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# E- GOVERNANCE IN INDIA AND NEW PUBLIC SYSTEM IN 21 ST CENTURY

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E- Governance is a form of e-business in governance comprising of processes and structures involved in deliverance of electronic services to the public. It also involves collaborating with business partners of the government by conducting electronic transactions with them. Besides it entails enabling the general public to interact with the government through electronic means, for getting the desired services. In other words, e-governance means application of electronic means in the interaction between.

- government and citizens
- government or business
- internal government operation

The aim, ultimately, is to simplify and improve governance and enable people's participation in governance through mail, and Internet.

E-governance is much more than just preparing some websites. It ranges from the use o Internet for the dissemination of plain web based information at its simplest level to service and online transactions on the one hand and utilizing IT in the democratic process itself, i.e. election on the other.

E-governance implies e-democracy wherein all forms of interaction between the electorate elected are performed electronically. E-government, as distinguished from e-governance, comprises a pragmatic application and usage of the most innovative technologies in computer and communication technologies, including Internet technology, for delivering efficient and cost effective services, and information and knowledge to the citizens being governed, thereby realizing the vast potential o the government to serve the citizens.

Various manifestations of e-governance initiative will be in terms of the government delivering services to citizens of transacting business, offering general information, or conducting interactions with the general public and business using such IT tools as:

* E-mail
* Internet web sites publishing

* WAP application and publishing
* SMS connectivity
* Intranet development and usage
* Promotion of citizen access.

The fundamental motivation for the campaign of e-governance in India and elsewhere is a slogan - to provide SMART government -"SMART" being an acronym for Simple, Moral Accountable and Responsive Government, a laudable ideal, though difficult it may be to achieve in reality. Thus we may conceive a Smart Village or Smart Municipality or a Smart State, all very difficult, but ideal models. Notwithstanding the difficulties involved in achieving this, a clear objective of e-governance can be cutting the cost of government and minimizing the complexities of procedures by possible business process reengineering. The concomitant benefit is empowerment of people through what is called 'disintermediation'; in other words, eliminating the middleman or tour between the government and the people. For example, by doing so, property tax assessment and collection system can reduce the element of corruption in the system apart from increasing consumer convenience. The online system based on Internet will reduce contact with mediating officials, thereby reducing the possibility of malpractice. This does not however mean that the primary objective of e-governance is tacking corruption.

Evidently, the objectives of achieving such e-governance go far beyond mere simple computerization of stand-alone back office operations in government offices. It should mean a drastic change in the way the government operates, and this means a new and redefined set of responsibilities for the executive, legislative and the judiciary. This requires bringing about a social catharsis, which needs to be done in a comprehensive, concerted and planned manner.

Historically, it was in Chile that a real e-governance initiative was taken up as early as in 1972, when the IT application were unheard of in government and were limited even in business. They used techniques of IT not to just make government paperless or less of paper but to perform government work efficiently. They realized that transparency is the ability to regulate the conditions, not the transactions. Prof. Stafford Beer implemented for President Allende of Chile, the first e-governance software that would help the government survive a severe crises.

Chile thus became the first country to have successfully implemented e-governance. Even though the Chile experiment of the real e-governance early in 1972 was a success story, the subsequent efforts in implementing e-governance in various counties.

The e-governance activity starts with providing information services by the government departments to the public in terms of State websites. These websites provide information about the department concerned, its aims, objectives, citizens' charters, organizational details, facilities available and services provided to the public along with the fees payable, as the role of IT in the specific organization increases, the web sites of government departments attempt at providing more advanced services such as dynamic information and also specific transactions such as making utility payments. Gradually, this e-interaction of the public with the government leads to organizational transformation, transparency of public services, speed of service performance, and increased citizen participation in the government and thereby greater facilitation of participative democracy. Ideally, as the public agencies such as government departments and public sector undertaking begin implementing e-governance and e-government initiatives, their performance improves and they are better equipped to interact with citizens and provide services over the Internet. Thus, the citizens are enabled access to government documents, file taxes, make payments as utility bills, obtain or renew licenses and permits of different kinds, make bookings and reservations for public services.

