



# A New Public Management Perspective in Indian E-Governance Initiatives

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## ABSTRACT

*In this paper, we have discussed the application of ICT in improving internal efficiency of government and transforming the relationship between government and its stakeholders. The theoretical underpinnings of e-governance, as discussed in this paper, come from the New Public Management (NPM). In an NPM framework, e-governance puts the citizen at the centre stage by enabling citizen participation in governance and makes government more responsive and accountable to citizens. This paper discusses the hope, hype and opportunities of e-governance initiatives by the Union government, State governments, and private/ voluntary sectors in India. While making a realistic assessment of ICT applications in governance, this paper brings out the challenges faced in scaling up and sustaining e-governance initiatives. The central argument of this paper is that ICT has immense potential to transform governance and empower citizens, and success of e-governance is contingent on creation of basic infrastructure, reengineering of processes around citizens' needs, provision of value-added services, and adoption of viable business models.*

**Keywords:** E-governance, India, New Public Management

## 1. Introduction

The theoretical underpinnings of e-governance come from the New Public Management (NPM) which originated in the late 1970s in the United Kingdom, Australia and New Zealand, has swept across other countries since. NPM, which has been fast replacing the *Old* Public Administration (Dunleavy and Hood, 1994) seeks to 'reinvent' government through metamorphosis into an entrepreneurial, business-like, mission and vision-driven state, which changes its role from 'rowing' to 'steering'. The two basic principles of NPM are managerialism (a proactive, outcome-oriented, customer-centric government based on decentralisation and participative management) and marketisation (charging for public services, promotion of markets through creation of incentives, introducing competition between units through fragmenting, and competition in public service delivery through contracting) (Osborne and Gaebler, 1992; Walsh, 1995).

Until quite recently, governments were plagued by a typical supply-side orientation, wherein developmental priorities were set by notions of the welfare state and centralised planning, and citizens were merely treated as passive recipients or beneficiaries of public services. E-governance has the potential to

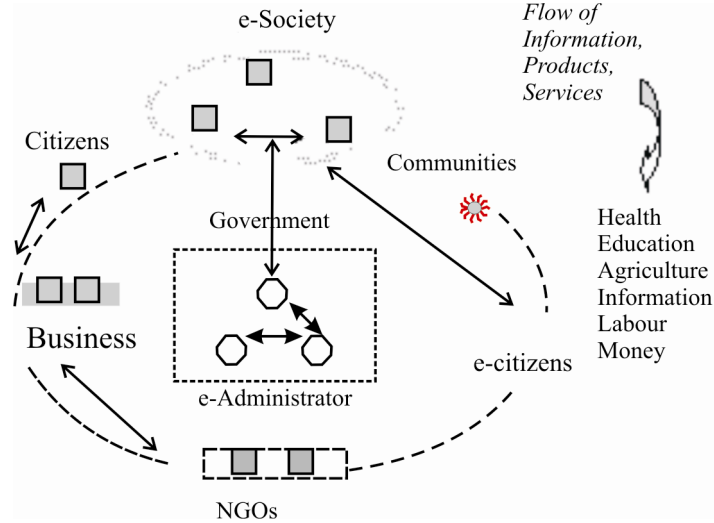
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transform not only the way in which public services are delivered, but also the fundamental relationship between government and citizens. Moon (2002) has identified five stages in the development of e-government. These include information dissemination, two-way communication, service and financial transactions, vertical and horizontal integration, and political participation. Through new modes of communication and interaction among government and various stakeholders, e-governance provides an all encompassing framework within which e-administration grows and includes e-citizens, e-services, and e-society as presented in Figure 1. ICT is seen to be the third wave (Toffler, 1980) leading to the evolution of the e-society.



**Figure 1:** ICT-enabled e-governance domain.

ICT has been applied in the various ‘tools’ of government policy (Margetts, 1998, 1999), namely, nodality, authority, treasure and organizational capacity (Hood, 1983). Nodality implies the extent to which ICT facilitates information exchange and the emergence of information networks comprising government and other stakeholders; treasure refers to the application of ICT for accounting and finance in government; authority refers to ICT applications in maintaining law and order; and organizational capacity refers to increase in information processing ability of government, improvement in efficiency enabled by ICT, and development of organized expertise (Dunleavy and Margetts, 2000). E-governance can increase the rationality in decision-making through formalization of rules and procedures reduce ‘bounded rationality’ (Simon, 1955) and modernize public administration through ‘informatization’ (Frissen, 1995). E-governance emphasizes the shift from process accountability towards accountability in terms of results (Hood, 1995), thus altering the traditional notions of accountability in bureaucracy.

