E-GOVERNANCE: FAST TRACK DEMOCRATISING TOOL

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ABSTRACT

This paper is an attempt to study evolution and present scenario of e-governance in India. It also proposes a model to implement e-governance in the democratic countries like India on the basis of identified roadblocks through the earlier studies.

Keywords: e-Governance, ICT, Public-Private-Partnership

Internet is more than just a technology it is a social phenomenon. With the use of Internet, India could well be on the way to becoming an information and knowledge society and contrary to popular perception, its far-reaching impact cannot be denied, down to the villages and could bridge traditional divides. In India, several state governments have initiated innovative e-governance projects. Some of the most successful projects include Gyandoot (Madhya Pradesh), Akshaya (Kerala), Bhoomi (Karnataka), e-Seva (Andhra Pradesh) and HP-Kuppam (Andhra Pradesh). These projects earned widespread appreciation, primarily for their ability to change the lives of citizens. Through Gyandoot, farmers got access to data relating to market prices of their agricultural produce and land prices as well, enabling them to sell these on their own rather than going through unscrupulous traders.

There was a time when the Government of India (GoI) didn’t really count as a buyer of IT. This situation has changed drastically over the past few years. What’s fuelling the growing use of IT in government is the fact that it has acknowledged the potential of IT and started looking at it as a component of progress. The National e-Governance Plan (NeGP) is the catalyst of the GoI’s e-governance initiative. Perhaps that is why Government has the zest to drive IT into the rural areas. Aware of and concerned with the ground realities and basic

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infrastructure (or lack thereof) at the village level. Now it is understood that the key for the development of the masses lies in information technology and communications (ICT).

**Meaning of e-Governance**

Professor Donald F. Kettl’s (2002), *The Transformation of Governance,* describes governance as the outcome of the interaction of government, the public service, and citizens throughout the political process, policy development, programme design, and service delivery. “Governance is a way of describing the links between government and its broader environment—political, social, and administrative.” (Donald F. Kettl, 2002)

The advent of Information Technology as a high leverage enabling tool for delivery of services in the public and the private sector has by now been universally recognised. This has redefined the fundamentals and has the potential to change the institutions as well as the mechanisms of delivery of services forever. It is in this context that the issues of Smart Governance – Electronic Governance needs to be analysed.

Quite obviously, therefore, the objective of achieving Electronic Governance (EG) goes far beyond mere computerisation of stand alone back office operations. It means fundamental change in the Government operation methods and this implies a new set of responsibilities for the executives, Legislature branches and the citizenry.

e-Governance is the application of information and communication technologies to transform the efficiency, effectiveness, transparency and accountability of informational and transactional exchanges within the government, between government and national, state, municipal and local levels government agencies, citizen and businesses, and eventually empower citizens through access and use of information.

**The Characteristics of e-Governance**

Governance is the societal synthesis of politics, policies, and programmes. So what does digitising and having it online do with the quantity and quality of its societal outcomes?

**Electronic Engagement**

The possibilities for the public to engage in the policy process via electronic networks range all the way from sending elected officials an e-mail to create a distinct conferencing facility (e-mail box, document repository, chat room, etc.) for each major policy initiative (whether a new policy, or changes in an existing policy).

**Electronic Consultation**

This is the part of governance that refers to interaction between public servants and the citizenry and interest groups. Contact between the public service and interest groups have been ongoing for years. Now Internet is providing an interface for this interaction.
Electronic Controllership

Controllership consists of protocols used to manage the cost, performance, and services of an organisation. In electronic controllership the capability is placed on a network, thereby reflexively managing the network’s infrastructure and content. There are two aspects to successful controllership, both of which must be optimised and integrated to achieve full benefits, namely hardware configuration, and software customisation.

Networked Societal Guidance

Who watches the watchers, who govern the governors? The concept of distribution of powers, between branches within a government, and between jurisdictions within a country, has gone part way to answering this question. Those who are competing for power will watch each other, either to keep everyone honest or to expose the illicit practices of competitors. The rise of the mass media served to inform public opinion of such infractions much more quickly and thoroughly than when all news gravelled by word of mouth. Recently, the Internet has become an even speedier vehicle for such disclosures.

