A Vision of Citizen-centric e-Governance for India

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Good governance is being recognized as an important goal by many countries across the world. These countries have taken up specific initiatives for open government. Freedom of information is being redefined and supported by detailed guidelines. The Internet revolution has proved to be a powerful tool for good governance initiatives. An important dimension of the Internet potential is the possibility of providing anytime- anywhere services. Along with this there is a conscious effort to put the citizen as the centre of focus of governance where citizens are being perceived as customers and clients.

e-Governance has to be citizen friendly. Delivery of services to citizens is considered a primary function of the government. In a democratic nation of over one 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 set up. No country has so far implemented an e-Governance system for one billion people. It is big challenge before us.

My vision

I visualize an election scenario, where a candidate files his nomination from a particular constituency. Immediately the election officer verifies the information provided from the national citizen database through multifactor authentication on a multipurpose Citizen ID card— civic consciousness and citizenship behavior from police crime records; property record from registration authorities across the country; income and wealth resources from the Income Tax Department; educational credentials from university records; track record of employment from various employers; credit history form various banks and financial institutions, etc.

All the details arrive at the computer terminal of the election officer within few minutes automatically by the act of e-Governance software agents crawling across various state and central government web service directories through the network – collecting and presenting information and facts automatically in real-time without any bias. Artificial intelligence software

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analyses the candidate’s credentials and gives a rating on how successful he/she will be as a politician. The election officer sitting at the remote block of the country decides on the spot and the election process starts. All the voters vote from their home through virtual polling booths.

Is it a dream? Is it possible? If possible, when shall we have it? Can we provide good governance to our one billion people? Can e-Governance speed up the delivery system? Can e-Governance differentiate between genuine transactions and spurious transactions? Can e-Governance ensure immediate action for the genuine cases that satisfy the checklist for a particular service and pend the action on spurious transactions? Can this be done by e-Governance at a cost affordable by our nation? If we have this system implemented then I call this as a true e-Governance system for the citizen.

Challenges in e-Governance

I am trying to seek an answer to these questions by asking another set of questions. Do we have a required e-Governance framework? Do we have a national citizen database that will be the primary unit of data for all governance – vertical and horizontal applications across state and central governments? Do we have standards for the exchange of secure information with non-repudiation, across the state and central government departments seamlessly? Do we have a secure delivery framework by means of virtual private network spanning state and central government departments? Do we have data centres at the centre and in states to handle departmental workflow automation, collaboration, interaction, and information exchange with authentication?

We should have our administrative systems empowered and reformed that accelerate decision-making. When will the entire administrative apparatus be able to contribute more to national development rather than being entangled in files? I have just visualized the scenario. Let us try to find an answer to each of the above questions towards providing good and smart governance to our one billion people. In summary, I visualize e-Governance as follows: “A transparent smart e-Governance with seamless access, secure and authentic flow of information crossing the interdepartmental barrier and providing a fair and unbiased service to the citizen.”

I have always been in my life an advocate of using technology for the betterment of our society. e-Governance is one such opportunity. I want all of you to remember that technology is a double-edged sword. If we do not have an implementation plan from concept to completion in less than one or two years, technology will become expensive and we will not be able to reap the benefits. Hence, I urge you to implement the e-Governance process extremely fast. While you are doing this, you must also have a quantitative measure on the impact of e-Governance measure on the society. Every year, you must be able to produce a number that states the number of people who have been touched by the benefits of e-Governance.
Transparency in e-Governance

India is transforming into a transparent society. It is essential that government functions which have interfaces or interactions with public, especially where state and central functionaries have to serve or support even correct the citizens, such functions have to be done through the tools of information technology and communications. This means, software has to be written to codify rules, procedures and other related government functions and public access should be through IT. Only then the government functions can provide equal access to all based on predetermined rules and even with rules to govern exceptions in a transparent manner. Since India has the core competence in information technology and communications, the possibility of success to bringing in transparency in administration and management through e-commerce and e-business leading to e-Governance, is definitely possible. Actions have to be initiated in a mission mode. Appropriate legal instruments empowering governments enable such interactions should also be done simultaneously.

