

# E-Projects Challenges in India – Role of Human Resource Management and Technology

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**Abstract:**

**E**-governance is a paradigm shift over the traditional approaches in Public Administration which means rendering of government services and information to the public by using electronic means. In the past decades, service quality and responsiveness of the government towards the citizens were least important but with the approach of E-Government the government activities are now well dealt. This paper withdraws experiences from various studies from different countries and projects facing similar challenges which need to be consigned for the successful implementation of e-governance projects. Developing countries like India face poverty and illiteracy as a major obstacle in any form of development which makes it difficult for its government to provide e-services to its people conveniently and fast. It also suggests few suggestions to cope up with the challenges faced while implementing e-projects in India.

**Keywords:** E-governance, e-projects, challenges, suggestions etc.

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## I. INTRODUCTION

ICT being a key element of reform has reshaped the government to improve government performances and reduce costs to affect the current society with a phenomenal transformation to 'Internet'. It has built a new mode of communication for individuals, businesses and government, providing them with more opportunities to communicate and collect information in advanced manner. The government information and services have been made easily accessible in a far more convenient as compare to two decades ago (emphasized by Kumar, Mukerji, Butt and Persaud, 2007). In the past decades, service quality and responsiveness of the government towards the citizens were least important but with the approach of E-Government the government activities are now well dealt.

E-government refers to the use of ICT - the Internet and web-based technology in order to deliver information and services and to encourage citizen participation (Sharma, 2004). E-governance is a paradigm shift over the traditional approaches in Public Administration which means rendering of government services and information to the public by using electronic means (Monga, 2008). This e-governance phenomenon has increasingly attracting the attention of citizens including politicians, economists and decision and policy makers. It has resulted in governmental effectiveness and has promoted chartered values of public services. With increasing accessibility to information, enhancing efficiency and greater access to government officials it is also the medium of delivering online services to citizens, businesses, and society through this new service delivery system of governments managing information.

Department of Information and Technology is the nodal department servicing as the apex Committee entrusted with the work of overall coordination and monitoring of the implementation of National e-Governance Plan. The various Central Line Ministries, States and also National Informatics Centre which are playing an important role in developing various e- Governance applications, have been working out transition and implementing the process - smoother, faster and transparent. This has also led to various guidelines by the Department of IT to act as an overall frame work for the Operational Model to support the Line Ministries/ State Departments for various activities and options relevant to successful implementation of the MMPs, right from project conceptualization stage to complete roll out and subsequent operations & maintenance phase.

After the formal approval of the Empowered Committee on the concept of a Project, a Central Project e-Mission Team (CPeMT) is established at the Central Line Ministry to initiate further to design and develop the Project Scheme. Based on the experience from past and ongoing e-Governance projects, it prepare the detailed Scheme covering Objectives, Core Services, Project Design, Development Methodology, Implementation Framework, Capacity Building & Training etc. and various elements of costing are also to be consolidated at this stage. Further the components are to be prepared by State.

State e-Governance Mission Team (SeMT) has been proposed to support the groundwork for providing an overall direction, standardization and consistency through program management of the e- Governance initiatives in the State is prepared at this level. All interdependencies, overlaps, conflicts, standards, overarching architecture, security, legal aspects, etc. across projects as well as core and support infrastructure shared across several projects would fall under the purview of this group. State creates a Project e-Governance Mission Teams (PeMT) to support the conceptualization, development, implementation and O&M for the State MMPs and other e-Governance initiatives. PeMT oversee project execution, manage implementation and deal with technology, process & change management related issues. The skills

necessary for handling programme/ project level issues such as Business Process Reengineering, Change Management, Financial Management and Technology are all dealt by this team. However, the emphasis expected from PeMT is balancing the domain expertise and technical expertise (i.e. technology, process re-engineering, change management, project management).

Withdrawn from various studies from different countries and projects there are many challenges which need to be consigned for the successful implementation of e-governance projects in India. Developing countries like India where poverty and illiteracy place a major obstacle in any form of development it becomes very difficult to provide government services to its people. Most challenges are (emphasized by Almarabeh & AbuAli, 2010) expected to be faced during the implementation of an E-Government program are Infrastructure Development, Law, Digital Divide, E-Literacy, Accessibility, Trust, Privacy, Security, Transparency, Interoperability, Record Management, Permanent availability, Education, Marketing, Public/Private competition/collaboration, Workforce, Cost structure, and Benchmarking. The major challenges while implementing process are; Implementing challenges economical challenge and technical challenges faced by central and state level.

