



THE ROLE OF SCIENCE AND TECHNOLOGY IN E-GOVERNANCE: THE ROAD AHEAD (WITH SPECIAL REFERENCE TO INDIA)

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ABSTRACT

Governments at local levels are facing challenges posed by increased demand for better quality of governance. While the developed world and some Asian countries have moved very quickly, India continues to lag behind in meeting the increasing levels of citizen expectations. The massive population growth, diversity of cultures, acute poverty and high illiteracy create numerous difficulties in delivery mechanisms of government services. The existing processes of service delivery and governance need to be improved. E-governance is the effective use of Information & Communication Technology (ICT) to improve the system of governance that is in place, and thus provide better services to the Citizens. E-Governance is considered as a high priority agenda in Kashmir. E-Governance has been recognized as a vital force for transformational improvement in quality, efficiency and effectiveness of governance. The Good Governance in the Urban Local Bodies involves increased participation of the citizens, greater accountability and transparency in the operation of these bodies. In line with the transparency in the operation of these bodies in line with the national policy, the State Government has agreed to initiate a programme of reforms in the Municipal Bodies to achieve these objectives. These reform measures would include steps to raise resources by the municipal bodies and to strengthen the accountability systems in these bodies. E-Governance is the process of enabling governance experts using Information and Communication Technology (ICT) to make governance effective for citizens in terms of efficiency, transparency, and cost-effectiveness.

Keywords: E-governance, Science and Technology, efficiency and Transparent.

INTRODUCTION:

The actual word governance comes from an ancient Greek term, kebernon, which means to guide. In current usage, to govern means to guide, to control, and to power from a position of influence. According to Former Secretary General of the United Nations Kofi A. Annan good



quality governance is perhaps the single most important factor in eradicating poverty and promoting development. Therefore, governance is an exercise of power for steering social systems, as well as a process by which organizations are directed, controlled, and held to account to their society. It is a set of the systems and processes worried with ensuring the overall direction, effectiveness, supervision and responsibility of an organization. E-Governance involves new styles of leadership, new ways of debating and deciding policy and savings, new ways of accessing education, new ways of listening to people and new ways of organizing and delivering information and services. E-Governance is defined as “E-governance is the application of in sequence & communication technologies to transform the good organization, effectiveness, transparency and accountability of informational & transactional connections with in administration (Dwiedi S., et al., 2005)[1]

Electronic supremacy, popularly known as e-governance, is a distinct measurement of New Public Management (NPM) which has gained substantial momentum since the early 1990s. The term ‘e-Governance’ is often used to explain the networking model and its decentralizing and communicatory implications. There is the overlap between government and e-governance as competing paradigms that interconnect at times during their growth. Some suggest that government makes use of e-governance plan to get better the quality of governance. E-Governance is the process of enabling governance experts using Information and Communication Technology (ICT) to make governance successful for citizens in terms of good organization, transparency, and cost-effectiveness. The term ‘e-Government’ has been used too generally to define initiatives and programmes that should rightly be deemed e-governance. Over the long-ago few years, “governments have quickly adopted e-government technologies and ideas from straightforward, online communication of government information to real time, secure communication for various processes and payments. Demands generated from political leadership, other linked governments, capacity building needs and apparent citizen prospect all contribute” to adoption of e-government methods for good governance. At a broader level, apart from delivering administration services, e-governance includes addition of several stand-alone systems and services between Government-to-Citizens, Government-to-Business, Government-to-Government as well as back headquarters processes and interactions within complete government framework.

The overall objective of such a catalogue is to facilitate the administration to provide services with reasonable cost and optimum time to the end user (citizen). In a broader common sense, ‘e-governance’ is all about reform in supremacy facilitated by the creative use of ICT. India’s e-governance transformation initiatives started in the 1990s. Since then the country has made substantial progress in the information and communication technology sector. To improve IT performance and productivity, the Government of India approved the National e-Governance Plan on May 18, 2006 which seeks to improve liberation of government services to citizens and business establishments with the visualization to “make all government services easy to



get to the common man in his locality, through common service delivery outlets and ensure good organization, transparency and reliability of such services at reasonably priced costs to realize the basic needs of the common man". E-Governance has become the basic condition to any form of governance at the local, regional, national or international level. While the 1980s saw the development of computerization in the government division, the 1990s witnessed the significance of overall computerization with a centralized model in India. With the cost of communication and IT communications going downwards and demand going upwards, the e-governance initiatives took shape in the decade of 2000s. Thus the government sponsored e-governance projects with the corporate globe took a big leap to provide the momentum for long-term growth of e-governance within the country. Demands generated from political leadership, capacity building needs, and professed citizen expectations all have contributed to IT innovations. At the state level, many state governments started off their initiatives in the same period by taking up projects to serve their people through ICT. Today every state has a State. Electronic Mission (SEM) to provide e-government services to the citizens (Sapru R.K., et al., 2014) [2]

Objectives:

1. To bring transparency in the governing process
2. To increase government and citizen interaction
3. To make the government accountable

Methodology:

No solitary method can be merely relied upon for getting meaningful insight of this research paper. Therefore a combination of interdisciplinary and methodical approach is applied in the study. Historical method has been followed to analyze the role of science and technology in E-Governance. The study is based on secondary sources like Books, Magazines, Journals, and Newspapers.

