language. However, given the sociocultural realities in India, it would stay out of reach for many individuals who are unable to use these services in English until we design interfaces in vernacular languages. This aspect, on the other hand, may be addressed thanks to the pioneering work of the Centre for Development of Advanced Computing (C-DAC) in Pune, which has produced multilingual software. However, given the national environment, it is critical to have a clear software strategy. However, in the national setting, a defined strategy for providing access to local level databases kept in regional languages, as well as the use of appropriate interfaces to aggregate such data, is critical.

### **Standardization in Data Encoding**

An interconnected system with many access points and maintained in a variety of languages would require automated updating with identical standards for data encoding, application logic, and data dictionaries. This is also required for locating aggregates at the national convention.

### **CONCLUDING OBSERVATIONS**

Public administration, as a discipline, must be aware of the problems offered by social and economic change. The influence of information technology on government administration has become a topic of scholarly debate in the field of "good governance."





Information Technology's speed and openness have the ability to make government more responsive and effective in its governance. Regardless of the initial euphoria, the following research areas can be listed for the growth and relevance of the discipline: future role of e-governance, cost-benefit analysis of providing e-governance in core services, command and control systems, ways of re-orienting public functionaries, citizen's role and choice, and extent of consumers' consultation and participation.

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