



IAS 100

A Civil Services Chronicle Initiative

E-GOVERNANCE



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e-Governance or 'electronic governance' is basically the application of Information and Communications Technology to the processes of Government functioning in order to bring about 'Simple, Moral, Accountable, Responsive and Transparent' (SMART) governance. This would generally involve the use of ICTs by government agencies for any or all of the following reasons: (a) Exchange of information with citizens, businesses or other government departments (b) Speedier and more efficient delivery of public services (c) Improving internal efficiency (d) Reducing costs / increasing revenue (e) Re-structuring of administrative processes and (f) Improving quality of services.

e-Government is not about 'e' but about 'government'; it is not about computers and websites, but about services to citizens and businesses. e-Government is also not about translating processes; it is about transforming them. e-Government is concerned with the transformation of government, modernisation of government processes and functions and better public service delivery mechanisms through technology so that government can be put on an auto-pilot mode.

The four pillars of e-Government are:

- ❖ People
- ❖ Process
- ❖ Technology
- ❖ Resources

However the penetration of e-governance and the skills required to adapt to e-governance are issues of concern. Further there are issues related to data access and data security with e-governance as it is believed that it has made sensitive government data vulnerable to hackers.

Logic of e-Governance:

Governance, based on bureaucratic structures built on rationale principles, that dominated the twentieth century, has failed to respond to the changing requirements of the present times. e-Governance, which is a paradigm shift over the traditional approaches has emerged

as the answer to the challenges of the contemporary times. Along with developments in technology the other important reason for the advent of e-governance has been the rising awareness amongst the citizens and their better experiences with the private sector, as a result of which the demand for better services on the part of government departments became more pronounced. The infusion of Information and Communication Technology (ICT) has played a prominent role in strengthening such a demand.

e-Governance, which is a paradigm shift over the traditional approaches in administration, means rendering of government services and information to the public using electronic means. This new paradigm has brought about a revolution in the quality of service delivered to the citizens. It has ushered in transparency in the governing process; saving of time due to provision of services through single window; simplification of procedures; better office and record management; reduction in corruption; and improved attitude, behaviour and job handling capacity of the dealing personnel.

Most of the advanced countries including United Kingdom (UK), Australia, Canada, New Zealand, and USA have adopted series of measures under a new model based on market principles. This new model has several names such as: 'new public management'; 'market based public administration'; 'the post bureaucratic paradigm'; or 'entrepreneurial government'. Though these appear to be different terms yet they convey the same message i.e. replace the traditional bureaucratic model with a new model. Have faith in market principles: cut costs; reduce budgets; improve public managements, simplify rules and procedures; check corruption; inject transparency; and strengthen market forces by minimizing the role of the state. To make the new system more effective and ensure efficacy, the use of information technology in the governance process is emphasized.

Stages of e-Governance

It is evident that e-Governance is intrinsically linked with the development of computer

technology, networking of computers and communication systems. In developing countries, such technologies and systems became available with a perceptible time lag as compared to developed nations. However, in the case of India, with the liberalization of the economy from the early 1990s onwards, there has been a convergence in the availability of cutting edge technologies and opportunities in the field of e-Governance. Generally speaking, the Indian experience demonstrates that the onset of e-Governance proceeded through the following phases:

- (a) **Computerisation:** In the first phase, with the availability of personal computers, a large number of Government offices got equipped with computers. The use of computers began with word processing, quickly followed by data processing.
- (b) **Networking:** In this phase, some units of a few government organizations got connected through a hub leading to sharing of information and flow of data between different government entities.
- (c) **On-line presence:** With increasing internet connectivity, a need was felt for maintaining a presence on the web. This resulted in maintenance of websites by government departments and other entities. Generally, these web-pages/web-sites contained information about the organizational structure, contact details, reports and publications, objectives and vision statements of the respective government entities.
- (d) **On-line interactivity:** A natural consequence of on-line presence was opening up of communication channels between government entities and the citizens, civil society organizations, etc. The main aim at this stage was to minimize the scope of personal interface with government entities by providing downloadable Forms, Instructions, Acts, Rules, etc. In some cases, this has already led to on-line submission of Forms. Most citizen-government transactions have the potential of being put on e-Governance mode.