Beyond just exposing scandalous misdeeds, however, the Internet promises a far more profound possibility: each and every citizen so interested can receive instant information updates on the current conditions of governance, and give either feedback or guidance to the governance system. With Internet, there is a greater challenge to share more and more information with the public in order to contribute to the knowledge society.

Matthias Finger and Gaëlle Pécoud (2003) has identified three conceptualisations of e-governance, first conceptualisation, which sees e-governance mainly as the continuation of new public management efforts, in particular when it comes to the aspect of service delivery and customer satisfaction; second conceptualisation, which sees e-governance mainly as the further development of all kind of processes and interactions, but especially the interactions between the citizens and the State; and a third conceptualisation, which is mainly technologically focussed, and thus sees all kinds of optimistic future possibilities for technologically enhanced democracy.

“e-Governance offers integrated government services through a single window concept by re-engineering of government processes. It provides a unique opportunity for local governments to provide more effective governance. e-Governance attributes a new dimension to the citizen and government relationship both in terms of needs and responsibilities. It not just redefines the good processes, but changes the very core of democracy, that we have known for long. The e-governance begins with a new view of society and with a different kind of citizen involvement” (Garg, 2001).
In India, the concept of e-governance has taken place during the seventies with a focus on development of in-house government applications in the areas of defence, economic monitoring, planning and the deployment of IT to manage data intensive functions related to elections, census, tax administration etc. The efforts of the National Informatics Centre (NIC) to connect all the district headquarters during the eighties was a very significant development. From the early nineties, IT technologies were supplemented by ICT technologies to extend its use for wider sectorial applications with policy emphasis on reaching out to rural areas and taking in greater inputs from NGOs and private sector as well. There has been an increasing involvement of international donor agencies under the framework of e-governance for development to catalyse the development of e-governance laws and technologies in developing countries.

While the emphasis has been primarily on automation and computerisation, state governments have also endeavoured to use ICT tools into connectivity, networking, setting up
systems for processing information and delivering services. At a micro level, this has ranged
from IT automation in individual departments, electronic file handling and workflow systems,
access to entitlements, public grievance systems, service delivery for high volume routine
transactions such as payment of bills, tax dues to meeting poverty alleviation goals through the
promotion of entrepreneurial models and provision of market information. The thrust has
varied across initiatives, with some focussing on enabling the citizen-state interface for various
government services, and others focussing on bettering livelihoods. Every state government
has taken the initiative to form an IT task force to outline IT policy document for the state and
the citizen charters have started appearing on government websites.

Initiatives

Global shifts towards increased deployment of IT by governments emerged in the nineties,
with the advent of the World Wide Web. The technology as well as e-governance initiatives
have come a long way since then. With the increase in Internet and mobile connections, the
citizens are learning to exploit their new mode of access in wide ranging ways. They have
started expecting more and more information and services online from governments and
corporate organisations to further their civic, professional and personal lives, thus creating
abundant evidence that the new ‘e-citizenship’ is taking hold.

DIT Initiatives

A new group—Electronic Governance Group—exists in the Department of Information
Technology, in order to accelerate the usage of Information Technology in all spheres of
governance. The e-governance group examines the practical implications of IT related issues
in the Government with the aim of improving services to the citizens. The goal is to “reinvent
government,” by identifying breakthrough strategies that rethink the core functions of key
government services, archive integrated services delivery, reduce costs, and redefine
administrative processes. DIT has e-governance website—http://egov.mit.gov.in—for
dissemination of public information at DIT.

National e-Governance Plan

The Government of India has approved the National e-governance Action Plan for
implementation during the year 2003-2007. The plan seeks to lay the foundation and provide
the impetus for long-term growth of e-governance within the country. The plan seeks to
create the right governance and institutional mechanisms, to set up the core infrastructure and
policies and implement a number of Mission Mode Projects at the centre, state and integrated
service levels to create a citizen-centric and business-centric environment for governance.