There is a lot of hope and hype on ICT applications in government. A realistic assessment, however, while accepting the potential of ICT, takes cognizance of its pitfalls. For instance, the experiences of UK and USA with e-government are replete with examples of high-profile ICT projects that went incurably wrong. For example the introduction of computers in the UK social security agency ran over-budget and resulted in obsolete, inadequate and inflexible systems. In 1998, the inability of the UK Passport Agency to meet customer demand resulted in near collapse of the agency. The departments of social security and taxation in the US also faced similar crises (Margetts, 2003). In tune with the NPM-type of reforms, the ICT function in government in the UK and USA in recent years is increasingly being outsourced to large global ICT service providers (Dunleavy et al., 2001).

## **2. E-governance as Citizen-centric Governance**

The NPM heralds the transformation of the citizen into a customer of public services, who pays for public services, and hence has choice and the exit option (Osborne and Gaebler, 1992; Barzelay and Kaboolian, 1990), and the opportunity to give feedback on public service delivery (Bellamy and Taylor, 1998). People wear four hats in society – that of customer, client, citizen, and subject (Mintzberg, 1996). As customers, they purchase private goods from markets; as clients, they consume professional services such as health care; as citizens they are entitled to certain rights; and as subjects, they receive protection. Citizens are active participants in service-delivery and co-producers of policy. As political beings, they participate in public life (Nye et al., 1997), have voice (Hirschman, 1970), and fulfil their collective purposes through politics (Cook, 1998). NPM transforms the traditional notions of democratic accountability by strengthening accountability of public managers downwards to customers (Kettl, 1997). E-governance involves the following functions for citizens (Malick and Murthy, 2001):

- Providing information to the citizen through a single source of information, optimising the resources of multiple organisations, creating economies of scale for information processing and distribution, inter-government participation and establishment of public utility networks.
- Providing representation to the citizens by making elected representatives more accessible and enhancing their functions in e-government.
- Improving citizens' voice by stimulating debate, exchange of ideas and the resultant feedback for qualitative improvement in the delivery system.
- Improving citizen's participation by promoting two-way communication, participatory decision-making, improving availability of services, and developing a system for public information and feedback.
- Engaging the citizens by providing a vision for partnership, community engagement and development of skills to participate in e-government, and creating conditions for information and knowledge relevant to citizens, service users, business and voluntary organisations.

E-governance entails a partner-approach in which there is collaboration between government and citizens in all phases of the policy cycle (Snijkers, 2005). As a partner of government, citizens are not subordinate to the government; citizens and government are placed on an equal footing. E-governance promises a plethora of benefits to citizens by accelerating and automating government-citizen interface, bringing about transparency in the functioning of the government, and enabling democratisation. Government is transparent for citizens and open to citizens' scrutiny. Within this framework e-governance enables new forms of representation and accountability. E-governance develops new styles of governance through the engagement of citizens which improves citizens' trust in government. These new styles of governance represent a change from traditional bureaucratic systems to pluricentric systems (Bekkers and Korteland, 2005). Whereas traditional accountability is organized in a vertical, hierarchical manner, e-governance entails more public forms of accountability, in which information about the results of organizations are made accessible and transparent for citizens as consumers of public services, professionals and civil society.

E-governance is in fact a step ahead of NPM as it enables the reinventing of governance (rather than reinventing government alone) through the emergence of networks where states and citizens, governments and private sectors, organizations and citizens form a web of relations (Kim et al., 2005), redefining accountability relationships, and placing the citizen at the centre of government efforts. Thus, e-governance carves out a new domain for citizen empowerment.

The potential of e-governance to transform government-citizen relations is often rhetorical rather than realistic. Empirical evidence shows that e-government is often in the first (information dissemination) or at best in the second (two-way communication) stage of development (Moon, 2002). Most of the time, use of

the Internet by governments is limited to providing content on websites (Holden, 2003). Streib and Navarro (2006) also find that people prefer in-person and telephonic communication in comparison to the Internet.

