



# **E-governance: Overcoming Obstacles Through Effective Human Resource Management Strategies**

Shefali Nandan<sup>1</sup>

## **ABSTRACT**

*E-governance involves the application of Information and Communication Technologies by government agencies for information and service delivery to citizens, business and government employees. It is an emerging field, faced with various implementation problems related to technology, employees, flexibility and change related issues, to mention a few. The paper addresses certain HR issues in e-governance. It makes a case in favour of implementing thoughtfully designed Human Resource Management strategies in consonance with the changing organizational and employee needs. Such changes arise due to the changes in various dimensions of job responsibilities and work styles. Such strategies may facilitate the redressal of many of the problems faced in e-governance implementation. Application of ICT also makes it essential for an organization to become a learning organization, as these technologies are characterized by continuous change.*

**Keywords:** Structural inertia, Learning organization, Capacity Building, Change management, Performance management

## **1. Introduction**

E-governance has evolved as a model of governance of information-age. It is the application of Information- and Communication Technologies in the processes of Government interaction with citizens and business as well as in government's internal operations with the objective to ensure the highest standard of services to the citizens by providing instant access to selected Government information, and interfaces for communicating with the various government functionaries, wherever and whenever they need it. (Gartner 2000, [www.himachal.nic.in](http://www.himachal.nic.in)). The Stakeholders in e-governance are the Government, Investors, Employees, Vendors and Intermediaries, and Citizens. Various environment variables exerting an impact upon implementation of e-governance are Social, Political, Legal and Economic variables (Figure 1).

Ray and Dash (2005) are of the view that e-governance should also include the aspects of internal working which cover application of IT to increase efficiency and effectiveness of internal functions and internal communications and internetworking. Internal aspects cover the overall transformation of government hierarchy to adapt to the new requirements and expectations of efficient and improved services, simplification and rationalization in the business process to better serve the stake-holders in a transparent and cost-effective way.

---

<sup>1</sup> SMS, Motilal Nehru National Institute of Technology, Allahabad, India (Email: [eshefali@rediffmail.com](mailto:eshefali@rediffmail.com), Telephone: +91-9919715535)

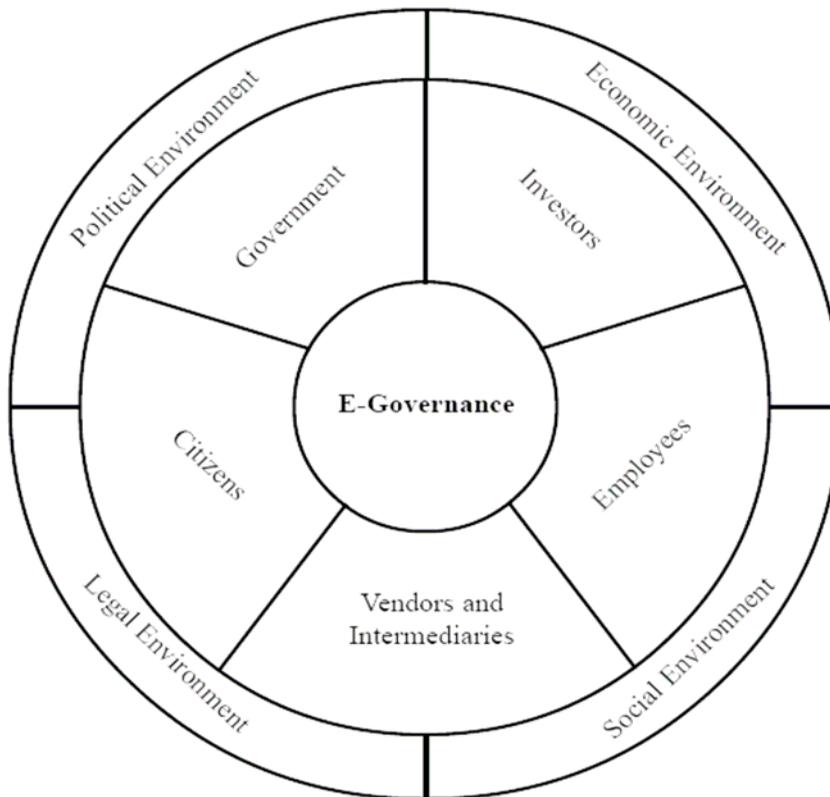
E-governance is the process of service delivery and information dissemination to citizens using electronic means providing the following benefits over the conventional system (Jayaradha and Shanthakumar, 2003):

- Increased efficiency in various Governmental processes,
- Transparency and anticorruption in all transactions
- Empowerment of citizens and encouragement of their participation in governance.

