BUILDING BLOCKS OF E- GOVERNANCE: STRENGTHENING THE DEMOCRATIC SYSTEM

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Abstract: The concept of e-governance is the latest attempt in the series of efforts to bring the government and its functioning much closer to its citizens and further, to strengthen the functioning of the government. E- Governance could be a panacea for the ideal, transparent and fair government. The purpose is to make government and its various institutions accountable through the introduction of much transparent and speedier modes of good governance. This article examines the concept of e-governance and its benefits that would reinforce strength in the three pillars of good governance, that is, Accountability, Transparency and Participation.

The UPA government, which took over the reigns of administration in May, 2004 promised a transparent and corruption free governance. The Common Minimum Programme (CMP) was declared by government to achieve these objectives Administrative Reforms Commission(ARC) was formed to promote e- governance on a massive scale. The 11th ARC Report focused on implementation of the e-governance reforms. The article further critically examines the recommendations and the feasibility of their implementation in the current state of reforms.

Over the years, a large number of initiatives have been undertaken by various State Governments and Central Ministries to usher in an era of e-Governance. Sustained efforts have been made at multiple levels to improve the delivery of public services and simplify the process of accessing them. In 2006, the Government approved the National e-Governance Plan (NEGP). The ultimate objective is to bring public services closer home to citizens. This article takes a deep insight into the policy initiatives and projects undertaken under the NEGP including National e-Governance Service Delivery Gateway (NSDG), State e-Governance Service Delivery

Gateway (SSDG), and Mobile e-Governance Service Delivery Gateway (MSDG).

With the introduction of electronic government to demystify procedures and improve the citizen-government interface is called SMART(Simple, Moral, Accountable, Responsive, Transparent) government. The E-governance system in developing countries has been applauded by the west. The article examines the e- governance projects and initiatives in other countries and draws a comparative analysis of US and European Union(EU) with India. The objective is to understand how far the policies have been successful in its implementation.

In India, the E- Governance has been most successfully implemented by the Andhra Pradesh government. Projects like AP Vision 2020, SmartGov, AP Portal, e- procurement are among the successful projects undertaken by the Andhra Pradesh government to open the doors of progress and reforming the existing system of administration. Andhra Pradesh also won the Best E- governed state award in the year 2004-05. The e-Procurement project has also been listed in the "Top20 Programs: IBM Innovations in Transforming Government" Awards in the world by the Ash Institute of Harvard University. The article examines initiatives of the Andhra Pradesh government, its implementation and benefits. No government can ignore this electronic tool despite of the fact that such tool is yet to reach the rural areas. The article further seeks to motivate the other states of India to develop such e-governance programmes for faster and better information access, thereby, strengthening the democratic process.

Keywords: Administrative Reforms Report; Democracy E- Governance; NEPG; India; NEPG; technology; US.

Introduction

he Internet is playing significant role of increasing importance in various fields whether it is public, private or business life. About one fifth of the world's population is connected to this digital information super highway. Therefore, with increasing dependence on internet lead to a much more advanced system of governance. The concept of e-governance is the latest attempt in the series of efforts to bring the government and its functioning much closer to its citizens to achieve the successful functioning of the government (Sridhar, 2006) .Electronic Governance (hereinafter 'egovernance) is a mode of transparency and accountability in governance. E- Governance is a of using Information Communication means Technology (hereinafter 'ICT') to provide better governance. E- Governance signifies the shift in interaction between the government and those governed i.e. the citizens.

E- governance is a kind of 'window of opportunity' facilitating a much faster, convenient, transparent, and synamic interation between government and its people. It has also been referred as 'i- governance'integrated governance. (Heeks, Richard 2001). The reform of government administration and the provision of improved services to citizens has been acknowledged as a major criterion for development and today's drive towards e-governance in many parts of the world can be considered part of this wider development goal (Shirinmadon, 2004). government of India sees e- governance as an important vehicle for introducing administrative reforms administrative reforms to improve the quality of life for underserved sections of society and provide more equitable access to economic opportunities across the nation. (Bekker, V.J.J.M.. 1998). The purpose is to make the government and its various institutions through the introduction of much transparent and speedier mode of providing governance.

