
E-governance and Problems of Digital Divide in India

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ABSTRACT

Information Technology is playing an important role in all walks of society, also influencing the Government functioning. Government is increasingly using web technologies for better governance and visibility. E-governance is seen as a medium based on information technology used to enhance the administrative efficiencies and effectiveness. Though it was meant to help all the sections of society, but it is observed that e-governance is creating a digital divide in the society. Most of the benefits are passing to the influential section of the society. This paper attempts to review some aspects of e-governance and its impact on the society.

KEY WORDS : E-governance, ICT, Government, Technology

1. INTRODUCTION

The later years of 1990s has witnessed a radical transformation in the nature of government functioning all over the world. This transformation could be made possible by the use of Information and Communication Technology (ICT) for the provision of services, information and transactions. Private business enterprises took lead in using ICT for business purposes. The net result of this was a significant improvement of efficiency of the working of the private sector serving the interest of the customers in a better way. In the later years, the public sector emulated the practice to improve its performance. Thus, the provision of services information and transaction by governmental agencies through internet may be termed as electronic governance.

Following are few definitions on e-governance found in current literature:

- E-governance is considered as guiding vision towards modern administration and democracy. (Winner and Trautman, 2000)
- It is an internet worked government. (Tapscott, 1996)
- E-governance is one in which the public service operates "in one stop and non stop way" does more for less and power is transferred to people. (Lawson, 1998)
- E-governance may be defined as delivery of

government services and information to public using electronic means. (Backus, 2001)

- Electronic governance technology is used to help simplify and automate transaction between government and constituents, businesses and other governments. (Sprecher, 2000)

Analyzing these definitions we can define e-governance as the "use of Information and Communication Technology by the government to provide information, services and transactions with the participation of people in the process of governance".

Thus, it is wrong to equate e-governance with simple digitalization or computerization of governmental functions. The meaning of e-governance is much broader encompassing the following issues.

- Provision of new government services.
- Enhancing the participation of people in the choice and provision of government services and thereby reinforcing democratic process in the country.
- Bringing new sections of society under governmental sphere including those who are most likely to remain excluded - namely the poor, the illiterate, the differently able, displaced, migrant and indigenous people.

2. E-governance Development in India:

The Indian experience with e-governance can be divided into two phases. The first phase started from

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1960s/ 1970s and continued up to 1990s. In this period the e-government effort mainly concerned with the use of IT for the in-house requirements of the central government activities such as defence, research, economic monitoring and planning and certain data, intensive functions related to elections, conducting of national census and tax administration (GOI, 1985). However, in this phase the use of ICT in administrative activities of central government was extremely limited. It did not result in the automation of departmental activities of the central government.

The second phase which started in the late 1990s saw a paradigm shift in the e-government policies of the government. The e-government policies in this phase involved the use of ICT for wider range of sectorial application reaching out to large number of people in the rural and urban areas with greater inputs of NGOs and private sector organizations in providing services to the public. (GOI, 2000)

At present different types of e-government projects are working in India as displayed in the website of World Bank funded e-government centre located at Indian Institute of Management, Ahmedabad (Centre for Electronic Governance, 2001). There are other types of projects which aim at improving transparency and accountability within the government by introducing electronic file handling and public grievance system. It has been introduced where it is required to deal with high volume of routine transactions like payment of bills and tax dues to the government. As a part of e-governance effort of the government, the government has helped establishing 'tele-centres' normally owned by private entrepreneurs. These centres apart from providing a range of services have become the hub of entrepreneurial activities.

The state of Kerala is considered a pioneer to make an attempt to implement e-governance at micro level to improve governance activities and foster socio economic development. The Kerala government realised that e-government could not fulfil its objectives if necessary administrative reforms were not made. Therefore, steps were taken to overhaul administrative procedures and information flows. The Kerala government helped the development of tele-centres under the project AKSHYA in all 555 panchayats of Vellanad district. These centres apart from providing IT knowledge to rural people have also become the hub of IT enabled agriculture, health, education, literacy offering help to people in filling forms and making applications to the government under social welfare

schemes.

"India is one of the leading developing country currently launching major e-government projects aiming to improve government process, connect government to citizens and promote socio economic development. (Madon, 2004)".