Scope of E-Governance:

While e-governance encompasses a wide range of activities, we can identify three distinct areas. These include government-to-government (G to G), government-to-citizens (G to C), and government to business (G to B). Each of these represents a different combination of motivating forces.

However, some common goals include improving the efficiency, reliability, and quality of services for the respective groups. In many respects, the government to government (G to G) sector represents the backbone of e-government. It is felt that governments at the union, state and local level must enhance and update their own internal systems and procedures before electronic transactions with citizens and business are introduced. Government to government e-governance involves sharing data and conducting electronic exchanges between various governmental agencies. There are number of advantages with government-to-government initiatives. One benefit with this is cost savings, which is achieved by increasing the speed of the transactions, reduction in the number of personnel necessary to complete a task, and improving the consistency of outcomes.

Another advantage, which flows from this, is improvement in the management of public resources.

Government to citizen (G to C) facilitates citizen interaction with government, which is the primary goal of e-governance. This attempts to make transactions, such as payment of taxes, renewing licenses and applying for certain benefits, less time consuming and easy to carry out. Government to citizen initiatives also strive to enhance access to public information through the use of websites and kiosks. Further, one of the main goals of implementing these initiatives has been to create a "single window" where citizens can carry out variety of tasks, especially those that involve multiple government departments, without requiring the citizen to initiate contacts with each government department individually. Thus, the G to C initiatives is driven by an urge to provide "better government" through improved efficiency and more reliable outcomes. Government to Business (G to B) sector includes both the procurement of goods and services by the government as well as the sale of surplus government goods to the public on line. There are two motivating forces behind G to B. Currently the business community prefers to carry out its activities such as sales, procurement, and hiring through electronic means. There are large numbers of software companies, which are producing number of products focusing on performing routine business activities on line. Thus, many companies like to extend the cost savings realized through Business to Business (B to B) transactions to their business with union, state and local level governments. The second reason for the growth of G to B is the

demand for cost cutting and efficient procurements in the government. Developing countries, where there is great pressure to minimize costs due to shortage of funds, G to B are being encouraged by the governmental agencies.

E-Government Initiatives in India: An Overview

The Government of India kick started the use of IT in the government in the right earnest by launching number of initiatives. First the Government approved the National E-Governance Action plan for implementation during the year 2003-2007. The plan was an attempt to lay the foundation and provide impetus for long-term growth of e-governance within the country. It proposed to create the right governance and institutional mechanisms at the centre, state and local levels to provide a citizen centric and business centric environment for governance. While endorsing the plan, it was observed that: weightage must be given for quality and speed of implementation in procurement procedures for IT services; devising of a suitable system of motivating the states for quick adoption; provision of delivery of services to the citizens through a single window etc. should be encouraged. Further, outsourcing of services wherever and whenever feasible; efforts be made to promote and develop public private partnerships to utilize the full potential of private sector investments; and connectivity should be improved and extended up to the block level in the states. Apart from the action plan, the following measures have also been introduced:

- ❖ Adoption of "Information Technology (IT) Act, 2000 by the Government of India to provide legal framework to facilitate electronic transactions. The major aims of this Act are to: recognize electronic contracts, prevents computer crimes, and make electronic filing possible. The Act came into force on 17 October, 2000.
- ❖ Establishment of the National Taskforce of Information Technology and Software Development in May 1998.
- ❖ Creation of Centre for e-governance to disseminate the best practices in the area of e-governance for the use by the Central and State Governments and act as a nodal Centre to provide general information on e-governance, national and international initiatives, and IT policies of the government(s).

