E-government in India: Opportunities and challenges

Anil Monga[1]

Abstract

Public administration, governed by 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 in public 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, behavior and job handling capacity of the dealing personnel. The present study substantiates these theoretical assumptions about e-governance by analyzing some experiences at the local, state and federal levels of government in India.

Keywords: E-Government, India, Public Administration

[1] Panjab University, Chandigarh, India. Email: monga_ak@yahoo.co.in

Introduction

In the past, service delivery mechanisms of the government departments left much to be desired in India. Cramped spaces; shabby ambience; discourteous dealing personnel and their chronic absenteeism; demands of gratification; inefficiency in work; long queues; procrastinating officials; procedural complexities; etc., were some of the undesirable features of the working of the government departments. Consequently, a visit to government department by a citizen to make use of any service used to be a harrowing experience. With the rising awareness amongst the citizens and their better experiences with the private sector – 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. The metamorphosis in the quality of delivery of services to the citizens by the government has been more pronounced in recent years with the advent of e-governance. E-governance, which is a paradigm shift over the traditional approaches in Public 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, behavior and job handling capacity of the dealing personnel. The present study substantiates these theoretical assumptions about e-governance by analyzing some experiences at the Union as well as State Government Level in India.

Public Administration, governed by bureaucratic structures built on rationale principles, that dominated the twentieth century, has failed to respond to the changing requirements of the present times. It is so because it tended to be rigid, laid too much emphasis on red-tapism; sap creativity; thwarted initiative; wore out dynamism and denied justice as of resultant delays. In addition the focus was more on following procedures and keeping records. Consequently the government moved at snails pace, that too, after guzzling scarce public resources. This criticism seems to be harsh and overstated, but it brings the sordid and murky picture of the system to light. The clarion call is revamp the government and the archaic governance system.

Most of the advanced countries including United Kingdom (UK), Australia, Canada, Newzeland, and United States of America (USA) have adopted series of measures under a new model based on market principles. This new model has several names such as: 'managerialism', 'new public management'; 'market based public administration'; 'the post bureaucratic paradigm'; or 'entrepreneurial government' (Huges, 1998). 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.

No doubt, India has introduced these global trends/ measures in 1990, but no sincere exercise has been undertaken in the corresponding 15 years to examine the effects of these

reformative measures, especially the role of the information technology, in the governance process. The present paper is an attempt to fill this gap in the existing literature.

The term governance needs to be understood before we move on to e-government and e-governance. Governance is not the exclusive preserve of the government. It extends to civil society and the private sector. It covers every institution and organization from family to the state. It involves exercise of political, economic and administrative authority to manage the affairs in, and "the manner in which power is exercised in the management of a country's economic and social resources for development". It can be better understood as, "the complex mechanisms, processes, relationships and institutions through which citizens and groups articulate their interests, exercise their rights and obligations and mediate their differences".

The two terms- e-government and e-governance are independent of each other, but are at times used alternatively, there by the major distinction between e-government and e-governance is missed out. E-government is understood as the use of Information and Communication Technology (ICT) to promote more efficient and cost effective government, facilitate more convenient government services and allow greater public access to information, and make government more accountable to citizens, where as governance is a wider term which covers the state's institutional arrangements, decision making processes, implementation capacity and the relationship between government officials and the public. E-governance is the use of ICT by the government, civil society and political institutions to engage citizens through dialogue and feedback to promote their greater participation in the process of governance of these institutions. Thus, e-government can be viewed as a subset of e-governance, and its focus is largely on improving administrative efficiency and reducing administrative corruption (Bhatnagar Subhash, 2004).

Scope of E-Government

While e-government 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-government 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 primary goal of e-government. 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 strives 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 is 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 center, state and local levels to provide a citizen centric and business centric environment for governance. The Government has given approval in-principle to the plan and overall programme content; implementation approach and governance structure. While endorsing the plan, it was observed that: weight age must be given for quality and speed of implementation in procurement procedures for IT services; suitable system of motivating the states for quick adoption be incorporated; provision of delivery of services to the citizens through a single window should be encouraged; Out sourcing 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 center 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, e-

notings, 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. Some of them have started their electronic newsletter for giving publicity to their activities on wider scale; and identifying departments, which have frequent inter-face with the citizens, and computerizing them on priority basis.

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 sustained basis in future also to maintain the momentum.

E-Government Initiatives at the Sate Level

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 centers in public places. Counters at these service centers 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 (Bhatnagar, 2004). 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 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 Center" is functional in all the 177 talukas in the state. These kiosks are used to provide RTC on line 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 Centers'. 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 Center', 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 mutations orders besides fixing responsibility and holding officials accountable, there by curtailing corruption, where as "Before Bhoomi, the process took weeks and was riddled with corruption. Farmers claimed they had to pay anywhere between Rs. 100 and Rs. 200 in bribes to officials" (Kaushik, 2004). 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 (ibid.)".