The first objective will make the service provision of the government more efficient by helping the people to get government services in a hassle free manner. Further, it will make administration more transparent and make public administrators and politicians more responsible to people. These factors will ultimately reinforce democratic values in the society.

The other aim of e-governance is to promote socio economic development that's holds lot of significance for a highly populated developing country like India. "Population rich country like India needs job led growth and not jobless growth". The challenge now lies in enlisting the technology as an ally in our pursuit of attaining higher economic growth, generating more employment and achieving economic equality. These objectives can be fulfilled by equitable spread of information. "We need to develop local application and local contents" (Pitroda, 2004). This can be possible by taking ICT to the rural areas and to the economically disadvantaged sections of the society. Generic information on health, education, agriculture, fishery, meteorology, market, prices, small and cottage industries should be converted to information specific to each location and to different social and economic groups. This will help agriculture and allied activities as well as small and cottage industries to become more productive and generate employment in a huge scale.

3. Case of Digital Divide and Solutions:

The study of progress of e-governance in India reveals that its progress so far has been lopsided and inequitable. The revolution in Information and Communication Technology has benefited the haves in an immense way but the have-nots have made only marginal gains. "E-governance has immense potential to benefit any person provided he is educated and has affordability to use ICT. Those who are educated preferably with proficiency in English and have a telephone connection better still a broadband data connection (which can transport information 8 to 8000 times faster than a ordinary telephone connection) and a PC (Personal Computer) or a third generation mobile phone with a built in camera (that enables pictures to be taken and instantaneously transmitted over internet to

any desired persons) are the haves of digitalised information knowledge from across the world. Since knowledge is power, the rich who have easier access to knowledge have become more powerful, dominant and wealthy.. For these people the whole world is market, the whole world is the resource and the whole world is the area of exerting influence and ingestion of knowledge.

There are those who are not literate, not educated and not skilled to use the facilities of ICT or who don't have the capabilities (affordability) are the have-nots of digital knowledge. The former will prosper rapidly and become richer and richer. The latter may improve only by (questionable) trickle down effect. This disparity between digital haves and digital have-nots is highly destabilising and distressing". (Chaturvedi, 2002)

The main challenge therefore before us is to make ICT available for everybody living in any part of the country. In other words we have to develop universal accessibility so that ICT spreads to remote areas of the country and people in the lower rung of economic ladder can afford to use it.

It should be mentioned that the meaning of universal accessibility would be different in our country than what it would mean in the rich nations of the West. In the rich nations of West, Universal Access means telephone with broadband connection in each home including those in rural areas and remote areas with no discrimination in the quality and range of services as between the rural and remote areas on the one hand and urban areas on the other. But, in India we cannot offer such a scheme where nearly 30% of population live below poverty line. So, in the context of India "Universal Access" would mean that any citizen anywhere in the country must be able to use public telephone and internet facility. This will ensure equitable spread of information in the country and help reduce digital divide.

The following are some steps which may be taken to solve the problem of digital divide:

- One way of bridging the digital divide is to upgrade village public telephones into Public Tele Information Centre (PTIC). This can be done by equipping the public telephones with internet connecting device like PC (Personal Computer).
- An English knowing person of the village may be employed at PTIC to download information and interpret the information to the illiterate or non English knowing seeker of information. Moreover,

if the PTIC is fitted with an IP/VOIP telephone and a scanner and if broadband facility is provided, electronic mails can be sent in any language and even video conferencing can take place. The PTIC can also be used to provide many government services to public as is done by e-Seva centres in Andhra Pradesh.

This proposal is feasible because at present most of the villages of our country have telephone connection and also because the price of PCs has gone down drastically in the recent past.

- The last some years has seen the opening up the telecom sector for private competition. Competition otherwise would have decreased the cost of telecom services in a substantial manner. But, this has not happened because of the government's policy of imposing entrance fees, revenue share, high spectrum cost and interconnection charges. None of these have any relationship with network or service cost. These are simply meant for generating revenue for the government.

In any society information and knowledge are promotive of human development. The government must realise it and abolish unnecessary charges on telecom and make telecom services cheaper and help the popularisation of telecom use.