In spite of the world-wide diffusion of e-government initiatives, getting the claimed benefits of E-governance has not been easy for various technological as well as organizational reasons in both developed and developing countries (Pacific Council on International Policy, 2002; Strejeek and Theil, 2002; Holliday, 2002; Wescott, 2001).

Survey of success and failures in E-governance projects indicate that E-governance initiatives in developing/transitional countries have to be better planned and executed. Following are some startling findings (Heeks, 2002):

- 15% are successes- most stakeholder groups attained their major goals and did not experience significant undesirable outcomes.
- 50% are partial success/failures-major goals for the initiatives were not attained and/or there were significant undesirable results
- 35% are total failures-the initiatives were never implemented or was implemented but immediately abandoned.



**Figure 1:** Variables of E-Governance

### **3. Issues in implementation**

There are many hindrances in implementing E-governance. These are inadequacy of funds, infrastructural issues, inadequate manpower, citizen readiness, data backlog, legal framework readiness, maintenance and so on (Jayaradha and Shanthakumar, 2003). A NASSCOM report puts e-Governance in India as a rapidly growing segment with three southern states (Andhra Pradesh, Karnataka, and Tamil Nadu) making significant progress. It however, suggests that to achieve desired benefits, several pro-active steps need to be taken by governments to address the operational, economic, personnel, planning and implementation issues, which are the bottlenecks to effective implementation of e-Governance (Rao, 2003). The scope of the paper is limited to those hindrances that arise due to employee related factors.

Modern technologies demand a new way of thinking about service and business process design, new ways of working, the development of new skills, the application of traditional skills more effectively and a more flexible approach to working patterns and practices. According to Robbins (1998) Structural inertia (built-in mechanisms) is a big hindrance to any change process. Another impediment is people's resistance to any change. It becomes very essential to design such employee-oriented Human Resource policies as would enable the organisation to prepare employees for change and also help them absorb rather than adsorb the changed systems.

There are cultural barriers which refer to values, beliefs, mindset, practices and customs of people, which pose the biggest challenge in installing a new system. Cultural barriers exist at employee level, officers' level and political level (Sharma and Palvia, 2004). The need is to create a rich and adaptable culture that encourages values such as team work, empowerment, trust, and sharing which is opposed to closed, rigid and mechanistic bureaucratic structure of the government organizations.

The shift from being an 'organisation' to becoming 'e-organisation' affects organisation structure and management styles as it results into re-distribution of power and control. It also changes the orientation of the organisation. An e-organisation needs to focus on the following aspects ([www.fareham.gov.uk](http://www.fareham.gov.uk)):

- develop customer orientation (understand the needs of the user, find new ways of presenting information to meet customer not employee needs; design feedback mechanisms;
- manage customer relationships;
- streamline processes;
- communicate better;
- organise information;
- work more flexibly;
- make better decisions.
- coordinate activities better

Keeping the above requirements in view, the key issues that need to be addressed in the context of personnel include: Doing job analysis again to redefine job responsibilities and other job dimensions of various jobs affected by the change.

- Redesigning the recruitment and selection process in view of the changing manpower needs.
- The identification of competencies of technological environment to enable all employees to operate effectively in a fully electronic working environment;
- Developing a performance management program that would incorporate changes in job responsibilities and requirements and which is development oriented.
- Educating employees about their new legal and corporate responsibilities and obligations;
- Developing knowledge workers capable of multi-tasking (Riley 2003)
- Evolving an environment that would encourage and reinforce the any positive behaviour exhibited by employees.

- Focus on better coordination of efforts between various government agencies as it will affect program effectiveness and efficiency.
- In addition, effective implementation necessitates changes in decision making processes, involving faster decision mechanisms, less red-tapism, changes in organisation structure making it flatter and higher delegation of authority (Garg and Khataokar, 2003)
- There is a need to integrate the new vision with the structure, culture and strategies of the organisation. All the four dimensions of the organisation should perfectly fit into each other like the pieces of a jig-saw puzzle for the best results. The problem faced may be also due to the fact that one or more than one of the four of these dimensions are not complementary with other dimensions.

### **3. Recommendations for Meeting Challenges**

The changes in various internal systems of organizations as a consequence of the implementation of information and communication technology need to be supported by proper strategies for handling the above mentioned issues. The need is to initiate the development of appropriate ICT skills and culture change in addition to providing appropriate technologies to support to employees to achieve the objectives.