The enthusiastic initiatives in e-governance and e-government are not without consequential problems, as any technological innovation has. These initiatives have the potential to create a digital divide within the society, especially in the poor and developing counties. While the e-governance initiatives may benefit certain privileged sections of the society, the underprivileged, those who do not have access to Internet or not well qualified or equipped to use Internet will be all the more distanced from the government, leading to disenchantment. Also, this will aggravate even further the existing divide between the privileged and the underprivileged. Thus, it is essential that governments concerned ensure that all citizens of different socioeconomic and educational strata will have adequate access to the basic skills and infrastructure to participate in an increasingly technological society. As the digital divide becomes perceptible in different counties, public policy makers need to devise policies that would address issues of universal access and educational needs of their citizens, so as to match the requirements of an IT enable e-government and e-society.

While detailed research is required to address these issues, preliminary indications are already available that e-governance increases efficiently, speed, effectiveness and citizen satisfaction.

A number of organizations are involved in studying these issues. The e-governance initiative, a part of National Centre for Public Productivity at Rutgers University, Newark, New Jersey; Centre for Digital Government, a US National Research and Advisory Institute; Centre for e-government, an international body; Centre for Electronic Governance, IIM - Ahmedabad; Centre for Good Governance and also National Institute of Smart Governance, both at Hyderabad, India, Centre for e-governance at Department of Information Technology, and Ministry of Communications and Information Technology, Govt. of India, New Delhi, are some such institutions.

Even though historically it was Chile which implemented real e-governance solution as early as the seventies, the current interest and attention on e-governance applications all over the world has its roots in the " Information Super Highway" concept initiated byte US Vice President AI Gore in early 1990s. The Information Super Highway was defined largely in terms of the information infrastructure at the national level by many counties including the US, UK, Canada, Australia and India. The focus was then largely on development of components of the infrastructure, such as fibre optic networks across the State of Nations. Subsequently, the interest was widened to include socio-economic considerations encapsulated in the concept of Information Society or Knowledge Society, which naturally has to encompass e-governance. That is how e-governance concept came into being in a formalized and focused manner, even though attempts to implement Information Systems in the government departments and other public organizations have been made with partial success in various counties including India. Such earlier attempts did not receive the state patronage on a broad-based manner while individual or stray attempts may be citied to have succeeded.

In general, during 1980s and 1990s the governments all over the world lagged behind the commercial world in accepting and implementing Information and Communication Technology (ICT). The commercial world, including the industrial world, had gone far ahead of the governments all over the world in harnessing the potential of ICT in their core and also peripheral activities. Commercial enterprises utilized ICT increasingly to reach out to their customers and business partners, thereby impressively

enhancing their service quality, speed and convenience. E-commerce thus, becomes a give boom (even though the boom never reached the expected levels). However, visible success cases of ICT application include the 24 hours ATM (Automated Teller Machines) services, 24 hours call centers, electronic shopping on the Web, the use of DTV, and integrating cable TV with Internet etc. 'Back office' computerization could be even handled offshore in developing countries like India, where the skilled software manpower and also unskilled operational manpower have been available at low cost. The cost-effective satellite communication infrastructure facilitated such remote development and maintenance of software of these banking, financial, aviation and industrial sectors. This formed the bulk of the 'software exports' activity in countries such as India, Ireland, Israel, and China. Similarly, in 1990s and 2000 till now, the IT enabled services ( ITES) formed the major component of remote services such as call centres, data entry etc. Governments were the last in the bandwagon of institutions attempting to harness ICT in their activities. However, though late, the government all over the world finally woke up to realize the potential of ICT in all their activities.