According to World Bank "E-Government" refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government(World Bank) .E-Governance may be defined as delivery of government services and information to public using electronic means. E – Governance refers to the use by government agencies of information technologies such as wide area networks, internet and mobile

computing that have the ability to transform relations with business, citizens and other arms of the government. It serves as the whole new agenda for introducing new concepts and methodologies in provision of information and services is under active implementation for evolving a comprehensive and qualitative system of public service delivery. (Malick, M.H. & Murthy A.V.K., 2001).

Now, its is important to note of what actually comprises of e- governance. Terms such as "data resale", "digital democracy", "e-politics" etc. are also frequently mentioned within the same breath as "e-government. Digital democracy is, in fact, "e-politics" rather than e-government; that is, leveraging the Internet to simplify the election process (rather than government). It is important that these terms not muddle the objectives of e-government.

In this research paper, the researchers have attempted to chart this form of governance in different sections. The first section deals with the evolution of e governance as a tool for ensuring transparency and accountability in governance. The second section describes the electronic governance prevalent in India and explains how various legislations departments have imbibed this latest tool of governance. The third section deals with the challenges that are faced by the government in implementation of e- governance techniques and the fourth section deal with the strategies that government has adopted to overcome the difficulties faced in implementation. In the last section while concluding, the researchers have attempted to provide some practical solutions to have a better and efficient implementation of e- governance.

Evolution

In the early 1990s, two changes took place which were a milestone in ensuring good governance. Those were the focus on good governance with increasing non government participation in delivery of public services and Information Communication Technologies (ICTs) and internet- technologies that potentially could connect any and everyone in real time. The concept of electronic governance or egovernment was born as a result of the two changes that were eventually a result of advent internet use. E-Governance marked the paradigm shift in the philosophy of governance and it became citizen centric instead of traditional governance techniques.

The concept of e-governance has its origins in India during the seventies with a focus on development of in- house government applications in the areas of defence, economic monitoring, planning and the deployment of IT to manage data intensive functions related to elections, census, tax administration etc. The efforts of the National Informatics Centre (NIC) to connect all the district headquarters during the eighties was a very significant development. From the early nineties, IT technologies were supplemented by ICT technologies to extend its use for wider sectoral applications with policy emphasis on reaching out to rural areas and taking in greater inputs from NGOs and private sector as well. (Citizen Centric e- governance in India, 2012).

Several E- governance projects across the country were implemented that focused on improving public service delivery, bringing greater transparency and accountability in government process. The National e- Governance Plan(NeGP), based on the learning from these projects was approved in May, 2006 and comprises of 31 Mission Mode Projects (MMPs) and 8 components with a vision to "make all government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs to realize the basic needs of the common man.(NeGP, 2011). In order to promote e-Governance in a holistic manner, various policy initiatives and projects have been undertaken to develop core and support infrastructure. The major core infrastructure components are State Data Centres (SDCs), State Wide Area Networks (S.W.A.N), Common Services Centres (CSCs) and middleware gateways i.e National e-Governance Service Delivery Gateway (NSDG), State e-Governance Service Delivery Gateway (SSDG), and Mobile e-Governance Service Delivery Gateway (MSDG). The important support components include Core policies and guidelines on Security, HR, Citizen Engagement, Social Media as well as Standards related to Metadata, Interoperability, Enterprise Architecture, Information Security etc. New initiatives include a framework for authentication, viz. e-Pramaan and G-I cloud, an initiative which will ensure benefits of cloud computing for e-Governance projects.(NeGP, Department of Information and Technology)

At present electronic governance is used as the latest tool for efficient governance. Government has attempted to get away with the traditional mode of governance by adopting electronic techniques .