Description:

Electronic governance or e-governance is the application of information and communication technology (ICT) for delivering government services, exchange of information, communication transactions, integration of various stand-alone systems and services between government-to-citizen (G2C), government-to-business (G2B), government-to-government (G2G), government-to-employees (G2E) as well as back office processes and interactions within the entire government framework. Through e-governance, government services will be made available to citizens in a convenient, efficient and transparent manner. The three main target groups that can be distinguished in governance concepts are government, citizens and businesses interest groups. In e-governance there are no distinct boundaries. Generally four



basic models are available government-to-citizen (customer), government-to-employees, government-to-government and government-to-business. Both terms are treated to be the same; however, there is a difference between the two. "E-government" is the use of the ICTs in public administration combined with organizational change and new skills to improve public services and democratic processes and to strengthen support to public. The problem in this definition to be correspondence definition of e-governance is that there is no provision for governance of ICTs. As a matter of fact, the governance of ICTs requires most probably a substantial increase in regulation and policy-making capabilities, with all the expertise and opinion shaping processes along the various social stakeholders of these concerns. So, the perspective of the e-governance is "the use of the technologies that both help governing and have to be governed". The public-private partnership (PPP)-based e-governance projects are hugely successful in India. (Wikipedia.org, E-Governance)[3]

Information and Communication Technologies (ICTs) play a key role in development & Economic growth of Rural India. Political, Cultural, Socio-economic Developmental & Behavioral decisions today rests on the ability to access, gather, analyze and utilize Information and Knowledge. ICT is the conduits that transmit information and knowledge to individual to widen their choices for Economic and social empowerment. In near future people will be carrying a handheld computer connected to the Web to get the information about the World at their fingertips. Government of India is having an ambitious objective of transforming the citizen-government interaction at all levels to by the electronic mode (e-Governance) by 2020. A successful ICT application in e-Governance giving one-stop solutions for rural community is the need of the hour. ICT is crafted to enable the Electronic Governance through wireless communication, thus it's integrally interlinked and knitted. India is a country of villages and to improve and sustain the overall prosperity, growth and development in the global competitive regime, National E-governance plan (NEGP) seeks to lay the foundation with various projects, starting from the grass-root levels, and provide impetus for long-term e-governance within the country. In this direction rural e-Governance applications implemented in the recent few years have been demonstrating the importance of Information and Communication Technologies (ICT) in the concerned areas of rural development. Indeed, some of the schemes introduced in rural India have improved the government services immensely. Instances like Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Warana Project in Maharashtra, Online Income Tax, Online Central Excise, Unique ID and E-office has accelerated growth of respective areas and contributing to country's economic development. Similarly, at state level the various rural E-governance projects such as SETU Project in Maharashtra etc, projects that have been providing excellent services and saving time and money of people as well as of government and are contributing their might to the socio-economic development of rural India. Being ICT a significant instrument in E-Governance and Rural Development,



appropriate infrastructure/design is mandatory for proper functioning (saha k., ceo & M.D, 2014) [4] I

In India, E-Governance applications in the new past have established their positive impact in minimizing the dispensation costs, increase clearness and hold economic growth by income generating ventures, increase in agricultural production, and improvements in health and learning sectors, all of which encourage the overall quality of life of rural people. ICT contributes in given that the transactional services for the rural people with the advantage of time and cost investments in obtaining the public armed forces with efficiency and effectiveness and it also examines changes in agricultural output and improved quality of life due to the ICT services. In addition to the above AEPS, GPS etc. are pivotal in ICT services. E-Government is a subset of the concept of good governance, connoting the process of decision making and implementation of the decisions, in corporate governance, international governance, national governance and local governance. It encompasses the entire process of public administration, the process underlying the formulation of public policies the HRD efforts required for re-skilling the government machinery, prioritization, and efficient management of public resources and above all redesigning the various instruments used to realize the concept of a welfare state. In short governance is a culture which changes how citizens relate to governments as much as it changes how citizens relate to each other.

E-Governance provides the key to making information technology relevant to ordinary citizens for relating to governments meaningfully and effectively. It enables providing of high quality government services to citizens and businesses, with equal access and equal treatment to the rich and the poor. Bringing in enhanced transparency, speed, reliability and consistency in handling transactions, opening up immense scope for offering new services, any time any where services to clientele making the concept of citizen charters reality and above all of reducing the real cost of transacting with the government, are the other important benefits that can result (Poulose, A.V., 2010)[5] With the great scope of Information Technology it can be very well said that it has a very bright and prosperous future. Government of every nation spends a good part of its GDP in e- Governance. Future e-Governance research agendas can be built around future visions for government and society Certain themes that will shape the future have world-wide import, but will play out and interact in both expected and unexpected ways in different places Therefore, no one future is best or ideal in all contexts The themes provide a parsimonious analytical framework for planning and evaluating e- Governance practice, and for designing e- Governance research in any context The framework itself needs assessment and validation Government of India is now beginning to realize that e-governance is the key to drive today's economy with an increased participation from citizens. Providing services online is no longer going to remain optional for local and central government, as demand for providing services at internet speed has been coming from citizens. The real challenge is how to develop and sustain successful e-