For governments, the more overt motivation is to shift from manual processes to IT-
enabled processes, may be increased efficiency in administration and service delivery, but this
shift can be conceived as a worthwhile investment with potential for returns.
At the Central and State level, many projects have been initiated. Few significant initiatives are:

- Modernisation of Income Tax Department (Dept. of Revenue).
- Customs and Excise (Dept. of Revenue).
- Tender Notifications and online tendering.
- Online Processing of Purchase orders and enhanced administrative functions to buyers and suppliers.

**Private Sector Initiatives**

“As far as e-governance projects are concerned, the government is gradually changing its role from an ‘implementer’ to a ‘facilitator and regulator.’ It will encourage private sector participation in e-governance projects, so more projects in e-governance based upon the public private participation (PPP) model should come about in the near future.” (Manoj Kunkalienkar, executive director, ICICI Infotech)

There are various projects that have already been implemented by the Government of India and various state governments in association with private players. Notable ones are the Bhoomi project of the Karnataka state government, Community Information Centres in the north-eastern states, AP Online, Kalyan Damodar Valley Project, CDFD Medical Bioinformatics Centre for Excellence in Hyderabad, and the Common Service Centres (CSCs).

- Microsoft is working with several state governments to help evolve a long-term technology blueprint for IT infrastructure. It is working with various departments of the central government, and has undertaken several projects and initiatives with state governments as well.
- e-Choupal, ITC’s unique web-based initiative, offers farmers the information, products and services they need to enhance productivity, improve farm-gate price realisation, and cut transaction costs. Farmers can access the latest local and global information on weather, scientific farming practices, as well as market prices at the village itself through this web portal—all in Hindi.
- IBM has been working very closely with the central and state governments on many strategic projects that pertain to the complete range of e-governance solutions and requirements such as citizen-centric applications, business process re-engineered solutions, and enterprise computing. IBM provides service providers with citizen solutions that are based on open standards. It also works closely with NIC, CDAC and state nodal agencies to provide Web-based solutions in agriculture, panchayati raj, taxation and health to realise the concept of ICT kiosks.
- MCA-21 is the largest e-governance initiative by the Ministry of Company Affairs, and a mission project under the Government of India’s NeGP was formally launched
on a pilot basis with a comprehensive online portal to enable e-filing. TCS will be
responsible for designing and implementing the project; owning, operating and
maintaining the system for a period of six years after successful roll out at all sites

- HCL Infosystems, as a single-window infrastructure provider, has participated in a
number of e-governance projects providing direct support infrastructure at 300
locations.
- Municipal Corporation of Delhi (MCD) signed an agreement with ICICI Infotech to
provide consulting and project management on e-governance initiatives.
- e-Government Foundation, a non-profit organisation supported by Fortune 500 Infosys,
is providing municipal software system for use in cities across the country free of
cost. It helps out the municipal corporations in the areas of property tax, monitoring
public grievances, fund based accounting and geographical information system (GIS).
- Wipro Infotech is working with Karnataka State Police Housing Corporation Limited
(KSPHC) in the field of electronic tendering. The venture enables KSPHC to
mobilise the market forces by combining the regular tendering process with a reverse
auction process (using the Internet) to obtain the most competitive and suitable
techno-commercial offers.

Roadblocks

NASSCOM, the apex industry association of software and service companies in India,
sharing findings of its e-governance study, said today that the e-governance market in India is
gaining traction but there are challenges which are stalling its progress. According to
NASSCOM, the e-governance market is witnessing year-on-year growth and is estimated to
be Rs. 14000 millions in size in 2001-02. The e-governance market grew by 18 per cent last
year and is the highest growing vertical in the domestic IT market.

As per the study conducted by Nitin Tanwar and Deepsikha Sharma, “People not at all
using because of no access posses an even more difficult challenge. Perhaps it is the group
who arguably need the e-governance the most. The reason is, most of these people living in
far flung areas fall under this category, many have a feeling of being left out at the national
level. Traversing long distances, without proper transport, the government offices are a big
hurdle for them. Poor infrastructure is there and commendable efforts are required to create
e-governance activities”.