National ID and e-Governance initiatives

The primary data requirement for effective e-Governance is the National Citizen ID Card. It should be a multipurpose, secured, and authentic ID card. It should be akin to the photocopy of the individual with multifactor authentication such as photograph, biometrics – fingerprint, iris-based systems and digital signature. India with a population of one billion people should be concerned about providing this card to the citizens on an cost effective basis. Hence, there is a need to select the right technology for the preparation of the card and online issue of the card also needs to be determined urgently. This challenge must be taken up by the consortium of public and private industries, and academic institutions with the government. Presently the government is considering the discussion of a bill for introducing multipurpose Citizen ID card.

Several state governments have made significant use of IT in government, integration of IT-based government services and their electronic delivery. Some of the examples are Gyandoot in Madhya Pradesh, e-Seva in Andhra Pradesh, FRIENDS in Kerala. Andhra Pradesh, Kerala, Maharashtra, Rajasthan and Tamil Nadu now provide online registration of property transactions. The NCT of Delhi has recently started electronic delivery of registration of births and deaths. Karnataka has fully deployed a computer application for the issue of land records under the Bhoomi project, Tamil Nadu has implemented the RASI project. In Karnataka, computer applications capture every single transaction at all districts and taluk treasuries. Some states have developed applications for Chief Minister Information System for monitoring activities covering developmental programs, redressing public grievances, and disaster management systems.
VIDYUDNET, India’s first VSAT-based communication network supports real-time data applications for power generation and distribution. Some of these systems can be replicated and used by other states to avoid the duplication of efforts and to speed up the implementation process. India has already established successful networks like NICNET for connecting state and central government offices, ERNET to connect educational and research institutions, RAILNET to connect railway networks, and the airline network, using the minimum network bandwidth to provide important services to government units. Networks are established for specific purposes and address vertical domains like government, education and research institutions, railways, etc. Such modes, serving domain needs, are working satisfactorily. Time has now come to integrate the functions of all the networks—public and private—in a seamless way and provide an Internet exchange in the country much the same way as our telephone networks of multiple service providers have been integrated. The inter-departmental communication is required to provide citizen-centric services such as interaction, collaboration and transaction with workflow.

Conclusion

There are islands of success. There are many more that are unexplored or explored and yet not adequately exploited. Everywhere there is computerization but is not universally operable. There are web based services but again coupled with manual processes which leads to delay. In my view, a comprehensive e-Governance framework needs to be evolved that encompasses the following:

- Establishment of the National e-Governance Commission or empowered National e-Governance Board.
- Establishment of e-Governance Grid across the state and centre; setting up of the horizontal grid across state governments; and interconnecting horizontal grids to the vertical central grid.
- Establishment of the National e-Governance Data Centre with a substantial presence at the state-level facilitating real time data updates from various government units.
- Setting up of a multipurpose, secure, and authentic National Citizen-ID Database to serve as the primary data source for all e-Governance services and seamless online issue of citizen ID card.
- Dedicated broadband VPN (Virtual Private Network) based connectivity from centre to states, states to districts, districts to blocks, and blocks to villages offering wireless, microwave and VSAT options.
- Rigorous implementation of the PURA scheme to provide an impetus to electronic and knowledge connectivity.
- Creation of language independent operating systems, databases, application servers, mail servers etc., adaptable for Indian languages.
- Outsourcing ninety percent of work concerning e-Governance; governments should only manage data centres for online applications.
Today, technologies in computers and communications have led to the death of time and distance. Computers and networks work extremely fast and technologies can improve anything and everything. Challenges have inspired some very creative responses in our country. Let every forum of IT professionals discuss and bring out a comprehensive set of recommendations continuously for the effective implementation of anytime-anywhere citizen-centric e-Governance systems across state and central governments in our country.