E- Governance Initiatives by Indian Government

"The Government would implement a comprehensive programme to accelerate e- governance at all levels of the government to improve efficiency, transparency and accountability at the governmentcitizen interface." Mr. Atal Bihari Vajpayee(former Prime Minister of India)

The Centre and state governments have taken various initiatives to promote the use of IT in furtherance of better governance. Various departments and ministries have also been provided with an annual budget with respect to IT related activities. Some of them are as follows:

MCA 21

MCA 21 is perhaps the biggest e- governance initiative in India. The Ministry of Corporate Affairs has almost all of its work done via electronics and less paper work. The Services provided by MCA21 portal include name allocation to a new company. incorporation of a new company, application for change of name of a company, registration charges, annual filings, etc. (MCA21). Earlier a stakeholder or his representative had to personally go to the registrar of companies for filing of statutory documents or modification of the public records of a company which could be done in the working days and hours specified by the ROC. Hence, it took a long time to get these applications processed as a result of which corruption in the ministry aroused and officials took bribe to process the application fast. Also, most of the time it is difficult to get physical records of the company. The greatest advantage of this is that the people living in cities which do not have ROC office have greatly benefited as a result of the introduction of the online filling of applications.

Information Technology Act, 2000

The Information Technology (hereinafter 'IT) Act, 2000 has been enacted by the government to grant legal status to information on the internet, legally acknowledge emails and enforce online contacts and transactions carried out on the internet. Some of the provisions promote e- governance include legitimizing digital signature, providing legal status to information in electronic form, attributing, acknowledging and dispatching electronic records etc. (IT Act, 2000). Section4 – 10 of the Act primarily deal with e- governance.

The Information Technology Act, 2000 was enacted to "... provide legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as "electronic commerce", which involve the use of alternatives to paper-based methods of communication and storage of information, to facilitate electronic filing of documents with the Government agencies and further

to amend the Indian Penal code, the Indian Evidence Act, 1872, the bankers' books Evidence Act, 1891 and the Reserve bank of India Act, 1934 and for matters connected therewith or incidental thereto." Thus, the focus of this Act is on electronic commerce and electronic records. ((Second Administrative Reforms Commission, 2008)

Right To Information Act, 2005

The 2005 Act has been enacted by the Union Government to provide right to information for the citizens to secure access to information under control of public authorities in order to bring transparency and accountability in the working of every public authority. This Act mandates every public authority to to place certain information about the organization in public domain. Therefore, it forces the government to organize information in digital databases so that it can be retrieved quickly and provided to information seekers within timelines mandated by the Act. Various provisions of the act such as legal recognition of electronic records, digital signature, utilization of electronic records and digital signature with respect to government dealings, etc., suggest how transparency in governance, can be brought through the means of e-governance. (RTI Act, 2005) This sort of arrangement will definitely help in establishing a better state- citizen relationship. It will further, result in bringing transparency in governmental functioning as the Act is providing right to citizens to ask for matters pertaining to governmental functioning. It is also recognizing use of e- governance as a tool for efficient functioning of the Act and for giving strength to the benign drive of "whistle blowing" (Singh Shalini, 2010).

Citizens Charter Bill, 2011

The Right of citizens for Time Bound Delivery of goods and services and redresssal of their grievences Bill, 2011 was planned to eliminate corruption among government officials. The Bill mandates that every department has to publish a Citizen's Charter , thereby stating that all the services that are to be provided to citizens by the various government departments. Herein, a Grievence Redress Officers, are appointed to provide assistance to citizens in filing complaints. The citizen who files a complainr, shall within two days of registering a complaint, the complainant receives a SMS/ email , a specific complaint number and time frame within ehih his application will be acted upon.(Citizen Charter Bill, 2011).

Hence, the e- governance is an essential tool in recuperating governance .

Income Tax

The Income Tax Mission Mode Project is established under the aegis of Directorate of Income Tax. The aim of this Act is to ensure efficient tax collection. This project is one of the finest e- governance initiatives since it enables the tax payers to fulfil tax obligations without even visiting the Income Tax Office. The project currently offers services like efilling of returns, e- filling of Tax Deduction (TDS) returns, payment of taxes online and issue of refunds. Apart from this, information relating to due dates, procedures of e- filling can be easily obtained from the website. Furthermore, the project has assumed even more significance after the Central Board of Direct Taxes. (CBDT, 2012). This project has made it mandatory for an Individual or Hindu undivided family and the person who resides outside India, to file E returns. E - Filling of returns of a company under digital signatures has been made compulsory. Hence, this new project has introduced various methods by which the tax payers transaction can be tracked which would eventually lead to a greater degree of transparency and accountability in governance.