### **3. E-governance in India**

E-Governance originated in India during the 1970s with focus on in-house applications in the areas of defence, economic monitoring, planning, and the deployment of ICT to manage the data intensive functions related to elections, census, tax administration etc. Most of these initiatives were stand alone applications. During the 1980s, State Wide Area Networks (SWANs) were created, linking all districts through ICT networks. From the late 1990s onwards, the national government as well as State governments have been enthusiastically pursuing the adoption of ICTs, particularly web-based technologies including the Internet.

Key milestones of the Government of India (GoI) include the Information Technology Act, 2000, that legalizes electronic forms of communication and regulates practices relating to electronic exchange of information. Another revolutionary institutional change is the Right to Information (RTI) Act, 2005, that makes public institutions liable to provide information to citizens who demand such information. 1997 onwards, through the adoption of citizen's charters, each ministry/department is committed to deliver specified services to citizens in terms of explicit standards, time frames and grievance redressal mechanisms. Other prominent institutional changes include the establishment of the Ministry of Information and Communications Technology (MICT) in Union government, and a Centre of Electronic Governance in Hyderabad. Most ministries/ departments have also hosted their own websites wherein they provide basic information about the ministry/ department, contact persons, citizen's charter, RTI Act, mechanism for requesting information, links to related websites, annual reports, publications and other documents. Some websites also provide an interactive interface, such as online submission of forms, and viewing status of applications. Community Information Centres (CICs) have been set up in North-Eastern States, Jammu and Kashmir, Andaman and Nicobar Islands, and Lakshadweep.

#### **3.1 National E-governance Plan**

In the early 1990s, the Central Administrative Reforms Committee recommended use of e-governance as an interface between the state and the citizen so as to improve efficiency, transparency and reliability of public service delivery. The midterm appraisal of the Ninth Plan and the approach paper of the Tenth Plan have lamented on the decline in governance processes. The NeGP (National E-Governance Plan), conceived in mid-2003, by the Department of Information Technology (DIT) and the Department of Administrative Reforms and Public Grievances (DAR&PG), is aims to improve speed, reliability, accessibility and transparency in the delivery of various public services to citizens and businesses. NeGP is based on a 'centralised planning and decentralised implementation' approach. It stresses 'process re-engineering' and 'change management' as key ingredients for successful implementation of e-governance initiatives (MICT, 2006).

NeGP is intended to serve as a binding thread for all e-governance initiatives undertaken by various states and line departments. In terms of the total number of government websites, India ranks seventh in the global list (Norris, 2001). However, according to the United Nations Global E-Governance Readiness Report, India is ranked 86 out of 191 countries (UNPAN, 2006). In view of ground realities, thus, NeGP appears to be over ambitious in the foreseeable future. NeGP, whose timeframe for implementation as initially stated was 2003-2007, got cabinet approval on 18 May 2006.

Government of India is emerging as the fourth largest vertical spender on Information Technology after telecom, manufacturing, and banking and financial sectors (IT for change, 2003). Even if we presume that

finance would not be a constraint to put necessary infrastructure in place, the emergent digital divide<sup>3</sup>, and the existing social divides and illiteracy (not only reading and writing but also computer skills) could undermine the success of NeGP. It is yet to be seen how the introduction of e-governance will make the administration more transparent, efficient and market-oriented. In the new system favouritism and bribery might prevail, with the genesis of a new genre of intermediaries (World Bank, 2008). Therefore, e-Governance alone cannot bring accountability, transparency, and corruption free society. It has to be accompanied by institutional change at a macro level.

### **3.2 E-governance Initiatives by State Governments**

Though all States have taken e-governance initiatives in some measure, the noteworthy ones include Andhra Pradesh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, New Delhi and Tamil Nadu.

A case in point is Andhra Pradesh that has a rich experience of e-governance and ICT for development projects. Each ministry in the State initiated several pilot projects because the then Chief Minister took active interest in harnessing the power of ICT for governance and development. Single window Integrated Citizen Services Centres (ICSCs) were created through which citizens could access information from government, pay utility bills and property taxes, get certificates and licenses, and receive information regarding building permits, property registration and transport procedures (Schware, 2000). However, each project was designed around the information needs of the particular ministry rather than that of the citizens (inside out perspective). The experience suggests that there is a need to first determine citizens' needs and then design the system in a citizen-centric manner (outside in perspective). Further, a backbone architecture connecting various ministries and districts could lead to seamless integration and enable service delivery through a single window<sup>4</sup>.

The difficulty in dealing with a public sector environment is being able to measure outcomes in a meaningful ways, resulting in a reduced scope in applying concepts derived from the private sector.

