E-Governance: A Step Towards Digital Democracy

Pradeep Nair[1]

ABSTRACT

Today, new global standards of governance are emerging. Citizens of developing countries are demanding better performance on the part of their governments, and they are increasingly aware of the costs of poor management and corruption. Attitudes are also changing in industrial countries where bribery is no longer viewed as a legitimate cost of doing business overseas. Development in ICT sector carried various e-Governance projects in Asia, with particular focus on India. The paper is intended to make us realize that only e*ffective implementation of E-Governance can take ICT to the common man, helping national and state governments to align their services with the hanging needs of both citizens and stakeholders, as well as to develop the economy. An ICT-driven E-Governance system primarily involves the creation, storage, analysis, dissemination and use of information and communication. It can provide vital inputs to the government's policy-making process. It makes government processes accountable. The paper finds that E-Governance automates and thereby speeds up routine administrative functions. It enables the government to work better, yields higher revenue growth and costs less, apart from servicing citizens' needs as never before. Citizens can freely interact with various government departments anytime, anywhere with maximum speed and with minimal effort and this is what digital democracy actually means.*

Keywords: Major Aspects of E-Governance, Issues in Implementation, Advantage and Practices, Digital Democracy, Model of Digital Democracy and Indian initiatives towards Digital Democracy.

1. Introduction

Information has come to play a key role in social, economic, cultural, and political growth of the nation. ICT has revolutionized the way we live, think, and perform, and even helps in realizing the vision of good governance. Today e-governance has become a buzzword. To put it simply, it means taking the government to the doorstep of the people. The citizens can get immediate online access to information, which maybe otherwise time consuming. It makes the governmental functioning more transparent, helping to check corruption. However, e-governance is not just about government website and e-mail. Nor just service delivery over the Internet. Nor even about digital access to government information or electronic payments. It is all about how citizens relate to each other. Indeed it is a neo-culture, allowing citizens to communicate with governments, participate in policy making, and communicate with one another.

Take the example of China. China is investing a large amount in e-government, growing at a compounded annual rate of about 40%. Similarly, investments in Singapore and Korea are growing at a compounding

[1]E – II/99, Sector – C, Aliganj, Lucknow – 226024, India (E-mail: nairdevcom@yahoo.co.in, Telephone: 91-9415788313).

rate of over 20%. We are late starters. Rural development-with e-government as its tool-must now be made an important agenda item of government's budgetary allocations. Now we have a separate ministry for promoting e-governance, and the government is allocating 2-3% of its budget for IT development. The launch of the India Portal, setting up of the National Institute of Smart Government (NISG), Central Repository of Data, Citizen Service Centers for one-stop a non-stop delivery of public service go to serve useful purpose.

In the 19th and the early 20th century, the knowledge of English and harnessing of the steam were crucial; it is now ICT that is needed for speedy transformation of the society. In terms of basic computerization, police departments, treasury, land records, irrigation, and justice are seen as having the maximum potential. It is encouraging to see that in India almost 20 states and union territories now have an IT policy in place. Andhra Pradesh takes the lead with its various projects. It is also interesting to know that Karnataka has gone miles ahead and digitized 20 million rural land revenue records covering approximately 6.7 million people in the state. Today, a printed copy of the record of rights, tenancy, and crops can be obtained online. The traditional manual land record system causes delays, harassments, and even encourages bribery. It is also interesting to know that Bihar has introduced e-governance in sales tax administration while Chhattisgarh has taken several steps in this direction.

The biggest challenge for a continent of our size and complexity is how to bring rural India on the IT map. For some years now we are worried and concerned about the very limited development in the northeastern states that are inaccessible in many ways. IT now offers hope. Despite our limited advance-according to the International Telecommunications Union (ITU) 2004 index, India is placed among middle-access economies at #37. Even though the Global Technology Report has ranked India above China, this is not of much satisfaction. The fact remains that a majority of our rural population does not have access to IT, not to talk about electricity, healthcare facility, and even drinking water.

Thus far, our attentions have been narrowly focused on the export potentials of the IT sector but far greater potential lies in the extension and application of IT to stimulate the development of our domestic economy. Apart from generating new employment opportunities, the application of IT can vastly extend access to education, healthcare, markets, financial services etc to many more people at far lower costs.

2. E-Governance

E-governance or electronic governance may be defined as delivery of government services and information to the public using electronic means. Such means of delivering information is often referred to as information technology or 'IT' in short forms. Use of IT in government facilitates an efficient, speedy and transparent process for disseminating information to the public and other agencies, and for performing government administration activities. According to Kate Oakley, e-governance can be defined “as a set of technology-mediated processes that are changing both the delivery of public services and the broader interactions between citizens and government”. Technology is like education–it enables people to lift themselves out of poverty. Thus, technology is a tool for, not just a reward of, growth and development”. (Bhatnagar, 2000)

3. Objectives of E-Governance

With a strategic objective to support and simplify governance for all parties, government, citizens and business, by using ICT for attaining good governance, following broad objectives of the E-governance can be identified:

- Improve connections between citizens and government and encourage their participation in governance
- Open up avenues for direct participation of women in government policy making process

- Reduce Poverty
- Enhance democratization and citizen empowerment.