Electronic Service Delivery Bill, 2011

This bill has an objective to provide delivery of public services by the government to all citizens by electronic mode within a stipulated timeframe to enhance transparency, efficiency, accountability, accessibility and reliability in delivery of such services. By eliminating paperwork on a massive scale, the bill can cut the red tapism and corruption that has spread like a epidemic which has spread its roots in the entire country. By eliminating paper work governance can be improved.(Electronic Service Delivery Bill, 2011).License, permit and other application forms could be filed online.

However, the grievance redressal mechanism under this Bill may overlap with the grievance redressal mechanism under the Citizens Charter Bill, 2011. Additionally, some states have enacted their own laws on electronic delivery of services.(Bill Summary, PRS India).

State Initiatives

There are primarily four models in e- governance scenario, namely- **Government-to-Government** (G2G), Government-to-Consumer (G2C), Consumer-to-Government (C2G) and Government-to-Business (G2B) model. The concept of e- governance is based Government to Consumer model. The e- governance models that have so far emerged in India have been

utility driven and community based. Success of these models are not only due to community support but also due to incorporation of user friendly technology in terms of software support of local language as a medium of interaction. (Sharma Vakul, 2007).

Some of the state government project to promote egovernance are :E- Seva project in Andhra **Pradesh:** was initiated with the objective of providing G2C and B2C services. Herein, the citizens are provided with their services online by connecting them to various government departments, whereby at the time of service delivery the information is provided online. (eSEVA, 2001). Lokvani Project in Uttar Pradesh: This project was launched to provide justice online by enabling people to lodge complain online. (Lokvani Project, 2004). Gyandoot Project in Madhya Pradesh: This project is a G2C service delivery system. This main objective to introduce this was to provide relevant information to the rural population and to bring interaction between district administration and the citizens. (Gyandoot, 2002). Another project in Dabri Rampura, Jaipur in the State of Rajasthan has currently been developed on the similar lines. It provides facilities like online grievance redressal, rural email account, bank accounts, applications for license, ration cards, issuance of domicile, caste certificates etc. could be now filed online, thus making less of paper work and leading to efficient governance. (Sharma Vakul, 2007).

eProcurement System: It was introduced for the departments within the State of Andhra Pradesh(hereinafter 'AP'), primarily the state owned Public sector undertakings and organizations. The objectives are, to automate the procurement and purchase procedures of AP government, monitoring and tracking of all purchase of all goods and services by government organizations. Thereby, creating a paperless procurement system, more accountable, cost effective and efficient procurement.(Sridhar, 2006)

There is no overarching central framework governing the public procurement in India. The states of Karnataka and Tamil Nadu have enacted their own public procurement laws and are largely based on the UNCITRL(United Nations Commission on International Trade Law) Model law on e procurement. (Karnataka Transparency in Public Procurement Act, 1999 and Tamil Nadu Transparency in Tenders Act, 1998).

AP Portal: This is a comprehensive online information, and interactive payment and services

coming together making a single window access for the people by the government of Andhra Pradesh. It is an independent body and own board of directors and functionaries .It is a joint venture between AP technology services ltd. And the Tata Consultancy services to form a company in the name of APONLINE LTD. This is a great example of commercial success with government support. All contact details of MLAs, MP, Secretaries among others are accessible through a search engine on AP Portal. (AP Portal, 2002). The AP eProcurement project has been listed in the "Top20 Programs: IBM Innovations in Transforming Government" Awards in the world by the Ash Institute of Harvard University, It has also won Best e-Governed State (Policy Framework & e-Readiness) Award among several other awards and is the only state in India to have such an advanced e- governance system.

Scenario in Other Countries

United Kingdom

The UK government releases the Public data to help people understand how government works and formulates its policies. The website www.data.gov.in puts together all the relevant information on one platform. The website classifies the data based on domains, eg. Health, local government etc , provides applications or better known as Mobile Apps and provides datasets.