## **II. IMPLEMENTATION CHALLENGES**

With the vast growing use of Information Technology the government of India is stepping ahead. Although government of India is coming up with e-Governance projects but still some projects are not successful in all over India that is due to implementation challenges faced. Competent technical manpower, untrained employees, lack of hardware & network engineer, privacy and security of personal data of the citizens are main challenges which are responsible for the unsuccessful implementation of e-Governance in India. There are other few challenges in implementing such as:

1. A shift in the phenomenon of moving from a paper-based to a web-based system to interact with government.
2. Without the qualified & competent technical manpower it's difficult to implement the new technology. The normal users fail to understand & handle the systems related problems effectively.
3. Few legal issues are involved in displaying the information publicly.
4. People are not aware of the illegal use and handling of the information available on internet.
5. The employees cannot handle the system efficiently due to lack of adequate knowledge of handling the system.
6. Most of the software's used in project are not user friendly. User/employee do not understand how to interact with the software for fulfill their requirement.
7. Most of the employee do not understand the language used in interactive software that causes reluctance in using new technology.
8. Most of the departments do not have broad band connection.
9. There is lack of regular electric power supply in many organizations.
10. The many government offices do not have proper adequate hardware.
11. Lack of dedicated Hardware & Network engineer for solving hardware problems in many organizations. Lack of dedicated Network engineer for solving hardware problems in many departments result in delays
12. Maintenance cost of hardware & network is very high. Adoption of new technology is not that easy.
13. Most of the departments lack of regular and centralized backup system.
14. Fear in people to tackle with handling instantly switched to new system.
15. Most of the e-governance services which are offered by the state or central government are not integrated.
16. Lack of collaboration between different departments of government may be its major cause (Asadi & Rashidi, 2012).

### **Suggestions**

The government needs to focus on adequate infrastructure, sound policy, legal security and citizen engagement in order to reach the goal of NeGP. There is much more strategies to be followed to implement the e-project which is mentioned below:

1. Government entities and public policy administrators cannot ignore the changes that occur as a result of the implementation of the ICT. Education about the value of new system is one step towards reducing some of this struggle
2. The state technical team PeMT should appoint dedicated technical person for projects, who can solve the hardware problems.
3. Awareness programs for the citizens should be organized in the rural as well as urban areas.
4. Provide in-office training for the employees of the department with practical exposure.
5. There need of a proper interactive, user friendly software with familiar language support.
6. Government should provide the reliable internet connection with high bandwidth from Bharat Sanchar Nigam Limited.
7. Government should provide dedicated internet line to the integrated projects.
8. There should be an arrangement of uninterrupted power supply at the location.
9. The government should purchase the equipments with latest configuration and high quality. And also keep updating with new techniques.
10. Appoint permanent maintenance engineer to solve the problem.
11. The operator must be trained with the software handling backup of data after office hours every day.
12. A special department for backup operating should be launched.

13. Every notice to the employee is being sent in electronic form that makes compulsion to user to access the mail service regularly eventually the learning process speeds up.
14. The information of different departments needs to be shared among various departments of the government so that the citizen needs not to provide the information again. Different services with unique ID should be started (Tebib & Boufaida, 2013).

The Government has launched the concept of paperless office. Government must campaign much to make the people aware about the e-Governance activities so that people may take full advantage of these activities and result the e-Governance projects implementation successful. The participation of citizens plays a vital role in implementation of e-Governance in India.

### **III. ECONOMICAL CHALLENGES**

Cost is the most challenging factor for implementing the e-governance projects in India. The Government of India cannot manage the funds, and resources to avail the employees with the latest technologies which are of high cost and high maintenance and it also leads to delay in implementing the latest techniques in the continuing or in the new projects. There are some technical challenges faced by the e-projects in the developing countries:

1. A lump sum capital is involved in implementation, operational and evolutionary maintenance tasks. Funds allocated & provided by the Government for implementing e-governance project is inadequate.
2. In developing countries cost is one of the most important obstacles in the path of implementation of e-Governance.
3. The Maintenance cost is high. India has limited financial resources, as to implement and maintain the e-Government projects properly
4. Financial department not competence in fund allocation against various expenditure categories.
5. e-Governance applications must be independent from hardware or software platforms (Robert Schware, 2000).

#### **Suggestions**

There is a need to make the employees or users to update the information every day. The proper network connection and technical equipments with latest technologies can bring in much efficiency and effectiveness leading to better results and extracting of funds from private sectors.