Developing e-office solutions to enable various ministries and departments to do their work electronically. Modules such as Workflow for Drafts for Approvals, e-file, submission of reports, integrated personal information and financial accounting systems have been developed.

- ❖ Setting up of a High Powered Committee (HPC) with Cabinet Secretary as its Chairman to improve administrative efficiency by using Information Technology in Government.
- ❖ Designating a Joint Secretary level officer as IT manager in every Ministry/ Department; and
- ❖ Instituting websites by almost all Ministries and Departments and providing information on aspects such as their objectives, policies and decisions, contact persons, etc.

Thus, it can be inferred from the above that a good beginning has been made to make e-government a reality in India, but still a lot needs to be done. Sincere efforts are required on a sustained basis in future also to maintain the momentum.

Quite a number of state governments have initiated measures to introduce information technology and its tools in the governance process. Most of these states are using these applications for improving service delivery to their citizens. They are moving from manual processes to on-line delivery by using conveniently located service centres in public places. Counters at these service centres are manned by public/ private agencies and multiple services are provided on-line at each location. Empirical evidence reveals that it has not been an easy task to implement ICT related reforms particularly at the state level and hence needs to be planned carefully for their successful implementation. In this regard, it is, therefore, of utmost importance to study and examine the various experiences for evolving effective strategies for future.

❖ Project "Bhoomi" in the State of Karnataka:

Karnataka, being an agrarian state, was faced with the problem of maintaining immense land records and the work was done manually by the revenue officials. The keeping of records regarding the current ownership of land, cropping pattern and village maps etc. for three to four villages was the duty assigned to 'Patwari', who was also entrusted with registering transfers of land due to sales or other reasons. He had to update the land

records as per procedure, which could take years for obvious reasons.

The recently launched project 'Bhoomi' facilitated computerizations of entire 20 million records of land ownership of 6.7 million farmers in the State of Karnataka. At present, computerized land record kiosk popularly called "Bhoomi centre" is functional in all the 177 talukas in the state. These kiosks are used to provide on line support to farmers at a fee of Rs. 15. Consequently, a request for change in land ownership due to sale or inheritance can be made at these 'Bhoomi Centres'. The computer on receiving application generates notices automatically, and is handed over to the 'patwari'. The process of issuing notices by 'patwari' to interested parties remains the same. However, the Revenue Inspector is expected to approve these changes in a specified time i.e. within 30 days after serving the notices. As the approval reaches the 'Bhoomi Centre', it is scanned and 'patwari' present at each center maintains the record. The new owner can receive a copy on demand.

With this techno savvy system, it is very easy to determine the number of executed and pending orders besides fixing responsibility and holding officials accountable, thereby curtailing corruption, whereas earlier, the process took weeks and was riddled with corruption. Farmers claimed they had to pay anywhere between Rs. 500 and Rs. 1000 in bribes to officials". In addition, the project has also improved the revenue contributions to the state treasury." What's more, the project has already started earning large revenue for the state as much as 7 - 7.5 million rupees every month.

Being difficult to introduce this scheme in all 177 talukas spread throughout the state, the Government of Karnataka launched the scheme in phases. Initially, it was introduced only in four talukas on a pilot basis and later on it was extended to one pilot taluka in each of the twenty-seven districts. Finally, it was implemented in all the 177 talukas in the state. The daunting task of implementation of the project, in spite of poor work culture and the oppositional attitude of the revenue staff, was achieved successfully with the active involvement of the private data entry agencies. Further, the selections of the officials (patwaris) were done very carefully. Youngsters/ freshers from the colleges were recruited and trained to regulate the Bhoomi Centres under the project leader-additional secretary of the department. Thus, project 'Bhoomi' came to be a success, as it resulted in: simplification of procedures; reduced the

hardships of the poor farmers, in terms of delays, reduced corruption and ensuring a more accountable, transparent, and responsive system.