4. Major Aspects of E-Governance

Two major dimensions of e governance can be considered as

- Application of IT for the betterment of administration and
- Application of governance to the cyber society.

The E Governance System is supported by five pillars:

- Computers: All hardware and software requirements of governance
- Connectivity: All carrier systems, bandwidth etc.
- Content: The information that is exchanged between the "consumers" of the system
- Consumers: All the human substitute systems that access and use the "content"
- Confidence Building: Those measures that help the citizens to develop confidence in the e- governance and encourage them to take to the e-transformation.

In addition to the above, following building blocks of E governance can be identified:

- *Application Architecture:* Criteria and techniques with the design of applications for the state's distributed computing environment that can be easily modified to response quickly to the changing business needs as well as to the rapidly evolving information technology to support their needs.
- *Information architecture:* Provides standards for accessing data for online analytical processing (OLAP), including Executive Information system (EIS) and Decision support System (DSS).
- *Data Architecture:* Provides access to high quality, consistent data wherever and whenever is needed. It's a prerequisite for fulfilling the requirement for data to be easily accessible and understandable by authorized users and application statewide.
- *Integration Architecture:* Specifies how various automated applications operations on different platforms can effectively work together.
- *Network architecture:* Specifies how information processing resources are interconnected, and documents the standards for protocols, topology and wiring.
- *Security Architecture:* Identifies criteria and techniques associated with protecting and providing access to information resources. It facilitates identification, authentication, authorization, administration, audit and naming services.

5. Practices of E-Governance

It encourages the take up of digital technologies that are crucial to economic competitiveness, it allows government to redefine its role and become more citizen-focused, it enables us to `join-up' information and hence governs more effectively and it can reduce the cost while not compromising the quality of public services. The E-Governance division of Govt. of India examines the practical implications of IT related issues in the Government with the aim of improving services to the citizens. The goal is to reach beyond current efforts to "reinvent government," by identifying breakthrough strategies that rethink the core value of key government services, improve service delivery, reduce costs, and redefine administrative processes. (Lal, Ram and Haleem, Abid, 2002: 69 – 81)

Public Grievances

Electricity, water Telephone, Ration card, Sanitation, Public Transport, police.

Rural Services

Land records, below poverty line (BPL)/EWS Families.

Police
FIR registration, Lost and found, valuables, person, dead bodies

Social Services

- Pension
- Old age, Widows Pension Schemes
- Acquisition/Rehabilitation & CCOMPENSATION
- Registration of lenience and certificates
- Ration card, birth certificates death certificates, domicile certificates cost/tribe certificates arms renewal, motor vehicle registration, driving licenses

Public Information
Employment exchange registration, Employment opportunities, Examination results, Hospitals/Beds availabilities/Services, Railway/airline time table Road transport time tables charitable trusts, government notification, government forms, governments schemes,

Agriculture Sectors
Speeds information, Pesticides, Fertilizers, crop disease, weather fore cast- Short range/District wise, Market Price.

Commercial Services
Taxation and return filing, Income tax, Corporate tax, Custom Duty, Central/State Excise Duty, Sales Tax, House Tax, Property tax, Company returns,

According to some studies, the use of e-government services worldwide has grown by 11% over the past 12 months, which is a downturn from the 15% growth achieved in the year to November 2005. The annual study, conducted among 32000 individuals across 32 countries shows that e-government use rates have slowed in the past year and suggests that strategies to increase use are generally taking more time than anticipated to impact on Internet users.

6. Digital Democracy

Digital democracy means "a collection of attempts to practice democracy without the limits of time, space, and other physical conditions, using ICT or *computer-mediated communication* (CMC) instead, as an addition, not a replacement for traditional ("analogue") political practices." (Hacker & Van Dijk, 2000) That is, distinct from *"street democracy"*, and taking place in arbitrary physical settings - not the physical places where power itself is concentrated.

By contrast, the term "virtual democracy" implies a new system of democracy while "teledemocracy" is a narrow concept associated with forms of electronic polling and *e-voting.* The term "electronic democracy" is too broad because it can include the old media of TV and telephone, implies *broadcast* and does not deal specifically enough with implications of digital technologies like *podcast, hacktivism or authentication.*

7. Stages of Digital Democracy

According to ***Roza Tsagarousianou*** there are basically three types of digital democracy:

- Obtaining information
- Engaging in deliberation
- Participating in decision making (Lanham, 1996)

Further there are three types of interaction based on the nature and extent of the government-citizen relationship:

- one-way information provision,
- a two-way consultation relationship, and
- active participation.