NASSCOM’s analysis of e-governance implementation undertaken in 10 key states
revealed that the southern states of Andhra Pradesh, Karnataka, and Tamilnadu are leading in
terms of implementing projects at different citizen—Government interface points. Others like
Kerala, Gujarat, Maharashtra, MP, West Bengal and Rajasthan, are catching up fast. But,
despite the islands of excellence, e-governance has not been able to make rapid progress due
to several operational, economic, personnel, planning and implementation issues. e-Governance
in India has also focussed heavily towards investing in hardware and very little on developing software and services, which could maximize hardware investments. The main hurdles identified in this study are shown in figure given below:

**Figure 2: Hurdles in e-governance**

On the basis of some other studies related to e-governance, the roadblocks can be identified in form of:

- Lack of literacy in terms of IT use and benefits of IT in governance.
- Lack of infrastructure in terms of Electricity and Telecommunication facility.
- Attitude of government departments.
- Resistance to change the departmental process.
- Lack of affordable price of Internet use.
- Lack of coordination between government departments and solution developers.
- Underutilisation of existing ICT infrastructure.
- Lack of commitment towards the implementation of e-governance system.
- Lack of awareness about the benefits of e-governance.
- Poor speed and poor access of Internet facility.

**DISCUSSION**

In India, on average, there are only three PCs per 1000 people (one of the lowest in the world) whereas it is 459 PCs per 1000 people in the USA (UNDP, 2000: 200).
Although electricity and telecommunications are critical for it and the Internet, globally over 33 per cent of the world population is without electricity and 80 per cent without reliable telecommunications (Panos, 1998; Heeks, 1999). In India, the power supply in villages is so irregular and poor that it is hardly possible to run computers (Yadav, 2001). Similarly, the lack of telephone connections is a serious obstacle to Internet access — India has one of the lowest per capita telephone lines (22 per 1000 people) in the world (UNDP, 2000: 200).

Also Internet access is too expensive for the poor in developing countries like India. According to UNDP (1999), while it might cost more than eight years’ income for an average Bangladeshi to buy a computer, it would cost just one month’s salary for an average American to do so. Installing the necessary telephone lines needed for Internet or e-mail access is equally unaffordable in most poor countries. In India, each telephone connection may cost as much as Rs. 30,000 in urban areas and Rs 70,000–80,000 in villages, which is unaffordable by most low-income families (Yadav, 2001). It is also very expensive to gain Internet access in India: it may cost about Rs 25 per hour in cities and Rs. 150-1200 per hour in rural areas (Yadav, 2001).

In India, beyond the issue of public access and participation, e-governance has not shown any promising results even in terms of service delivery. In fact, the critics identify quite a number of failures of e-governance in India. Examples of total or partial failure include such cases as the creation of district-level information centre by the National Informatics Centre; the computerisation of the Income Tax Department’s tax system; the use of the executive information system in the management of adult literacy programmes; the adoption of a computerised decision support system in the Narmada Irrigation Project Authority; and the implementation of the Rural Information Systems Project (Madon, 1997; Heeks, 1998a). Similarly, the e-governance scheme undertaken by the state government of Rajasthan has failed due to its centralised planning, its insensitivity toward local infrastructure and lack of motivation among villagers (Yadav, 2001). It has been concluded that apart from some improvement made in the railway services (e.g., a faster reservation service and less corruption) by computerising the Passenger Reservation System, there seems to be no other significant cases in India to demonstrate any noticeable positive outcomes made from the use of it in governance (Heeks, 1998a; Government of India, 2001a).

**Recommended Model for Implementation**

The given model for e-governance is derived with the objective of finding a suitable method for implementation of e-governance in the developing economies like India. It is proposed on the basis of discussions with government officials, public representatives and the facts collected from different secondary data sources. Here, we want to mention the statement of our Union Minister for Panchayati Raj Mr. Mani Shankar Aiyar who has urged people and the government to implement a new formula for the upliftment of rural economy. He discovered the ‘4Ps’ strategy that stands for – Public, Private, and Panchayat Partnership. According to
him, this is the best way to root out the potential of the rural economy of India. The rural development programmes alone cannot work better without cooperation with other partners from government, private sector and NGOs as well.