United States of America

On December 8, 2009, the White House issued an open government Directive requiring federal agencies to take immediate, specific steps to achieve milestone in transparency, accountability, participation and collaboration. Wherein, the agencies are expected to provide an Open Government Plan within 120 days that will describe how they'll improve the transparency and assimilate public participation and collaboration into their activities. The memorandum requires the executive departments and agencies to take the following steps towards the goal of creating a more open government – publish government information online, improve quality of government information, create and institionalize a culture of open government and create an enabling policy framework for Open government. (Whitehouse Memorandum, 2010).

Canada

In strengthening the citizen- cantered approach to government, the Ontario province has developed a strategy on citizen engagement. One component of this strategy is intended to expand the use of electronic channels, mainly the internet, to help

bring citizens close to the government. The goal is to ensure citizens have access to a wide range of tools and information that will enable them to participate more fully in the democratic process.

Some e- tools for actively consulting with and engaging citizens already exist in Ontario. For instance , all significant environmental policy and program changes are posted on the Environmental Bill of Rights Registry, which is available through public libraries and on internet.

The Canadian Index of Wellbeing (CIW) is considered the best example of a national system of comprehensive, citizen based progress and well being measures. It began in 1999, with a national consultation of Canadian citizens to identify core national values and key aspects of well being. (Ministry of Government Services, Ontario).

Norway

An electronic public record database for the civil service (OEP) was launched in May2010. This was first of its kind in the world. Through this all citizens can get access to the documents of the central civil service. Until now, only journalists had the right to do so. On the OEP, it is now possible to access the public records database and make searches in public journals. All documents sent from ministries , directorates and state agencies are journaled in public files, The agency for Public Management and e-Government (Difi) carries the management responsibility for the service. The Ministry of Government Administration and Reforms has been responsible for the development of the OEP. (SmartGrid Norway, 2010).

China

In one municipal government in China, creating an "information society" is seen as the foundation of its e-government plans. The idea defines the city's entire e government vision- to see its citizens, businesses, schools and public administration and service industries all become information based. Networks and ICT are to become part of the daily work and lives of the people. (Roadmap for E government in the Developing world, 2002)...

Challenges In Implementation Of E- Governance

Delivery of services to citizens is considereda 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 a big challenge before us."Dr. APJ Abdul Kalam Azad

It is evident that over the years there has been a tremendous growth in ICT projects. However, failure of implementation of these projects continues to exist. Some of the challenges are as follows:

Firstly, in India it is the elite class who have access to computers and internet. Due to economic disparities in the country the poor are unable to access the internet and reap benefits of the egovernment. In India, people metropolitan cities have been able to gather maximum by paying tax returns online among other things, but the poor are left out. Hence, the Digital divide or gap is one of the main reasons for implementation of e- governance projects. Secondly, the government departments in India do not have sufficient machineries and infrastructure to support ICT initiatives. Most of the technology and infrastructure is outdated and require urgent up gradation.

Thirdly, the procedures followed by government departments are slow, which eventually make implementation of e- governance plans slow. Fourthly, the government departments lack training, expertise and virtual training. The websites aren't updated on time as a result of which people don't come to know the e- governance initiatives by the concerned ministry or department. Fifthly, with increased use of internet and mass storage of citizens information on the government websites has initiated transparency in governance but at the same time there is a risk to privacy of citizens. Lastly, the redressal mechanisms set up by the government are not effective and often people don't replies to their queries posted online.

Strategies to Overcome the Challenges

In order to overcome the hurdles in implementation of e-governance initiatives there is a need for holistic framework of the implementation procedure.

Following are some of the suggestive measures the government could adopt:

Firstly, the government should frame a policy that specifically deals with e- governance implementation programs. Such a policy should establish a committee or board which would examine the needs of thr rural masses for the implantation of the ICT projects. **Secondly,** since it the elite or the upper strata of the society which have access to interet and can respond to the e- governance initiatives by the government. The rural masses should also be covered and they should also be able to reap the benefits of e-