❖ **Project "Gyandoot" in the State of Madhya Pradesh:**

"Gyandoot" was launched on 1 January 2000, in poverty stricken, tribal-dominated rural areas of Madhya Pradesh after gathering information from the villagers regarding their problems. Lack of information about the rates of agricultural produce, difficulty in accessing information on land records; and absence of grievance redressal mechanism were their main problems. The Government selected villages, which functioned as block headquarters, or where weekly markets were held, or villages along the major roads, for establishing information kiosks equipped with computers connected through Internet. These information kiosks were run by rural educated youth having matriculation with working knowledge of computers. The services provided at these kiosks included:

1. Supplying information regarding current rates of crops at the local and other auction centres in the country at a very nominal fee of Rs. 5.
2. All documents containing information of land records to be given on the spot at a fee of Rs. 15.
3. All applications with regard to domicile or income or caste certificates can be sent through e-mail at a cost of Rs. 10.
4. Complaints of poor quality of seeds/fertilizers, drinking water, functioning or nonfunctioning of schools or Panchayats, village committees, etc can be lodged at a cost of Rs. 10.
5. Auction facility for land, machinery, and any other durable commodities at a fee of Rs. 25 for three months; all information on government development programmes and grants on various development projects; and
6. Data regarding families below poverty lines.

'Gyandoot' was observed to be hugely instrumental in establishing a link between the government and the local population residing in the remote villages. It has also provided an opportunity to the marginalized tribal citizens to have an access to knowledge at a little cost. The awards such as the Stockholm Challenge IT Award 2000 in the Public Service and Democracy category and the CSI-TCS National Award for best IT usage for the year 2000, were signs of its success which

was attributed to overcoming the biggest hurdle evidenced in the lack of reliability by efficacious build up of dial-up connection as most of the rural telephone exchanges came to be functional with optical fibre cables, with support from Member of Parliament of the area. The local, being fully convinced of the value of the project, helped by allocating 25 per cent of the development fund for computer education in the district.

❖ **Project “Smart Government” in the State of Andhra Pradesh:**

The Government of Andhra Pradesh, in its endeavour to provide simple, moral, accountable, responsive and transparent governance to its people, launched ‘SMART GOVERNMENT’ (Smartgov) at the secretariat level. This project resulted in an automatic workflow in the secretariat and ensured not only internal efficiency but also provided an effective tool for performance evaluation. In Smartgov, on receipt of a document, it is scanned to generate a number for the file and is e- mailed to the concerned officer. The official notings are done electronically. The system being automatic enforces the desired checks and balances. It curtails negativism and overrides all hurdles of resistance and opposition to change.

The project Smartgov has helped in introducing paperless file processing system in the Andhra Pradesh secretariat. It has not only helped in reducing the time consumed in processing the files, but also significantly improved the quality of decisions besides curbing corruption. That the new governance improvisations/systems because of their faster, efficacious, efficient and effective remedial implications have evoked a positive response from the public in general and the administrative set up in particular speaks volumes for its acceptability. It can, thus, be safely inferred that if implementation of such programmes is preceded with requisite training and orientation activities for the end users the total success of effecting changes can be ensured.

❖ **Project “Sustainable Access” in Rural India (SARI) in the State of Tamil Nadu:**

People in a tiny village called Pathinettangudi, 35km from Madurai, Tamil Nadu, a state in South India, are enjoying the fruits of IT revolution. They are using e-mails, voice mail and webcams courtesy the Sustainable Access in Rural Internet (SARI) project. Around 30 other villages around Pathinettangudi are also covered under this project

and are being provided with similar facilities through ‘Public Access Internet Kiosks’. These kiosks are established by private initiative of enterprising individuals who have taken the risk of investing money in computer, multimedia and other accessories and have installed user-friendly softwares, which can be easily understood and used by local population. The project has received excellent response from the government and the public and with the result its patronage is growing gradually. These Kiosks are a huge success and the local population is making their use for activities like downloading application forms for caste, birth and death certificates and forwarding them through e-mail to the ‘tehsildar’ etc. Normally, online takes a week to process this application and issuance of certificate. Further, as a large number of youths from the area have gone abroad, the family members of these youths are saving huge money on telephone bills. They are paying Rs. 25 an hour for interaction and watching them live on screen by using web cams. Also, free counselling to farmers online on agricultural problems is being made possible with the help of experts from Tamil Nadu Agricultural University and other research institutes in the region.