1. The government should take steps to ensure sufficient budgetary allotment for development of e-Governance.
2. Regulations of different devices and their different characteristics may vary and the system in use must be capable to handle all the emerging needs of the citizens and the services made online. The government should maintain & execute their portals & websites themselves.
3. Government should collaborate with major IT industries to initiate the e-Governance projects.
4. e-Governance project can be executed on the basis like Build-Operate-Transfer (BOT) and Build-Own-Operate-Transfer (BOOT)
5. Sharing applications can be used at any platform irrespective of the hardware or software and from one platform to the other platform. These applications must be made possible to reuse by other departments in order to avail government services from any concerned departments.
6. Maintenance is a key factor for long living systems in a rapidly changing technical environment (Palvia and Sharma, 2007).

The citizens find it very difficult to access the online services through internet in an environment where broadband development is very low and the facilities to install a new connection too expensive. Computers and Internet access are two vital facilities required for any government and citizens engagements, but due to lack of such facilities, it remains challenge to be overlooked to how e-government can be adopted by the people who need it (Beniwali and Sikka, 2013).

### **IV. TECHNICAL CHALLENGES**

All over India the telecommunications infrastructure is still inaccessible. The government in order to support e-government and ICT has tried to invest in infrastructure and still a lot of infrastructure problems such as obsolete equipment, e-infrastructure etc. are faced in few better developed metros and big cities. The implementation of e-projects at all the levels of governance face mostly the challenges of network, server down, relationship with other ministries, lack of proper knowledge among employees, technical faults due to constant use of equipment and much like mentioned below:

1. Most of the rural and urban areas lack broad band connections that require for network connectivity.
2. The power shutdown problem creates problem in service providing.
3. No sufficient skilled manpower for maintaining and repairing computer systems and network.
4. Frequency of up gradation of web portal is very less. Technology needs to be up to date.
5. Application forms available on web are found in the form of old versions for long period. Local language must be an option.
6. For searching information on web, a lot of efforts and interactions are needed.
7. The quality of the Internet connection is very poor.
8. Misuse of data by officials
9. The documents must be proved by the Government, (Dawes, 2008).

## Suggestions

There is a need for each department to train their personnel about the information and communication Technology (ICT) techniques. All the department of governments at the state and centre must be interconnected through the internet. The ICT equipment must be provided to the employees with encouraging them to use the technology well.

1. Government should provide dial-up internet connectivity if there is problem for broadband connection especially in rural areas. The system of e-Governance must use the wireless networks like existing cellular networks to reach the applications into rural areas irrespective of the geographical issues.
2. The employees of the government organizations should be trained by provide add-on or value added training. It is better and safe to use technologies and products which are tried and tested for longer periods of times than using the latest ones.
3. Government should update web portals at least every seven days and changes in the web portal should upload within one working day. Government should design standards of systems, applications and processes across the District and State.
4. The applications provided by e-Government, their scope must be known in advance for the accurate implementation of e-Governance projects. Simple language and purpose must be considered as the major objectives of e-governance.
5. Government should provide the high speed internet connectivity.
6. Maintenance expenses should be borne by the citizens against the facility of service provided by the government & availed by the citizens.
7. The transaction or information provided by the citizen to the government agency must be ensured. Otherwise the information can be misuse by the private sector or competitors and the users may be reluctant to access the services provided.
8. Transaction security is another major problem in e-governance. The tax, fine and bill payment must be secured and the system design should be full proof.
9. Cyber law must be made as soon as possible in order to make the electronic transactions and documents of legal validity of the services provided and availed, (Rao, 2013).

The e-Governance applications must have this characteristic so that the newly developed and existing applications can be implemented together. E-Governance in order to affect every citizen of the country the applications must have the scale to interface with every citizen. Multimodal interaction provides the user with multiple modes of interfacing with a system. An e-Government application can only be effective if its users can access it using different devices (Felix, Kumar, & Vijaykumar, 2011).

## V. CONCLUSION

In India, challenges of weak governance, cost, time, quality, risk, procurement, capacity building, poverty and bureaucratic corruption among others are very much engaged with the successful application of e-governance. The electronic mode motivate reforms, therefore, are capable of engaging greater citizens' involving in policy formulation, responsive governance and administration, beyond, ushering global best practices which are cultural and contextual compatible (Gajendra, Xi, & Wang, 2012). There are various challenges for implementing e-government project in India. In order to overcome these challenges a vision is required to implement the e-government in India in an adequate manner. The cultural norms and patterns of individual behaviour affect the manner in which technology is used by the citizens. There is a need to develop effective implementation of e-government in India in order to serve the citizens. In order to match the digital divide gap in the country there is need to develop an environment for e-government by overcoming these challenges.

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