It is an effort to suggest a proper process by which the implementation may be effective and hurdles can be minimised at all levels of economy.

![Diagram of e-Governance Model](image-url)

**Figure 3: A Framework for Implementation of e-Governance**

- **Levels:** The model can be divided into three levels.
  - Policy level
  - Operational Level
  - User Level
- **Actors:** The main actors in our models are government officials/public sector, private sector and social institutions. The actors are responsible for policy-making, service delivery and awareness creation. Here, the vital role of private sector and social institutions.
organisations like NGOs, Panchayats and academic institutions to make e-governance a success cannot be ignored.

- **Functions:** Three functions identified for policy level are to identify IT vision, policy and strategy and regulatory function. In our model, it is proposed to have an operational level where the services will be delivered with the use of ICT. Although in the era of globalisation the role of government is squeezing at operational level, but in economies like India, to create a faith in the new system, it is essential to have this function in the hands of government machinery in the beginning. At the later stages, the responsibilities can be handed over to the private sector or public-private partnership. It is very important to note that role of private sector is also very critical in the development of IT infrastructure and technology development.

- At the user level, it is almost impossible to make the system useful without creating an awareness and proper education about the use of ICT and its effectiveness in terms of transparency, speed and effectiveness. Also, it is important to have a system, which can help people to work with new technology, so the role of NGOs, academic institutions, and panchayats becomes inevitable. A proper feedback system should also be developed to have a continuous improvement in terms of service delivery and strategy.

- **Use of ICT:** “It is generally distinguished between three different degrees to which the NICTs can be used as part of current state transformation, namely information, interaction, and transaction (GCSI 2000). Information is certainly the lowest level of interfacing between the citizens and the state. Generally, such information has an educational dimension and can mostly be found on governmental websites. Interaction defines a use of NICTs, whereby citizens or other actors can also communicate with the state, be it in policy-making or regulation. Transaction, finally, is an even deeper use of the NICTs, whereby the citizens participate more actively in the state, mostly in the function of policy-making. While this distinction between information, interaction, and transaction is certainly useful, it does not, in our view, fully cover all the potential uses of the NICTs along the process of current state transformation.” ICT will not be used by the people unless there will be proper awareness about the new system. This awareness should be citizen centric and government centric.

**Future:** Reaching out to the rural masses has always a problem. The government is now making sincere efforts to provide telecom access in the rural areas. Towards this, about 5.5 lakh villages out of 6 lakh have already been provided with telephone connectivity. The remaining 42,000 villages will be provided with village public telephones (VPT) by November 2007. This data shows the results-oriented approach and the serious efforts of the government to reach out to rural India.
Minimum Agenda for e-governance of India: Ministries/Departments of the Central Government

- Each Ministry / Department must set up LANs and provide PCs with necessary software up to the Section Officer level.
- 100 per cent training of all staff who have access to and need to use computers for their office work should be ensured.
- Each Ministry / Department would start using the Office Procedure Automation software developed by NIC with a view to keeping a record of receipt of dak, issue of letters, as well as movement of files in the department.
- Payroll accounting and other house-keeping software should be put to use in day-to-day operations.
- Notices for internal meeting should be sent by email to the officers and also put up on online notice boards of the Ministry / Department.
- Ministries / Departments should use the Web-enabled Grievance Redressal Software developed by Department of AR and PG.
- Each Ministry / Department should have its own website.
- All Acts, Rules, Circulars should be converted into electronic form and, along with other published material of interest or relevance to the public, should be made available on the Internet and be accessible from the Information and Facilitation Counter.
- The websites of Ministries / Departments / Organisations should specifically contain a section in which various forms to be used by citizens / customers are available. The forms should be available for being printed out or for being completed on the computer itself and then printed out for submission. Attempts should also be made to enable completion and submission of forms online.
- The Hindi version of the content of the websites should be developed simultaneously, as far as possible.
- Each Ministry / Department would also make efforts to develop packages so as to begin electronic delivery of services to the public.
- Each Ministry / Department should have an overall IT version or strategy for a five-year period, within which it could do detail specific action plans and targets (including the minimum agenda) to be implemented within one year.