- The capital cost of providing internet facility is high. In this condition no internet company will be inclined to provide this facility if revenue flow is not adequate. But, in the rural areas the revenue flow is low and so internet providing companies show little interest to make provision of this facility in the rural area. In this situation efforts should be made to introduce low cost technology to overcome the problem. The indigenously developed radio technology is such type of technology. This technology enables communication device like telephone to be connected with network of radio. We should try to establish large number of these in the rural and low population density areas to spread internet.
- It is unfortunate that in India, the Receive only VSATs are imposed with unnecessary financial burden in the form of entry fees and revenue share. But, this not found in other countries. Receive only VSATs mostly provide information on health and education, which is important from the point of

socio economic development of the country and realising this the government should abolish all these unnecessary burdens on the Receive only VSATs.

- The majority of internet users in our country gain access to internet on telephone lines. In the past some year's competition among Internet Service Providing (ISP) companies has brought down the charge on internet use substantially. But, since there is virtually little competition in the field of fixed telephone service access to internet from telephone network is too costly because time duration of one unit charge on fixed telephone is only three minutes. The unit time should be raised to make internet use cheap for people.
- Internet telephony is the cheapest mode of voice communication. Government should allow internet telephony from any internet booth not only to any telephone outside the country but also to telephones inside the country. Facility of internet telephone will enable the poorest of poor in our society to get themselves linked with outside world and help bridge digital divide to a great extent.
- Spread of computer knowledge among larger number of people is another measure which may be taken to bridge digital divide. For this computer education may be provided in all 11 lakh high schools of the country. Further, internet facility may be provided in all these high schools so that students may be trained in internet use.

4. The TRAI Proposal:

Recently the TRAI (Telephone Regulatory Authority of India) has come out with a proposal of spreading Rs. 8 thousand crores to increase tele-density in the rural areas. This proposal looks pragmatic as it is technologically and financially feasible to connect all the villages digitally. In the recent years wireless technology and system has evolved so that it is no longer required that there should be cables and overhead wires for the telephone instruments to be connected with networks. The cellular mobile radio system is an example of such technology. We find the use of use of this technology by the private telecom companies in the urban areas of our country. We can establish Radio Base Centre (RBSs) all over the country and connect them to Mobile Switching Centre (MSCs) just like cellular mobile telephony networks. In this system one can get a mobile phone SIM card and can get

communication facility. Radio based technology now enables a radio base station to give signal up-to a radius of 10 kms in the rural areas and a radio base station costs 40 lakh rupees to be installed. Thus, the whole of rural India can be covered if 8000 such stations are installed. The total expenditure of installing 8000 station will be Rs.3200 crores. Further, these radio based stations need to be connected with all India network. The BSNL network being the most extensive one, all these stations should be connected with it. The cost of connecting will come around Rs, 5200 crores. So, the total investment for provision of radio based technology to cover the whole of rural India will be around Rs.8200 crores.

In the current scenario, it cannot be hoped that private telecom companies will come forward make investment because in the rural areas the resource flow to the telecom companies will be poor. Hence it is the responsibility of the state/government to provide the facility to the rural people. If the government is serious about providing digital connectivity finance should not become a problem. This is because in the past some years the government has generated huge amount of revenue from the telecom companies. For example all the telecom companies contribute 5% of their revenues to the Universal Service Fund (USF) which come around Rs.7000 crores as service tax in the telephone bills. Further, in the past the Government has collected Rs.20, 000 crores by way entry fees and revenue shares from the telecom companies (Chaturvedi, 2006). But, despite making so much of money from the telecom sector, the government has not spent a pie on telecom development, much less on rural telecom development. So, money is not the constraints but what is required is genuine sincerity on the part of the government to work for rural telecom development, which is indispensable for the spread of ICT in the rural areas.

5. Conclusion:

There is no nation in the world which is technologically backward and has attained widespread wellbeing and economic power. So, technology possesses great potential to speed up the progress of the society. In a country like India technology can become a potent force for development provided it reaches the rural area where bulk of Indian population lives and because it is the region marked by high degree of social and economic backwardness. But, so far the revolution in Information and Communication Technology has mostly benefited the rich living in the urban areas to the utter neglect of the rural area of the country. This problem of digital divide is highly disturbing. When we

have the technical capability to connect all villages of the country and that too in an economical manner, the government must not show hesitation in increasing tele-density in the rural areas.

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