If e-governance have to move from more than hype than it must solve the problems of citizens and must respond to diversity by providing localization to accommodate the linguistic, social, cultural, environmental, political, historical issues.

### **3.3 E-Governance Initiatives by Private/ Voluntary Sectors**

Besides the initiatives taken by the Union government and various State governments, several e-governance initiatives have been taken at local level – started by private/ voluntary sector entities in partnership with district government. One such project, Gyandoot, provides e-government as well as e-commerce services to people living in rural areas of Madhya Pradesh (Mihra et al., 2001). Initially there was a lot of hype on the potential of Gyandoot to use ICT for development of rural masses. The critical factors responsible for the success of Gyandoot include leadership, champions for change, cost sharing between government and kiosk owner, and focus on citizens' needs. The challenges that Gyandoot faced include poor infrastructure in terms of power supply and Internet connectivity, frequent transfers of government officials, introduction of ICT without reengineering processes, and lack of financial sustainability (Sanjay and Gupta, 2004).

Another grassroots ICT initiative, n-Logue, promoted by Indian Institute of Technology Madras, has developed viable and scaleable business models based on a three-tier franchise model and cost-effective

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<sup>3</sup> There is much talk about the digital divide, the true divide is the social divide (in terms of gender, literacy and caste) that tends to push and reinforce the disparities.

<sup>4</sup> As informed by a senior bureaucrat of Information Technology Department, Government of Andhra Pradesh.

corDECT technology. n-Logue has identified the resources, skills and motivation of the kiosk operator as the most important determinant of business success. External factors such as village size and power supply are critical to scaling up (Paul, 2004).

#### **4. Overcoming the Challenges**

The introduction and implementation of ICT in government is fraught with several challenges, namely, technical, organisational and institutional. These challenges arise from the growing inter-dependencies between government organisations due to e-government, and the emergence of inter-organisational networks (Snellen, 2005).

##### **4.1 Technical Challenges**

Technical challenges could be overcome by implementing measures at three levels, namely, intra-organisational, intra-sectoral and inter-sectoral, as illustrated in figure 1. Intra-organisational and intra-sectoral issues are concerned with information sharing, intra-sectoral issues are concerned with service delivery and client registration, and inter-sectoral issues are concerned with overall information architecture. At the intra-organisational and intra-sectoral level, issues related to electronic sharing of data are to be resolved. These include, among others, definition of shared data, operational work processes, technical standards and protocols, quality of data, security of data, control over data sharing, cost of shared facilities, and object identification and numbering. The second level deals with transforming e-government to make it customer-oriented and citizen-centric. The issues that need to be addressed herein include developing one-stop-shops or single window-type of portals that provide a range of services to the citizen, managing the content on websites to include information on rights, obligations, procedures, contacts, frequently-asked-questions and feedback, developing systems for identification and authentication of transactions, and initiatives with regard to freedom of information. The third level is related to the exchange and use of information between different sectors of government, for e.g., health, education, employment and civil supplies. While each would have sector-specific information requirements, they would also be required to store common information, such as that pertaining to demographics. The challenge then is how to integrate the disparate databases and achieve consistency between them by overarching information architecture (Snellen, 2005).

##### **4.2 Organisational Challenges**

The introduction of e-government entails reorganisation in government to some extent. One such organisational change is standardisation, which helps eliminate redundancies in processes, data, and organisations (Fountain, 2001). Reorganisation poses challenges such as loss of control, lack of feeling of ownership, myopic view of technical experts and inability to understand societal problems, and inertia (Homburg, 1999). The bureaucratic structure of government, with clearly demarcated roles and responsibilities, vertical and horizontal separation of powers, and hierarchical structure, is less amenable to ICT applications and interconnectedness because of its immobility and inflexibility.

##### **4.3 Institutional Challenges**

Institutional challenges to e-government arise from mental, legal and socio-cultural factors. Mental barriers arise from the loss of discretion and power of officials, particularly at the street level, and the perceived takeover of their jobs by ICT. Legal barriers to ICT applications in government may arise from the sharing of information, resulting in blurring of boundaries, inability to authenticate information, and weakening of accountability. In traditional public administration, jurisdictions have remained the exclusive authority of an actor ... to determine rights and obligations of citizens in a task domain ... for which this actor is legally and politically accountable (Bekkers, 1998). However, ICT has the tendency to blur this boundary, which may have negative consequences for public administration in terms of reliability, authenticity and integrity. Moreover, the legal system of the country would have to be amended to incorporate the requirements of

e-government. Cultural barriers, such as risk-avoidance and lack of innovativeness, may discourage the adoption of ICT in government.