In one-way information provision, government produces and delivers information for use by citizens. In the two-way consultation relationship, citizens are invited by government to provide feedback on specific policy issues. Active participation refers to the partnership relationship between government and citizens, and citizens propose policy options and shape polices actively.

8. Digital Democracy Model

Both in developed and developing countries, a four stage model of digital democracy is accepted and practiced. The stages are:

- information disclosure,
- listening/consultation,
- online deliberation, and
- online decision-making.

Digital democracy develops from lower-level stage of information disclosure to higher-level stage of online decision-making. These stages are ordered according to the extent of citizen participation by means of the Internet. In the stage of information disclosure, public agencies provide useful information about policy matters on the Internet so that citizens can read and form opinions. In the stage of listening/consultation, public agencies receive feedback or opinions from citizens through government Web sites. In the stage of online deliberation, citizens and public officials discuss policy issues online.

In the stage of online decision-making, citizens participate in decision-making online - making it genuine *computer supported cooperative work.* As time goes on, the development of digital democracy is cumulative.

To realize democracy, there exist lower-level values such as accountability of public officials, responsiveness of public officials, transparency of public administration, and efficiency of administration. Often, these values are discussed with regard to establishing good governance. These values are particularly important for developing countries where authoritarian government dictates and corruptions are rampant. Thus, for developing countries, stage one and two of digital democracy are important to address first.

By contrast, in developed countries, people are dissatisfied with government and representatives because people have little opportunity to influence the decision-making process. So, stage three and stage four are considered important for citizens. (Lawrence, K. Grossman, 1995: 113 – 127)

Considering these gaps in stages of digital democracy, best practices should be grouped to either develop digital democracy or advance digital democracy.

9. The Indian Initiatives Towards Digital Democracy

The State governments in India are quickly matching the central government's own information age initiatives like the IT Act and Policy. According to a recent NASSCOM-McKinsey report, the e-government infrastructure and services sector in India is a 1.5 billion dollar market for IT vendors, software and training companies.

It was found in some studies on IT scenario in India that the Indian government is allotting at least 2-3 per cent of its budget for information technology expenditures. In other parts of Asia, the ASEAN group of countries has announced an "e-ASEAN" initiative in Southeast Asia, focusing on e-government and e-commerce. Ten multinational companies - like Oracle, Sun and GM – have been identified to handle four clusters of IT projects. The ASEAN countries are not rigidly bound by ideologies of the past. Despite all the country's progress in the IT sector, India still lags considerably in global indices of human development and information society parameters. IT tends to be one sector where all political parties are generally in agreement that there is some potential for alleviating some of society's problems. But we need a considerable amount of sharing of lessons and expertise between the different states of India. Although the "IT triangle" of the cities Bangalore, Chennai and Hyderabad is showing good progress in e-government, other areas need to catch up fast.

Today, most state governments in India have some degree of departmental computerization under way; many have basic informational websites, and some even have IT Secretaries and IT Parks. Tamil Nadu is making notable progress in online citizen services in Tamil and English, especially web-based information about land records, birth/death certificates, subsidy schemes, GIS systems, college admission forms, and examination results. In addition to "pushing" information from government to citizens, the Internet can also open up a channel for citizens to communicate their grievances directly to government. Public grievances can be aired online regarding electricity cuts, water supply, phone connections, ration cards, sanitation facilities, and transport services.

Online services provided by the Indian government's National Informatics Centre (www.nic.in) include passport application (http://passport.nic.in), registration procedures (http://igregn.tn.nic.in), school exam results (http://results.nic.in), trade guidelines (http://commin.nic.in), telemedicine (http://indmed. nic.in), customs EDI (www.chennaicustoms.com), and land records computerization in talukas (administrative unit). Companies active in e-government services in other parts of the world - such as IBM, EDS and NCR - are stepping up operations in India as well. The kiosk solutions in India are offering e-government services like payment of traffic fines, utility bills, land and income taxes, and provident fund payments.

Further many state governments in India are already taking initiatives for massive skill-building at the school level. The need is to address multiple channels of education, not just in classrooms. Large international companies like NIIT and APTECH are playing a big role in skill building and software solutions for e-government in India. The governments of developing countries like India are also using offline and online methods for conducting a referendum on various issues. In our country many newspapers/magazines are already conducting informal opinion polls on their Web sites. Today, the Net is also forcing news media - not just government - to become more accurate, responsive and accountable. Media sites covering government issues are effectively linked to government sites and to other media, and by this they are creating a seamless organization of online information easily available to the common masses. (Jonathan, Katz, 1997)