The performance of public sector (read government agencies) in delivering service to the people depends on the performance of its employees. A highly motivated and satisfied workforce will perform much better than a demoralized and dissatisfied workforce (Prasad). Following strategies are suggested to tackle problems in various areas of human resource management in the changed environment:

- **Manpower planning:** Total job analysis, comprising job description and job specification, needs to be reviewed. New responsibilities, tools, changed relationships etc. have to be determined. Restructuring and redefining job responsibilities would also necessitate determination of additional skills and qualifications required for the job. Number of employees required must be determined to avoid work overload/underload. Re-allocation of existing manpower to the new organization structure is a challenge. Reshuffling of workforce can be done on the basis of their skills and competences. This process needs to be supported by a good career planning and performance management system which helps in identification of employee potential and hence placement of right person at the right job at the right time.
- **Recruitment/ selection:** On the basis of the new profile of employees required for e-governance, new sources of their availability need to be tapped. One of these sources could be college campuses, a source which has been well utilized by private organisations. Feasibility of other sources like HR consultancies, may also be explored. The existing manpower may not be ready to be deployed into e-governance projects. Training costs might be high due to geographical spread. 'Generalist' manpower which can be relocated, or re-trained to other functions may be preferred. Designing a selection process that would objectively and correctly measure the skills and competences required to handle the changed work style and job responsibilities is required. Such a process should incorporate methods that would objectively assess the knowledge and skills required to handle the redesigned job.
- For quick decision making de-layering of the decision making levels leading to re-engineering and appropriate sizing of the decision making machinery is essential (Agenda Paper For Discussion On E-Governance Workshop). Quick decision making also necessitates employee empowerment. If governing processes were directed by flexible guidelines than the minute rules, and if those on the frontline were permitted to respond to unforeseeable particulars in a creative way, the larger aim of policy and program improvement may be more favourably achieved (Riley, 2003 p14).
- **Change Management:** More than technical issues it is management of change that is of prime concern. Organizations, by their very nature are conservative (Hall, 1987). They actively resist change. The reasons for resistance to change amongst employees could be threat to established

power relationships, threat to expertise, threat to established resource allocations (Robbins, 1998), possibility of redistribution of authority, expected changes in work schedules requiring change in habits, fear of unknown or resistance to computerization due to 'retrenchment fear'. These apprehensions may be allayed by educating the employees about the reasons for change, where possible involving them and informing them about decisions made and training them to adapt themselves to changed conditions. These measures must be proactive rather than reactive. Changed processes would have to be properly understood, accepted, internalized, adopted and improved to enable full advantages of the technology being adopted as a part of Smart Governance (Agenda Paper For Discussion On E-Governance Workshop).

- Leadership: The e-governance implementation leader should have strong conceptual and man-management skills. The leader will be required not just to direct but to also act as mentor and coach. Leaders need to change their styles and will have to adopt different approaches to manage people in new work settings in the organizations that are characterized by use of modern technologies, and continuous change (Table 1).

**Table 1: Move from Steady State to Continuous Change**

<b>From</b>	<b>To</b>
Continual Change	Transformation
Quality Improvement	Process Engineering
Matrix	Network
Performance Appraisal	Performance Management
Technophobia	Application of Technology
Functions	Process
Control	Empowerment
Employment	Employability

(Source: Marquardt, MJ (2003): *Building the Learning Organization: Mastering the 5 elements of Corporate Learning*, Jaico Publishing House, p113)

- Training and Development: Training and acclimatization of the personnel at all levels more so at the lower rung of Government management organizations is required. It is essential to train all employees in basic computer usage. There should be workshops and seminars for all levels. The new as well as the existing employees need to be trained regularly for learning new skills and updating skills as the development in ICT takes place at a very fast pace.
- Performance Management: The performance management system should be modified to incorporate new Key Result Areas and also the new competences and skills expected from employees. On-going feedback should be given to employees. Nadler (1977) makes a strong case for feedback in helping to improve the effectiveness of organization. Periodic reviews of employee performance must be conducted to get desired results. Technology that has restructured work will force those who are responsible for employee development to create ever more flexible and responsive learning and performance solutions (Van Buren, 2001).
- Reward System: HR managers need to be creative in designing a reward system for employees who are new to the use of ICT to motivate them. Any positive behaviour that is in consonance with the requirements the new job must be re-inforced. Any outstanding efforts, suggestions and innovations can be rewarded/recognized to boost morale of employees.
- New work patterns: In times to come, Government agencies may need to employ new work patterns in a workplace where knowledge becomes more important than procedures. Employment of more flexible working patterns like flexi-time, telecommuting, part-time jobs and so on, may be required to be adopted.