Source: http://egov.mit.gov.in

In India, it is mostly the favourable view of e-governance that is echoed in various print and electronic media, especially government websites. In line with the common optimist picture of e-governance, it is pointed out that in India, compared to the previous citizen–administration relations characterised by bureaucratic rigidity, long delays, unnecessary complexity and public suffering, this relationship under e-governance is now characterised by higher speed, greater access, less cost and less public harassment (Dev, 1999; Pardo, 2000; Budhiraja, 2001). IT penetration at the back-end of government and business processes will change the Indian scenario in the next three to five years.

The NASSCOM study has stressed that the government should first focus on bringing efficiency in governance through better use of technology. Some key imperatives for the
government identified by the study include ensuring three per cent of the budget is committed towards e-governance and the amount be spent in the ratio of 40:30:30 on hardware, software and services respectively. The government should also identify project champions who can push e-governance in government departments and states and also rewrite tendering and bid evaluation procedures to encourage private participation. The study suggests the government to clearly define an e-governance strategy and a roadmap with measurable timelines which are currently not present.

On the basis of these statements, it can be said that situation is improving and future of e-governance is bright in India. But it is also true that many hurdles will take place during implementation because Indian economy is an economy with more than 1 billion people out of which a great percentage is with poor purchasing power and with lack of infrastructure therefore careful analysis of implementation strategy is essential. The main aspects those should be looked after for better future can be summarised as:

- Development of high-level awareness and commitment that will carry forward e-governance.
- Development of the capacities necessary to address e-governance strategically.
- Development of the human and data infrastructure necessary for e-governance.
- Implementation through pilot projects.
- Building Infrastructure for e-governance Implementation.
- Proper Evaluation of e-Projects.
- Identification of projects with long term prospective.
- Global Vision.

CONCLUSION

From the above discussion, it is very much clear that the importance of e-governance is now accepted by almost every state in India, and now all these states are eager to improve the governance through the use of information technology. As per the analysis of present status, it is also true that speed of implementation is not satisfactory due to many roadblocks as discussed above. A recent OECD study on e-governance—which involved interviews with public officials, top policy-makers and information specialists—suggests that the use of ICT, specially the Internet, has largely failed to enhance people’s access, increase transparency, encourage bottom-up participation or allow public criticism (Norris, 2001). This is a very positive sign to say that Indian system has to adopt the e-governance with the fast speed and e-governance will be recognised as fast democratising tool.

It is clear from above discussion that in India now objectives of achieving e-governance and transforming India goes far beyond mere computerisation of stand alone back office operations, which implies a new set of responsibilities for the executive and politicians. It will require skilled navigation to ensure a smooth transition from old processes and manual operations.
to new automated services without hampering the existing services. “Unfortunately, it’s not as easy as adding “e” in front of your service delivery mechanism. Successful e-governance initiatives can never be taken in haste. Particularly for the democratic nation of the billion people like India, e-governance should enable seamless access to information and seamless flow of information across the state and central government in the federal setup. No country has so far implemented an e-governance system for one billion people” (Kanungo, 2004).

On the basis of this, it can be said that in a democracy like India, there is a need to identify a strategy of implementation of e-governance, which can transform the Indian governance system in such a way which can give long term results to create a reliable, accountable, transparent and efficient democracy. It is not always very easy for the countries like India to implement the e-government easily due to lot of constraints like population, illiteracy, poverty etc. discussed by many economists time to time. Hasty decisions in this regard may lead to failure in many ways. So the real challenge is to develop such type of e-governance projects those can lead to deliver state of the art e-services to citizens.

Note: Kerala, Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Tamilnadu, Gujrat, West Bengal, Rajsthan are the states/Province of India. Hyderabad is a city in the state of Andhra Pradesh. Gram Panchayats are local government bodies at the village level in India.

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