governance. Hence, to reduce the gap, an immediate policy or program should be designed to cover the rural population. So, far a few schemes on different agendas have been launched but a better implementation and all in one category of policy is required. Thirdly, the digital divide between the rural and the elite class can be abridged quality of education be improved including the web based learning. This can be done by introducing less costly software and computers and organising training programs on usage of web based leaning. Fourthly, to encourage the web based or virtual learning, there should be free wifi access in rural and remote areas to improve accessibility to online information and services. Fifthly, the government staff, policy makers, politicians and other concerned officials should be trained so that they have the basic knowledge about the internet and and information technology . Also, there should be a mock trial before starting with the process of implementation of an e- governance project. This will save time and money . Sixthly, personal data of people stored by the government should be protected by way of privacy enforcement mechanisms and ensure that personal data is not leaked out under any circumstance. Lastly, the administrative wing of the judicial system should also be improved. Inititaived by the Delhi High Court are applaud able. They have introduced online filling of cases that allows litigants, lawyers to file cases online and do away with bulky court files and argue on the basis of soft copy. Moreover, online gate pass facility will also be started by the court. Suxh initiatives should be encouraged and introduced at all other courts in the country. ((Times of India, 2013).

Conclusion

For a democratic country like India, participation of people is an essential feature of good governance. With increase in Internet and mobile connectivity, the best way is to attain the citizen participation. In the decision and policy making of the government, it is thrigh the lens of e- governance. Despite of the fact that e - governance has its own benefits still the implementation has not been to the fullest. There are various challenges in using ICTs for the purpose governance and impart this to the rural areas. In order to overcome the challenges, it is essential to change the way the government system operates. The hurdles in implementation of e- governance initiatives should be removed in order to ensure transparency, accountability, trust and responsiveness in governance.

Bibliography

- [1] AP State Portal, Andhra Pradesh Government.
- [2] Bekker, V.J.J.M.(1998) Writing Public Organizations and Changing Organizational.
- [3] Bill Summary- The Right of citizens for Time Bound Delivery of goods and services and redresssal of their grievences Bill, 2011, PRS Legislative Research
- [4] Citizen Centric E governance in India, Strategies for Today, Vision for the Future.
- [5] Dr. Shirinmadon, Department of Information Systems, London School of Economics. Evaluating the Developmental Impact of egovernance Initiatives: An Exploratory Framework, Ejisdc(2004) 20, 5, 1-13.
- [6] Government of India, Ministry of Finance, Department of Revenue (Central Board of Direct Taxes) notification S.O. 626 (E).
- [7] Gyandoot, Rural Cybercafes on Intranet- A cost benefit evaluation Study, Centre for Electronic Governance, Indian Institute of Management Ahmedabad, October 2002.
- [8] Heeks, Richard(2001): I- Government Working Paper Series, Institute for Development Policy and Management, Manchester.
- [9] Information Technology Act, 2000.
- [10] Karnataka Transparency in Public Procurement Act, 1999.
- [11] Lokvani Project, India Governance.
- [12] Malick , M.H. and Murthy. A.V.K. 'The Challenge of E- Governance', XLVII(2) Indian Journal OF Public Administration, (2001).
- [13] NeGP, Department of Electronics and Information Technology, Ministry of Communications and Information Technology, Government of India.
- [14] Ministry of Corporate Affairs, MCA21.
- [15] Ministry of Government Services, Ontario.
- [16] Online filing of cases to begin at HC today EGate Pass to be launched, The Times of India, Oct 25, 2013.
- [17] Right to Information Act, 2005.
- [18] Sharma, Vakul, Information Technology Law and Practice, Universal Law Publishers, 2007.
- [19] Singh, Shalini . Indian Journal of Scientific and Engineering Research ER, Volume 1,November 2010 Edition.
- [20] SmartGrid, Norwegian Government: Every citizen now able to look public authorities in the cards, May 18, 2010.
- [21] Roadmap for E government in the Developing world- 10 Questions E-Government Leaders Should Ask Themselves,

- [22] The Working Group on E-Government in the Developing World, April 2002.
- [23] Radhakrishna, T., No more Queues, Real Cio World, Vol1 issue 1, November 15, 2005, 76.
- [24] The Right of citizens for Time Bound Delivery of goods and services and redresssal of their grievences Bill, 2011.
- [25] Tamil Nadu Transparency in Tenders Act, 1998.
- [26] UNCITRAL, Model Law on Electronic Commerce Guide to Enactment with 1996 (with additional article 5 as adopted in 1998), United Nations, New York. 1997.
- [27] White House memorandum , Open government Directive , 2010.