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/ fresher from the colleges were recruited and trained to regulate the Bhoomi Centers 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; put an end to corruption; and ensured 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 function 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 include:

(i) supplying information regarding current rates of crops at the local and other auction centers in the country at a very nominal fee of Rs. 5;

(ii) all documents containing information of land records to be given on the spot at a fee of Rs. 15;

(iii) all applications with regard to domicile or income or caste certificates can be sent through e-mail at a cost of Rs. 10.

(iv) complaints of poor quality of seeds/fertilizers, drinking water, functioning or non-functioning of schools or panchayats, village committees, etc can be lodged at a cost of Rs. 10;

(v) 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

(vi) data regarding families below poverty lines. Some of these centers were also rendering miscellaneous services including online matrimonial advertisements; Photostat STD, PCO and horoscope services.

'Gyandoot' is instrumental in establishing a link between government and the local population residing in the remote villages. It has also provided an opportunity to 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, are signs of its success which are attributed to over coming 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 fiber cables, with support from member parliament of the area. The local Member of Parliament, being fully convinced of the value of the project, helped by allocating 25 percent of the development fund for e-education in the district. The role of the kiosk manager has also turned out to be of critical significance in the success of the project.

Project Smart Government in the State of Andhra Pradesh

The Government of Andhra Pradesh, in its endeavor 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. With it the leitmotif came to be efficacy. 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 over rides all hurdles of resistance and opposition to change.

The project Smartgov has helped in introducing paper less 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 the total success of effecting changes can only be ensured if it is preceded with requisite training and orientation programmes for the end users. This will minimize resistance.

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 web cams 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 software's, which can be easily understood and used by local illiterate 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 downloading application form for caste, birth and death certificates and forwarding it through e-mail to the 'tehsildar'. Normally, it 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 counseling to farmers on line 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

Union territory of Chandigarh, the capital of two states-Punjab and Haryana, is a planned city of India. 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 establishment of 'IBM e-governance solution centre' for the administration, consequently developing different e-government applications. A Project called 'Sampark' has been initiated. Under this project electronic service centers known as 'Sampark Centers' have been established at different locations in the city. These centers 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 there being no jurisdiction limitations. Thus, these centers ushers 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 centers are organized. Providing multiple services through a single window with a wide geographic spread is a 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 centers with drinking water, toilet, sitting space, etc. has resulted in higher satisfaction among the citizens.'

Thus, from the above it can be concluded 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. It has ushered in:

(i) transparency in the governing process;

(ii) saving of time and cost due to provision of services to the citizens through single window;

(iii) better decision making;

(iv) simplified office procedures;

(v) checking corruption; and

(vi) better office and record management.

Challenges for E-Government in India:

The governments both –the Union and the states must make earnest efforts to complete the daunting, but formidable task of quicker and effective E-government programs by:

- making a policy choice in favour of computerization to overcome radically the 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;

- 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. Thus, interoperability of e- governance projects is of vital importance if the citizens are to feel the benefit of IT in day to day life;

- 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;

- making cyber laws available to the public as early as possible so that the IT systems and information documents stored in the systems has the same legal validity as the documents stored today on paper; and

- build supporting infrastructures of power and all weather surface transport system to bridge the digital divide between the rural and urban India

Last of all the Government must address on urgent basis: the two major concerns in the IT implementation- the security and privacy. Steps must be initiated to generate confidence among the individuals and organizations to conduct on-line transactions and communications.

References

Bhatnagar Subhash (2004), e-government from vision to implementation, sage publications, New Delhi.

Government of India, 'Information Technology Action Plan: IT for All Indians by 2008',http://it-taskforce.nic.in.

Gupta, M.P. (2004). *Towards E-Government Management Challenges*, Tata McGraw-Hill Publishing Company Limited, New Delhi.

Kaushik, P.D. (2004). E-Governance: Government Initiatives in India, in Bibek Debroy, *Agenda for improving Governance*, Academic Foundation in Association with Rajiv Gandhi Institute for Contemporary Studies, New Delhi.

Kochhar Sameer and Gursharan Dhanjal, (2005). E-government Report Card, *Yojna,* Vol. 49, August, New Delhi.

World Bank (1992), *Governance and Development*, World Bank Washington, DC.

www.edevexchange.org/eGov/sfoverview.htm

www.egov4dev.org/egodefn.htm

www.pacificcouncil.org

www.unpan.org/dpepa-kmb-eg-egovran ready. asp

www.1.worldbank.org/publicsector/egov/index.htm