governance projects and deliver state of the art e-services to citizens. Some of the requirements for implementing successful governance across the nation (khan Intekhab. et al., 2015) [6] In the earlier period, our scientific methods and institutions have tended to highlight the study of individual natural processes rather than systems, study more than synthesis, and considerate nature more than predicting its performance. And in many instances, science has focused on short-term, small-scale problems, often in monodisciplinary mode, rather than on long-term, large-scale or integrated evils. While these approaches and perspectives have built up a significant base of knowledge and led to a vast collection of useful technologies particularly in the 20th century many of the problems now facing humankind. The impact of technological interventions on individual people, communities and the surroundings must also be carefully measured. To do this, science needs to become more multidisciplinary and its practitioners should carry on promoting collaboration and integration between the social and ordinary sciences. A holistic move toward also demands that science draw on the charity of the humanities within the general public, there is certain measure of distrust and even fear of science and technology (S&T). Some is based on community experience, but much is the result of a significant communications gap between scientists and society. Many reasons are superior for these attitudes public unawareness or misunderstanding of science, imprecise or biased media reporting, uneven distribution of the costs and profit of science among different sub-groups in society, lack of public control over the applications of S&T, and the incapacity of some scientists to converse ideas in plain language. The issue of nuclear misuse disposal is one instance of how the gap between scientific result (which, in this case, suggest that safe disposal technologies exist that are at least as safe As other manufacturing risks accepted by society) and public opinion and performance (continuing resistance to the use of such technologies) may sometimes appear inflexible, that is, not agreeable to solution simply through better communication or further technological research. (Village Kananaskis. et al, 1998)[7]

Conclusion:

In malevolence of poor transportation, poverty, illiteracy, language domination and all the other reasons India has number of award winning e-governance projects. An effective promotion scheme by the Indian government will also a boosting factor to provide quality services to their citizens, which means there is enormous potential for the progress of e-governance in different Sectors. According to Skoch consultancy New Delhi 81% citizens description reduction in bribery, 95% find cost of e-governance reasonable and 78% favors fast of rescue of services. Hence we can say that e-Governance is the key to the “Good Governance” for the mounting countries like India to reduce corruption, provides competent and successful or quality services to their general public. The influence of science on people’s lives is on the increase. While recent benefits to humanity are incomparable in the history of the human species, in some instances the impact has been hurtful or the long-term

effects give causes for serious concerns. A substantial measure of public suspect of science and fear of technology exists today. The power of science to bring about change places a duty on scientists to continue with great care both in what they do and what they say. Scientists should reflect on the social consequences of the technical applications or broadcasting of partial information of their work and explain to the public and policy makers alike the quantity of scientific hesitation or incompleteness in their conclusion. E-Governance has been documented as a vital force for transformational development in quality, efficiency and effectiveness of governance. Nearly all governments of the world are now moving from the customary way of management administrative tasks to e-governance applications to meet the outlook of the growing populations. The significance of e-governance has been recognized and applied at the uppermost level in the country. The government departments are now offering in order and transactions services through their websites on the internet. In this way these websites will be the main touch points for the citizens.

REFERENCE

[1] Dwivedi, sanjay and Bharti Ajay (2005) E-governance in India problems & acceptability Journal of Theoretical & Applied Information Technology www.jatit.org, p37-38

[2] Khan Intekhab, Khan Nadeem and Nazia (2015) E-Governance Reforms in India: Issues, Challenges and Strategies - An Overview, IJCSI International Journal of Computer Science Issues, Volume 12, Issue 1, No 2, January 2015 ISSN (Print): 1694-0814 | ISSN (Online): 1694-0784 www.IJCSI.org p42-43

[3] Poulouse A.V (2010) E-Governance and Infrastructure: Looking ahead, Former Financial commissioner (Railways) and Ex-Officio Secretary, Government of India, New Delhi, Rites Journal p 9.2-9.3

[4] Saha Kumar, CEO&MD at Senrysa(2014), Role of ICT in E-Governance and Rural Development, cxotoday.com.

[5] Sapru R.K and Sapru Yudhishthira(2014)Good governance through e-governance with special reference to India, Indian journal of public administration, vol. lx, no. 2, April-June 2014, p1-2.

[6] Village Kananaskis, (Canada) Alberta (1998) The Role of Science and Technology in Society and Governance, Budapest Hungary 26 June 1 July 1999

http://www.unesco.org/science/wcs/meetings/eur_alberta_98_e.htm, [Accessed 09 Dec, 2017]

[7] www.wikipedia.org, E-governance. [Accessed 12, Dec 2017]