The initial efforts of e-governance simply resulted in only partial automation of the existing paper based manual procedures and did not result in any significant reengineering or optimization. While implementation of ICT in the business has resulted in good amount of Business Process reengineering (BPR) as to move away from redundant and inefficient functional business units and to restructure organizations around processes that support core business, in the government enterprises such radical or significant changes have failed to happen to a large extent. This situation could be traced to various factors in government functioning such as conservatism, resistance to change, and rigidity of legislation which impedes the amendment of rules and procedures.

As a result, ICT based management methodologies such as business Process Reengineering, Supply chain Management, Just in Time (JIT) methodologies, which had salutary effects in business and industry, had left the government system practically untouched. The scope and extent of e-governance have been largely limited to simple applications with the maximum of computerized MIS and database management within the government departments along with gradually enhanced usage of simple ICT technologies such as e-mail and limited usage of Internet and video-conferencing for government functions.

In addition to potentially delivering significant improvements in government services, ICT has been visualized by some as having much deeper and wider impact on society and even capable of affecting the quality of life and nature of democracy.

However, the significant issues that has become highly relevant for large scale implementation of ICT in governance are the issue of security, privacy, vulnerability of public ICT infrastructure to crime, potential for abuse, terrorism, and general crime, in addition to issues related to social cohesion, and social exclusion following what is popularly known as the digital divide.

Notwithstanding the issue of digital divide which basically refers to lack of access of poor people and rural people to Internet, the indirect benefits to all citizens from computerization and ICT in the government machinery will go a long way in improving the quality of life of people.

Press reports (during the end of 2002) indicate a trend of global growth in e-governance utilization by people in different categories. They indicate the flowing: the proportion of adults worldwide using the Internet to access government services or products during the past 12 months has increased by around 1 per cent, according to the findings of the second Government Online Study published by Taylor Nelson Sofres. Three out of ten citizens (30 percent) globally said that they had accessed government ser ices online compared with only a quarter (26 per cent) questioned a year ago.

Government online services are most commonly used to search for information (24 per cent of users) and to download information (11 per cent of users). The increased use of government online services is primarily due to the rise in the proportion of people searching for information (from 20 to 24 per cent during the period from September 2001 to September 2002). Globally, online government transactions increased from just 6 per cent to per cent during this period and the percentage of those providing personal details to government increased from 7per cent to 8 per cent.

In some counties, percentage incrase has been significantly higher than in others. Among the most significant increases in the use of government services online are Australia (from 31 per cent to 46 per cent), Turkey (from 3 per cent to 13 per cent), the Netherlands (from 31per cent to 41 per cent), and the US (from 34 per cent to 43 per cent). In contrast, in Japan, however, government online usage fell by 4 per cent (from 17 per cent to 13 per cent of citizens) between 2001 and 2002.

While security issues about accessing government services online were the main concern for manycountries during 2001), perceptions of safety improved globally during 2002. When 23 pr cent of citizens worldwide said that they feel safe disclosing personal information such as credit card and bank account numbers online compared to just 14 pr cent of citizens in 2001, representing thus an increase of almost two-thirds (64 per cent). As for the use of government online, the Scandinavian markets (Denmark, Finland, Norway, and Sweden), together with some South East Asian markets (Singapore and Hong Kong), have perceived the highest levels of safety (around one-third of users), in the sytem. In contrast, the greatest safety concerns were expressed by citizen in Japan (90 per cent said they felt accessing government services online was "unsafe"), Germany (82 per cent) and France (76 per cent).

Globally, government online use is more prevalent among men (33 per cent) than women (26 per cent), and among those aged under 3 compared with other age groups.

During the past 12 months substantial increases in government online use have taken place among 3-44 year olds (from 22 per cent to 36 per cent) and 55-64 year olds (from 2 per cent to 18 per cent). In contrast, use among those aged 6 and above decreased (from 7 per cent in 2001 to per cent in 2002).

Globally, the proportion of Internet user's who have made transactions using government services online is equal to the proportion of user's who made online shopping transaction. Fifteen per cent of internet users who made online shopping transaction, Fifteen per cent of internet users have made an online government transaction and in addition 1 per cent has made an online purchase at least once during the past 12 months.