## **5. Concluding Remarks**

There is a lot of hope and hype on the potential of e-governance to transform the internal efficiency of government and the relationship of government with stakeholders. E-governance provides an all-encompassing framework comprising e-administration, e-citizens, e-services and e-society. The New Public Management principles provide a useful conceptual framework to study e-governance. E-governance is an enabler for NPM type of government as it supports outcome orientation, customer-centricity, decentralisation, participative management, and service delivery through marketisation. It makes information exchanges faster, deeper and cheaper, thereby improving the internal efficiency of government. E-governance places the citizen at the centrestage by redesigning of government processes in a citizen-centric manner, delivery of e-services through single window, making government officials accountable downwards to the citizens, providing voice to citizens, empowering citizens and enabling them to participate in policy. Wadia (2000) mentions that in India, e-governance has created an avenue for its citizens to communicate with top political leaders and local ministers through such tools as video-conferencing, online grievance channels and complaint cells. With regard to this new mode of relationship, Schwabe (2000) emphasizes that it e-governance provides equal access to government and speedy and transparent responses from public servants.

However, the case for e-governance is more rhetorical and realistic. Like any other innovation, ICT applications in government can also go wrong. There have been failures in developed countries such as the UK and the USA. In developed countries, the use of Internet by government is more for dissemination of information or two-way communication (such as emails). The use of Internet by government for service delivery, financial transactions, enterprise integration, and political participation is limited.

India has achieved several milestones in the development of an e-governance framework for the country. However, certain basic problems exist that pose threats to the sustainability and scaling up of e-governance initiatives in India. These include poor infrastructure in terms of power supply, telephone connectivity and Internet connectivity; social divides in society (in terms of rural/urban, rich/ poor, male/female, literate/illiterate, digital haves/digital have nots); the persistence of corruption even with new systems of service delivery.

Most e-governance initiatives make use of business models, public-private partnerships (PPP), localization, appropriate technology, interface with SMART Government, entrepreneurship etc. However, almost all fail to scale up and/or replicate initial success story. Experiences with ICT for development projects suggest that most projects across the country have survived beyond their pilot phase but suffered from hiccups when scaled up because of lack of killer applications, unviable business models and the inability to address the existing divides in society.

In the e-governance hype, substantive issues need to be addressed. The key lessons to be learnt from the e-governance initiatives in India at national, State and local levels are summarised hereunder:

- Between euphoria and cynicism, practitioners need to adopt a balanced approach for implementation of e-governance initiatives.
- There is a need to gradually move from information dissemination and emailing to advanced applications of ICT in government.
- A core common ICT infrastructure needs to be created. This infrastructure should be scalable, interoperable, secure, replicable, support multiple languages, technology neutral, open and standards based, provide multi-vendor support, and provide multiple service delivery channels.

- The external threats to ICT (in terms of poor infrastructure, social divides and persistence of corruption) need to be dealt with at a system-level. Merely taking the Internet to the villages will not cause the villages to 'leapfrog'. There is a need for multi-level institutional change. There is a need to create social, economic and political institutions that create opportunities for people, and enable them to utilise these opportunities to attain developmental outcomes.
- For success of local grassroots initiatives, it is important to design and implement projects based on killer applications in a bottom-up manner with the involvement of local communities. The projects need to be based on viable business models (such as PPP) so that they can be scaled up while maintaining financial sustainability.
- It has been pointed out by Norris (2001) that the key issue in evaluating e-governance is the way in which it affects the nature of the relationship between political institutions, bureaucracies and citizens; and whether it facilitates a relationship based on public accountability and participation.
- The induction of technology alone will not improve governance. Archaic procedures must be re-engineered and people within and outside government must be encouraged to switch over to e-governance. For instance, in the Railways, the entire contracting out of works is now done through internet-enabled e-procurement system. This was partly accomplished by the Railways' decision to altogether stop accepting bids on paper.
- For e-governance to actually lead to empowerment of citizens, the focus needs to be more on provision of value-added services, such as education and health that cater to long-term needs of the citizens and bring about change in their 'position' and not 'situation' alone.

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