❖ **Project “Sampark” in Chandigarh:**

Chandigarh Administration in an effort to provide a responsive and effective administration has effectively relied on the Information Technology mode to ensure better quality services to its citizens. Its Memorandum of Understanding with IBM has led to the establishment of ‘IBM e-governance solution centre’ for the administration, consequently developing different e-governance applications. A Project called ‘Sampark’ has been initiated. Under this project electronic service centres known as ‘Sampark Centres’ have been established at different locations in the city. These centres provide different government services such as Payment of Taxes, Payment of Water, Sewerage, and Electricity Bills, Payment of Sticker/Postal Challan, issue of Bus Passes, Issue of Senior Citizen Cards, issue of Births and Death Certificates, Space Bookings, Tenant Registrations, Domestic Servants Registrations, Passport Applications, and selected Telephone Bills under a single roof thereby reducing costs and saving time of the customers. Thus, these centres usher into the anytime, anywhere, and non-stop governance concept.

Moreover, the enhanced timings, courteous staff, and better physical infrastructure are some other factors which have made these centers very

popular, as revealed by a recent survey. The reason for the success of this initiative can be traced through the way these centre are organized. Providing multiple services through a single window with a wide geographic spread is the prime reason. Another reason is that the costs due to single window have also come down and it has relieved the citizens of botheration of visiting different departments. Availability of air-conditioned service centres with drinking water, toilet, sitting space, etc. has resulted in higher satisfaction among the citizens.'

From the above examples we can safely conclude that with the introduction of e-government applications, the service delivery mechanisms in India have made clear departure from the past - cramped spaces, shabby ambience, long queues, delaying tendencies of officials, procedural complexities, direct and indirect demands for bribe, and inefficiency in work. The introduction of Information Technology in the governance process has brought about a revolution in the quality of service delivered to its citizens. But still there are several challenges which need the attention of the policy makers.

Benefits of e-Governance

e-Governance would lead to:

- i. **Better access to information and quality services for citizens:** ICT would make available timely and reliable information on various aspects of governance. In the initial phase, information would be made available with respect to simple aspects of governance such as forms, laws, rules, procedures, etc, later extending to detailed information, including reports (including performance reports), public database, decision making processes, etc. As regards services, there would be an immediate impact in terms of savings in time, effort and money, resulting from online and one-point accessibility of public services backed up by automation of backend processes. The ultimate objective of e-Governance is to reach out to citizens by adopting a life-cycle approach i.e. providing public services to citizens which would be required right from birth to death.
- ii. **Simplicity, efficiency and accountability in the government:** Application of ICT to governance combined with detailed business process reengineering would lead to simplification of complicated processes, weeding out of redundant processes, simplification in

structures and changes in statutes and regulations. The end result would be simplification of the functioning of government, enhanced decision making abilities and increased efficiency across government – all contributing to an overall environment of a more accountable government machinery. This, in turn, would result in enhanced productivity and efficiency in all sectors.

- iii. **Expanded reach of governance:** Rapid growth of communications technology and its adoption in governance would help in bringing government machinery to the doorsteps of the citizens. Expansion of telephone network, rapid strides in mobile telephony, spread of internet and strengthening of other communications infrastructure would facilitate delivery of a large number of services provided by the government. This enhancement of the reach of government – both spatial and demographic – would also enable better participation of citizens in the process of governance.