The percentage of Internet users who access government online services varies considerably across different countries from 16 per cent in Hungary to 81 per cent in Norway.

Wendy Mellor, Director, Taylor Nelson Sofres commented: The increase in the use of government online services at a global level suggests that the public see the Internet as a more acceptable means of getting involved in government activity at both national and local levels. However, significant differences exist between countries, may be due to, awareness of services, perceptions of safety, relevance of the site to users, and access to the Internet, among others.

In countries such as Singapore, Norway and Sweden, where the use of government services online is high, it is likely that a significant proportion of citizen feel comfortable with this approach of dealing with government. Yet in counties such as Britain, New Zealand and South Korea, where usage lags behind general Internet use, more needs to be done to assess why uptake of online services is slow and what steps need to be taken to address this.

All the above statistics on usage is time bound. Over the years there has been a definite rise in the usage of e-governance all over the world. While the growth in the use of e-government is encouraging, our research shows that the majority of this growth is from citizen searching for information online rather than making transactions or providing personal information to government. This maybe due to perceived security risks but if the use of these services is to increase, messages about the safety of government online services need to be communicated effectively.

## NEW CONCEPTS OF E-GOVERNANCE IN INDIA.

### 1. Electronic Doorway Library:

The Developing Library Network (DELNET) has floated a new concept of Electronic Doorway Library, which envisage a more comprehensive coverage. It has proposed to the Planning Commission and the Department of Culture that such libraries be set up in rural India in a phased manner. According to the proposal, "each Electronic Doorway Library (EDL) could be attached to the existing facility in a village, such as the school, Gram Panchayat, Cooperative Society, religious endowments, youth and voluntary organizations." etc. Special attentions is to be given to the requirement of children, women and the physically handicapped. As it is essential to offer such information to the people of rural India which they need and can use in improving their life, five subject areas have been identified, via, health and welfare, agriculture, education, general information and small-scale industries, on which appropriate resources need tube selected or developed a new. In each state at least one library will be selected for creation of databases of bibliographic records. Each EDL, will be provide with a computer system with internet connectivity and it will offer access to government generated information, information

relating to courses and continuing education, local level information specially created for this project and e-mail and databases access facilities.

**2. Kiosk on-Wheel**

The Indian institute of Technology, Kanpur, has developed a mobile information kiosk for rural India. It is a dust-proof unit on board a cycle rickshaw, called Info Thela. It will connect to the web through a wireless system. It has a battery bank that will be charged as the entrepreneur pedals from street to street, village to village to provide information and e-mail services.

**3. Service Delivery to Communities:**

Beyond universal service funds, various examples exists where government have taken lead in ICT service delivery to communities, with or without external partners. For example, the government of India has undertaken numerous activities to provide services to the poor.

**4. The Warana Wired Village Project:**

The Warana Wires Village Project was implemented as an e-government project to support sugarcane farmers, with 50% of the funding provided by the national government 40% by the district, and 10% by the Warana Farmers Cooperatives. the project was further extended to the Warana unwired Project in collaboration with Microsoft Research India to integrate the original PC based internet system with a mobile text messaging service to provide access to real time market prices, more community participation, particularly by women and poor, would result in more effective use and benefit for the community. The Warana Wired Village Project is a cluster of seventy villages, forty six from Kolhapur and twenty-four from Sangli district in the Western State of Maharashtra, India.

**5. Lokvani**

Lokvani is a public - private partnership programme between the district administration of Sitapur and the National Informatics Centre of India. The project aims to provide e-government services to communitites to raise grievances and petitions via the internet and/ or mobile text messaging. The government benefits by being able to track the performance of national departments, and citizens benefit from the use of multiple channels to raise concerns.

### 6. Akshay Kendras

Kerala Government is setting up information kiosks, named as Akshay Kendras, in different village. The scheme has been first implemented in Mallapuram district, where over 600 such kiosks have been setup at every two kilometers by the enterpreneurs, with the assistance of the government. The government, jointly with Tulip IT services, is setting up rural broadband Wireless network eliminating the need of telephone lines to run internet in these kiosks. The villagers can make payment of electricity bills get birth certificates and contact police stations by e-mail, besides obtaining other information through these kiosks.