Digital democracy also includes online participation by socio-cultural complexes like arts clubs, libraries, youth associations, gender groups, cooperatives, tribal organizations, human rights activists, disaster relief agencies. Kiosks and community centre solutions are also playing a key role in bringing e-government services to a wider user citizen base, especially since an estimated 60 per cent of Indian Internet users access the Net via cybercafes. The Department of Telecommunications reportedly earns 30 per cent of its revenues from public long-distance call booths, which can thus open up new revenue streams if Internet-enabled. The key solution to bringing the Net to a wider citizen base resides in innovative approaches like installing cybercafes along railway stations outside cities, using solar power for computers, developing low-cost PCs, and leveraging new access techniques like DSL (digital subscriber loop) and WLL (wireless in the local loop). In this connection, low-cost Internet access technology called CorDECT, was already

developed by the IIT's Telecommunication and Networks Group and has been successfully used in France, Brazil, China, and in Indian districts like Kuppam (in Andhra Pradesh) and Madurai (in Tamil Nadu); other trials have been launched in Hyderabad, Patiala and Delhi.

While Internet backbone costs are coming down, last mile costs are still high in India, thus leading to low penetration of phones and Internet. By way of comparison, India with a population of over a billion has only 25 million phone connections - as compared to China which has 150 million phone connections today increasing at the rate of almost 30 million new phone connections each year. The Internet is more than telecommunications - it is power. But the Internet can create a strong digital divide if the governments don't do anything about it. The last-mile costs of telecom and Internet access in the West are low enough to be recovered by ISPs via user fees, and thus the basic access industry has matured to include more value-added features. What is needed is a regulatory change in India to allow private companies to more easily offer telecom solutions like CorDECT in rural areas. More companies need to focus on growing the Internet market solely in developing nations; many of the companies in mature urban markets pay only lip service to rural market access. (Tapscott, D., 1998: 85 – 93)

10. Concluding Remarks

Citizen confidence in e-government can also increase with appropriate cyberlaw infrastructure. The IT Act allows for electronic documents and digital signatures, and it outlaws computer crime. Here we need to go further and create a cyberlaw literacy movement among bureaucrats, policymakers, police officials, judiciary and Netizens. Netlaw is still a new field. Lawmakers and enforcers should use their own creativity in interpreting cyberlaws and not blindly follow other countries; at the same time they should not re-invent the wheel where basics are concerned. A growing trend in countries around the world is the move to enact a Freedom of Information Act, which should foster more open e-government. Governments should promote a culture of openness. Access to information should be as unrestricted as possible. Over40 countries in the world provide citizens a right of access to state-held information through legislation; it acts as a weapon in the fight against government abuse and corruption. Attention must also focus on grassroots reaction to and utilization of e-government services. There is apprehension among some government employees that e-government may involve reduction of government jobs; and those who actually do launch e-government initiatives must be responsive to email queries and not just be content with publishing reams of government statistics online. Good case studies and success stories of e-government must be documented. It should be well recognized that the Internet will affect politics by helping people make more informed choices, based on a wider variety of information.

IT is the rage of the age. But while many politicians are jumping on the bandwagon and announcing e-government plans, the challenge will be for them to live up to these promises. Internet access charges need to come down from phenomenal to nominal. The Andhra Pradesh state plans to add "e-government outlet" facilities to the public long-distance call booths in 400,000 villages out of a total of 600,000. Though India was one of the first countries in Asia to shake free of Western colonial rule, it still struggles with the lowest levels of development and literacy in Asia. What is needed is that - Computerization, Intranets, FM radio, e-townhalls, and televised state assembly meetings must all be collectively harnessed to bring in true a Digital Democracy in which the voices of the marginalized and down-trodden sections should be heard clearly and honestly. Here we need some more initiatives.

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About the Author

Pradeep Nair is an innovative and flexible communication expert having good working knowledge in the fields of development and participatory communication, media research and communication technology. He is well acquainted with the latest technological and conceptual advances taking place in the field of media studies. Currently he is working as a Senior Lecturer with Amity School of Communication (ASCO), Amity University Uttar Pradesh, Lucknow Campus. He was also associated for one year with the Institute of Journalism & Mass Communication, C.S.J.M. University, Kanpur and three years with the department of Journalism and Mass Communication, University of Lucknow as a Faculty Member. Nair worked as a development practitioner, researcher, trainer and resource person with many development agencies. He worked as an IEC Officer with STCS in a National Health Program (RNTCP) funded by World Bank. Dr. Nair's research interests lie at the practices of participatory communication approaches for change and development at community level in developing countries. After earning his Bachelor's in Science, has done his Masters in Journalism and Mass Communication and his Ph.D. in Development Communication from Lucknow University and is presently doing his Post-Doctorate research study in Participatory Communication. Dr. Nair has number of publications to his credit on participatory communication approaches, ICT, Media Convergence, Community Radio, Digital Divide in national and international journals of repute.