CORE PRINCIPLES OF e-GOVERNANCE

- ❖ **Clarity of Purpose**
- ❖ **Environment Building**
- ❖ **e-Governance as an Integral Part of Reform in Governance**
- ❖ **E-preparedness and Step-wise Approach**
- ❖ **Disciplined way of working**
- ❖ **Monitoring and Evaluation**
- ❖ **Developing Secure, Fail-safe Systems and Disaster Recovery Systems**
- ❖ **Sustainability**
- ❖ **Development of Local Language Interfaces**
- ❖ **e-Governance – a Continuing Process**

Challenges for E-Government in India:

The benefits of information technology have not been evenly distributed. It has been noticed that most of the time the benefits of e-Governance are also reaped by the affluent sections of society. e-Governance has to be comprehensive; mere introduction of the IT component is not an end in itself. Comprehensive e-Governance reforms cover (1) the process, (2) preparedness and the technology (3) and the people. Introduction of e-Governance needs process engineering as the first step. Unless the processes and procedures and even structures of government are re-engineered so as to be e-

e-governance compatible, e-governance projects cannot succeed. The technology and the hardware and software come second, only after the processes have been re-engineered. And ultimately, in order to make the reforms sustainable the people in the concerned departments/agencies have to internalize the changes. This is also one of the reasons why e-Governance projects succeed at the pilot level but 'when up-scaled' they become unsustainable.

Therefore a concerted effort has to be made to direct e-Governance reforms towards the common man.

The governments, both the Union and the States must make earnest efforts to complete the daunting, but formidable task of quicker and effective E-governance Programs by:

- ❖ Making a policy choice in favour of computerization even if it requires huge investments for the purchase of hardware and software.
- ❖ Serious efforts would be required to mobilize resources for this arduous job. One way to deal with the situation could be that governments enter into arrangements for leasing of computers. This would reduce initial heavy capital investments. There are a large number of agencies which would like to fund the leasing to the departments. Ministry of Finance can be asked to provide concessions to these agencies.
- ❖ Reviewing the IT Act 2000 to address its weaknesses and incorporate new features to tackle issues like cyber crime, data security and document authentication.
- ❖ Establishing complete connectivity between various ministries and departments so that transfer of files and papers could be done through Internet thereby choosing efficacious speed as an alternative to manual labour. To make this really effective, there is a need to make databases of various departments compatible with one another.
- ❖ Supplying information to the public in a language that they understand and are comfortable with, and generally, it is the local language. As, technology is available by which transliteration from English into other languages can be made therefore, the problem is

manageable provided there is enough motivation to do this onerous task.

- ❖ Changing the mindset of the government employees who are used to working only in the manual mode. This is a big task and needs patience and careful planning.
- ❖ Workshops, seminars, and training programmes are required to be organized to spread awareness among the employees at all levels.

Conclusion:

Information Technology presents many avenues for improving governance. It has opened up new opportunities for governments to manage things differently and in a more efficient manner by utilizing information effectively and re-engineering processes. ICT tools are emerging as important instruments towards the goal of "good governance". Many countries have launched specific initiatives for open government. Freedom of information is being redefined and supported by ICT. India's Right to Information Act, 2005 is a prime example in this regard. ICT has facilitated a conscious attempt to bring the citizen to the centre-stage. Citizens are being perceived as customers and clients rather than beneficiaries. The internet revolution coupled with rapid advances in communication have proved to be a powerful tool for citizen-centric governance. An important dimension of the Internet potential is the possibility of providing public services anytime, anywhere.

Last but not the least, we should not forget that e-governance is no magic wand which will wipe out all the problems and challenges of administration in no time rather it is one of the instruments which have the capacity to dilute the intensity of the serious problems like corruption, red tapism, insensitivity to the grievances of the citizens etc. These problems have got their ultimate solutions only in improving the morale, motivation and achievement orientation of the bureaucracy and e-governance is just one clog of the wheel. Further there are other capacities of e-governance viz. in the field of crime investigation, grievance redressal, awareness creation etc. Thus there is also a need for a detailed exploration of the scope of its potential so that the return on the investment on technology can be maximized.