#### 4. Need to become a learning organization

Continuous learning and knowledge provide the power for sustenance in the new workplace transformed by ICT. The technology advances at a very fast pace. Therefore, employees need to be receptive and must be ready to update their knowledge and skills continuously for effective e-governance. Peter Senge (1990) believes that organizations learn only through individuals who learn. Individual learning is essential to the continuing transformation of the organization, to expand organization's core competencies and to prepare employees for unknown future (Redding, 1994). Experiences and researches have shown that when organizations incorporate five distinct sub-systems, learning, organization, people, knowledge and technology into the process of becoming a learning organization, they are more successful in attaining their goals. (Marquardt, 2003). Making an organization a learning organization also makes it mandatory to encourage a culture of innovativeness, where people are given freedom (within some limits, particularly in case of government organizations, that are accountable to public at large) to practice what they have learnt to find solutions to problems in a novel way.

This also necessitates building capacities of people at all levels. The government seems to be making good efforts in this direction by focusing on capacity building through enhancement of knowledge and skills to plan, implement and sustain e-governance initiatives, through National e-Governance Plan (NeGP). According to Das and Chandrashekhar, comprehensive capacity building is required across key areas relating to Policy Making, Institutional Arrangements, Access to Professional Expertise and Outcome Monitoring. These can be explained as follows:

- **Policy Making:** The e-governance policies are framed at the highest levels of government involving politicians and bureaucrats. This makes it essential to develop skills at this level.
- **Institutional Arrangements:** These need to be so structured and empowered they are able to monitor that e-Governance policies are implemented in all the state and central government departments uniformly, adhering to fixed standards and are consistent with a broad policy.
- **Access to Professional Expertise:** Certain basic skills for working in the changed work environment and with changed technology are required in employees. Accessing external experts and professionals has also been envisaged in NeGP. A balance between hiring outside experts and retraining of existing employees must be achieved.
- **Outcome Monitoring:** Close monitoring the benefits accruing out of the e-government project needs to be done to check the utility and relevance of the whole programme.

#### 5. Concluding Remarks

Today many of the public sector organizations and government agencies are refurbishing and modernizing their systems to enhance their efficiency. E-governance is a big leap towards that direction. Hindrances are bound to occur when a change of such huge magnitude and expanse is sought to be implemented. Thoughtfully designed policies, implemented step-by-step would certainly prove to be fruitful. Innovative strategies related to employees need to be framed to sustain the changes. Employee satisfaction is the key to delivery of quality services to the people. Employees can be motivated by adopting such HR policies that are complementary to the changed work environment and job requirements and which recognize and reward their efforts. These practices will help create a culture where learning becomes an on-going process and becomes an integrated part of all organizational functions.

#### References

1. Agenda Paper for Discussion on E-Governance Workshop/Meeting with State I.T. Secretaries July 11, 1999 New Delhi, available at <http://www.praja.org/journal.htm> (access date 05.09.2007)
2. S. R. Das, S R & Chandrashekhar, R. "Capacity Building for E-Governance in India" available at <http://www.apdip.net/projects/e-government/capblg/casestudies/India-Chandrashekhar.pdf> (access date 29.09.2007)
3. Garg, VN and Khataokar, A (2003). "E-Governance in India: Implementation Issues", *i4d*, Nov-Dec, p18
4. Gartner (2000). *Government*, available at [http://www4.gartner.com/1\\_researchanalysis/government](http://www4.gartner.com/1_researchanalysis/government)