### 7. CLC Project

The Government of West Bengal has taken up a project of setting up in phases around 1500 community Library & Information Centres in such villages where there is no public libraries. To start with, one centre would be set up in each of the 41 panchayat samities. SO far more than 100 such centres have been set up. These are run by part-time community library organizers (CLO). The centres, besides providing normal library services, especially cater information relating to career and vocational opportunities, essential data needed for regional planning, and information pertaining to development activities being carried out by village panchayats.

### 8. Community Information Centres

In April 2000, the Ministry of Information Technology, Government of India, launched a project to establish Community Information Centres (CICs) in all blocks in North- Eastern State of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Sikkim and Tripura to extended the reach of modern day technology even to the remote areas and difficult mountain terrains of these states in order to enable rapid socio- economic development and bring the area closer to the national mainstream. Under this project CICs have been set up in all 487 blocks of the North- Eastern States. The pilot project covering 30 blocks in these states was inaugrated on 12 August 2000. The centres are located in local schools, collages or suitable government buildings. In order to ensure uninterrupted communication, the centres are connected through a satellite based communication network. Besides providing e-mail and web access to the people of the area and other citizen centric information and services, these centres provide access to different socio - economic databases.

**9. Jana Mitra Scheme**

Jana Mitra is a United Nations Development Programmed (UNDP)- government of India supported initiative. Under this scheme information kiosks have been set up in remote areas of Jhalawar district of Rajasthan. The scheme aims to providing access to information pertaining to government services and availing of many such services on-line in remote pockets of the country thereby bridging the gap between the local administration and the people of the area.

**10. Lokmitra Project**

Himachal Pradesh Government has taken up Lokmitra Project to provide the general public, especially those living in distant rural areas of the state, easy access to the government information and the facilities of e-governance at their door step. The project was first implemented in Hamirpur district, where a district- wide intranet has been created. Lokmitra Soochana Kendra (i.e citizen's information centres) have been set up in 25 panchayats areas, which are run by unemployed youth. These Kendras provide current news relating to the district; government notices; information relating to vacancies; tenders and promotional schemes; sale and matrimonial advertisements; downloading all types of forms which the citizen need; and facilities for launching complaints and grievances and e-mailing. The funds for the project have been provided by NABARD. The project is propsed to be extended to all districts of the state.

**11. NATP Project**

Manage- National Institute of Agricultural Extension and Management, Hyderabad, under its National Agricultural Technology Project (NATP), has setp internet kiosks in 24 districts in seven states, via, Andhra Pradesh, Bihar, Himachal Pradesh, Jharkhand, Maharastra, Orrisa and Punjab. In Andhra Pradesh villages in Ranga Reddy district were selected for special study. Each village received a complete computer system with the internet connectivity. Mutually Aided Cooperative thrift and credit Society ( MACTCS) was given the responsibility to run the Kiosks. Each kiosks has cD containing database of Rayatu Panchangam ( Encyclopedia-cum-agricultural calender showing when to cultivate what), agricultural expert system for diagnosis of pest related problems, e-books in Telgu on child rearing, pickle making, etc. These kiosks provide facilities of e-making and information regarding weather, examination result, etc. all services are moderately priced.

**12. NIRD Scheme:**

National Institute of Rural development (NIRD), Hyderabad has set up two public information kiosks with the internet connections, one at vikarabad in ranga reddy district and the other at Tenali in Guntur district (both in Andhra Pradesh). The initials equipments, databases and manpower have been provided bythe institute. The kiosks are located in the respective premises of local public libraries of these villages. These kiosks have photo copying, scanning fand faxing facilities and thereby serve as communication centres and provided economic viability. The kiosks provide such information as examination results, directories, agriculture prices, government forms, land records, educational opportunities, etc. all services are nominally priced.

**13. Raj Nidhi Scheme:**

Rajnidhi is a web enabled information kiosks system, developed jointly by the Rajasthan's Department of Information Technology and Rajasthan State agency for Computer Services. From these kiosks, called Raj Nidhi information kiosks, the citizens are able to access information/ services relating to health, family planning, immunization schedules for children employment, transportation, distance education, agriculture, water and electricity connections, birth and death registration, approved housing socieiteis, rates of land and building taxes, places of tourist interest, fairs and festivals, investment opportunities etc. the first kiosks was inaugurated in an obscure haml Nayala, near Jaipur, by Bill Clinton, the former US President, on 23 March, 2000. Such kiosks are being set up in all the 9184 panchayats of the state, which will finally conect in a network.

**14. Information Village:**

The emerging information and communication technologies ( ICTs) have a significant role to play evolving in an interdisciplinary dialogue on Information Technology: Reaching the unreached held in January 1992 ( Swaminathan 1993), With a modest grant from IDRC, Canada, M.S. Swaminathan Research Foundation, Chennai, initiated in January 1998 or imaginative experiment in electronic knowledge delivery in a cluster of villages and hamlets near Puducheery (for merely pondicherey), ( for merely pondicherey), to meet the local needs using a mix of wired and wireless technologies and through a local website. Through participatory rural appraised in 13 villages. the MSSRF team chooses Villianur, and a market centre surrounded by several hamlets, as the project

local headquarters, A value addition centre-equipeed with a computer, modern, telephone, a small telephone exchange ( EPABX), wireless, equipment, etc. was setup atVillianur. It from here that the project staff operates and produces and updates all the databases to provide information to the people. Information shops have been setup in II villages around villianur, it is mandatory for the volunteer running the shops to keep the shop open for specified hours per day, guard the equipment provided by the foundation against vandalism and tampering and guarantee access to members of Dalit population, At least half of the volunteers and the system workers are women, Over time, the project volunteers have built up their own databases,. These locally generated databases now include details of approximately 130 government programmes for low income rural families local market prices for grains; local farming input prices; a directory of insurance plans for both crops and families; pest management plans for rice and sugarcane; a directory of local hospital and medical practitioners; regional time table for buses and trains; and a directory of local veterinaries, cattle and animal husbandry programmes. The shops also provide information about women's health care and local weather forecasts. Much of the information is available in Tamil, the local language.

**15. Drishtee Project:**

Drishtee has been described as " a platform for rural networking and marketing services for enabling e-governance, education and health services". It runs with the help of a state-of-the art software facilities communication and information interchange within a localized internet between villages and a district centre. This communication backbone, with kiosks site in village centres, has been supplemented with a string of services, which can be difficult to access in rural areas, such as avedan (application), mool nivasi (domicile certificate), cast certificate, bhoo adhikar evem rin pustica (land holder's paas book of land rights loans) gram daak (mailing), gram haat (virtual market place), vaivahiki (matrimonial), sikayat niwarn( online grievance redressal), goun ka bazar (rural market), etc.

**16. Gyandoot Scheme**

Under the scheme 20 villages in five blocks in the tribal area of Dhar district have been interconnected through an Internet owned by the community. Thirty one Wired Village Centres or information kiosks are operational under the name of Soochanalayas. Villages have bought computers and other required equipments themselves. These Soochanalayas

are managed by unemployed youth specially trained for the purpose, to provide service against fees. The information served by them include agricultural product auction details, comodity rates, career related information, government programme announcements (like polio eradication drive), different forms required for government transactions, list of people covered under below poverty line criterion, details of marriageable boys and girls etc. Villagers can send complaints on day to day problems to approriate authorities through e-mail, the replies of which are assured within a week. Village auction site on the internet helps e- transactions for everything from cattle to machinery. The scheme has owned several awards including Stockolm challenge IT Award in 2000. There is a plan to employ Wireless Local Loop Technology to reach interior villages.

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