- [services\\_brochure.pdf](#) (Access date 01.09.2007)
5. Hall, RH (1987). *Organizations: Structures, Processes and Outcomes*, 4<sup>th</sup> ed, Englewood Cliffs, NJ: Prentice-Hall, p. 29
  6. Heeks, Richard (2002). "E-Government for Development, Success and Failure Rates of e-government in developing/transitional countries" IDPM, University of Manchester.
  7. Holliday, I (2002). "Building e-government in East and Southeast Asia: Regional Rhetoric and National (In)Action", *Public Administration and Development*, 22, pp.323-335
  8. <http://himachal.nic.in/lokmitra/lokmitra2.htm> (access date 02.09.2007)
  9. <http://www.fareham.gov.uk/council/departments/cx/section5.asp> (Access date 07.09.2007)
  10. Jayaradha, Shanthakumar: egovernance (2003). "Tackling the Hurdles" available at [http://www.infitt.org/ti2003/papers/58\\_jayara.pdf](http://www.infitt.org/ti2003/papers/58_jayara.pdf) (access date 02.09.2007)
  11. Kumar, P; Sushil and Gupta, MP (2004). "Effectiveness and Change Management in e-Governance", in MP Gupta (Ed), *Towards E-Gov- Management Challenges*, Tata Mc-Graw-Hill, New Delhi, p256-264
  12. Marquardt, MJ (2003). *Building the Learning Organization: Mastering the 5 elements of Corporate Learning*, Jaico Publishing House, p21
  13. Nadler, D. A. (1977). *Feedback and Organization Development: Using Data-based Methods*. Reading: Addison-Wesley.
  14. O'Looney, J. (2001). "Sprawl Decision: A Stimulation Tool For Citizens and Policy Makers", *Government Information Quarterly*, 18 (3), pp 309-327
  15. Pacific Council on International Policy (2002). "Roadmap for e-government in the developing World: 10 Questions E-Government Leaders Should Ask Themselves". Los Angeles, CA, USA: Working Group on E-Government in the Developing World. Available at <http://www.pacificcouncil.org/pdfs/e-gov.paper.f.pdf> (Access date 02.09.2007)
  16. Prasad, Amit Mohan. "Turning 'Babudom' On Its Head: 'Karmchari' In Uttar Pradesh", Available at <http://www.10thnationalegovconf.in/5.pdf> (Access date 02.09.2007)
  17. Rama Rao, (2003). "Electronic Governance: Lessons from Experiences" Newsletter, *Volume 13, No. 1*, Available at <http://www.iimahd.ernet.in/egov/ifip/jun2003/article2.htm> (Access date 03.09.2007)
  18. Ray, Dibakar; Dash, Shefali S (2005). "In Quest for a definition of e-Government", *Journal of International Management*, Vol 2 No. 1, pp. 47-66
  19. Redding J (1994). *Strategic Readiness: The making of the Learning Organization*, San Fransisco, Jessy Bass
  20. Riley, TB (2003). "E- governance Vs. E-government", *i4d*, Nov-Dec, p12
  21. Robbins, S P (1998). *Organisational Behaviour*, 8<sup>th</sup> ed., Prentice Hall of India, pp.635-636
  22. Senge P (1990). *The Fifth Discipline*, New York, Doubleday
  23. Sharma A and Khandekar A (2004). "Managing Change and Culture in Indian Organizations- A Strategic HR Perspective", in MP Gupta (Ed), *Towards E-Gov- Management Challenges*, Tata Mc-Graw-Hill, New Delhi, 305-313
  24. Sharma, Sushil K; Palvia, Shailendra (2004). "Organisational and Cultural Barriers to E-government Implementation in India", in MP Gupta (ed) *Towards e-Government: Managing Challenges*, Tata McGraw-Hill, , New Delhi.
  25. Strejeek, G. and Theil M. (2002). "Technology Push, Legislation Pull? E-government in European Union", *Decision Support Systems*, 34, pp. 305-313
  26. Van Buren, M (2001). *State of the Industry Report2001*, Alexandria, VA: ASTD
  27. Wadhwa S and Ali, M (2004): "A Flexibility perspective in e-Governance" in MP Gupta (Ed), *Towards E-Gov- Management Challenges*, Tata Mc-Graw-Hill, New Delhi, 271-280
  28. Wescott, CG (2001). "E-government in the Asia-Pacific region". Available at <http://www.adb.org/Documents/Papers/E-Government/egov-asiapac.pdf> (Access date 01.09.2007)

### **About the Author**

Shefali Nandan, Faculty, School of Management Studies, Motilal Nehru National Institute of Technology, Allahabad, India, completed her M.Sc. in Chemistry and MBA with specialization in Human Resource Management from Lucknow University. She has done her doctoral research on Employee Performance Appraisal. She has presented many papers in National & International Seminars and has several published papers in national and international journals to her credit. She has been a resource person for training programmes in several organizations. She has over six years of teaching experience. Her areas of interest include Human Resource Development and Organizational Behaviour. She is also the sub-editor of *Confluence*, journal of management.