

Impact of e-Governance and its Challenges in Context to India

Dr. Ajeet Singh Poonia¹

Govind Singh Tanwar²

^{1,2}Dept. of CSE, Govt. College of Engineering & Technology, Bikaner (Rajasthan), India

Abstract: e-Governance is nothing but use of Internet Technology as a platform for exchanging information, providing services and transacting with citizens, businesses, and other arms of government. E-Governance provides a sound strategy to strengthen overall governance. It can not only improve accountability, transparency and efficiency of government processes, but also facilitate sustainable and inclusive growth. e-Governance also provides a mechanism of direct delivery of public services to the marginal segments of the society in the remotest corners, without having to deal with intermediaries. This paper deals with the problems and challenges of e-Governance, reasons of e-Government Project Failures, current status of e-Governance related initiatives and future prospects of e-Governance in India.

Keywords: e-Governance, Internet Technology, Public Services, e-Government, Project Failure.

I. INTRODUCTION

The concept of e-government started with the advent of government websites in the early 1990s. The system of government is fixed, static hierarchical regulated, whereas web is dynamic, flat and unregulated. Government's function is liked mammoth, where one hand does not know what the right hand is doing [20]. With the development of Information Technology and increased dependence on the internet as a transaction medium and the development of adequate infrastructure and regulations, government websites soon developed into a highly potential channel for supporting a frontend and back end applications [2].

e-Governance in India has steadily evolved from computerization of government departments to initiatives that encapsulate the finer points of governance, such as citizen centricity, service orientation and transparency. Governance has set aside huge corpus for expansion and faster implementation of e-Governance across national, state and local levels. NeGP (National e-Governance Plan) takes a holistic view of e-Governance initiatives across the country, integrating them into a collective vision and a shared cause [3]. The objective of the NeGP is the bring public services closer home to citizens, as articulated in its vision statement.

II. IMPACT OF E-GOVERNANCE IN INDIA

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 cyber-optimists believe that e-

Governance does contribute to better relations among these three actors by making information available on government operations and public services, facilitating public feedback or reaction and allowing more direct participation by the ordinary citizen in decision-making [9,10]. In the case of India, for the current generation of Policy - makers, e-Governance facilitates the dissemination of information to citizens, ensures greater access to government administration, enhances public participation in the formulation and implementation of state policies and thus strengthens the government-public interface [14].

In line with this favorable view, the Indian Government maintains a massive list of government websites. But the cyber pessimists believe that the use of it in governance may worsen inequality in access to government services due to the lack of an adequate infrastructure, unequal ownership of computers, language constraints, and so on [17,18,19]. There is also a concern that e-Governance may dis-empower citizens by individualizing them, eroding their common bonds and endangering their privacy [7, 22]. This section of the article examines this crucial issue of how e-Governance has affected the relationship among politicians, public servants and citizens in India.

III. E-GOVERNANCE CHALLENGES

There are large numbers of potential barriers in the implementation of e-Governance. Some hindrance in the path of implementation, like security, unequal access to the computer technology by the citizen, high initial cost for setting up the e government solutions and resistance to change. Challenges identified as trust, resistance to change, digital divide, cost and privacy and security concerns.

Although the government has come up with several initiatives to facilitate the access to public services, the desired outcomes are yet to be fully realized. This can be largely attributed to various front-end and back-end challenges that the Government countries to face.

Two major categories of challenges of e-Governance in context to India are:

A. *FRONT END CHALLENGES*

B. *BACK END CHALLENGES*

A. FRONT END CHALLENGES are:

1. *Low penetration of ICT and Limited access to information :*

Low internet penetration and digital literacy is likely to weaken the potential of the initiatives taken by the Government. Rural people often complain that there is lack of access to information about government programmes and services. There is a desire to learn to access information and enjoy their right to information. However, proliferation of computer and computer education is very low in rural areas. The internet penetration has still not reached the desired values. Rural India has 38 million internet users and 31 million active internet users. The penetration of internet users in rural India has grown from 2.6% in 2010 to 4.6% 2012. On the other hand, the penetration of active internet users has grown from 2.13 percent in 2010 to 3.7% in 2012 which still is not impressive [11].

2. *Lack of Awareness:*

Common man in the country is unaware of the benefits and potential of ICT in his day to day life. The benefits of e-Governance are generally unknown. There is a tremendous need to update citizens of their rights and the services that are being offered to them [4]. Citizens are not aware of their legal right to information or in some cases are reluctant to assert it.

- A massive awareness and communication strategy is required to be launched to educate people about what ICT in general and NeGP in particular can do to improve their lives as well as empower them.
- The second set of audience that needs to be addressed are the stakeholders within the Government structure – politicians, policy makers, directors, secretaries, patwaris, tehsildars and circle officers. A special awareness campaign targeting the group would also be needed.
- The third set of audience is the industry – Central Statistical Organisations (CSOs) and Non-Governmental Organisations (NGOs) – who will help create awareness at local levels and who will research, study and generate findings that can potentially be used to improve projects and their impacts.

3. *Need for Building Capacity:*

India has a very large pool of highly skilled IT professional in high scientific manpower. However, these

developments have largely been confined to the urban areas with the exception of a few rural initiatives in some states. There is an urgent need to address the digital divide in the county in an integrated and holistic manner. Government needs to build or strengthen existing institutions to impart IT skills in rural areas [12]. There is also a lack of personnel with appropriate background and aptitude within government framework to handle the programme. In such low capacity environments, record management and statistics generation may be insufficient to support access to information. Each of these gaps needs to be addressed adequately.

4. *Trust:*

Chopra and Wallace (2003) suggest that an integrated definition of trust recognizes the union of three elements: a trustee to whom trust is directed, confidence that the trust will be upheld, and a willingness to act on that confidence, as follows: “Trust is the willingness to rely on a specific other, based on confidence that one’s trust will lead to positive outcomes” [3].

5. *Cost:*

Cost is one of the most important prohibiting factor that comes in the path of e-Governance implementation particularly in the developing countries like India where most of the people living below the poverty line. Elected officers and politician don’t seem to be interested in implementing e-Governance. Its return is not visible in the near future. In 2004, the United Kingdom and Singapore respectively spent 1 percent and 0.8 percent of their gross domestic product (GDP) on e-government. India is spending 3 percent of GDP [5].

B. *BACK END CHALLENGES*

1. *Lack of interoperability:*

Interoperability is one of the biggest challenges faced by the government. There is a lack of consistency in terminologies and methodologies employed by different authorities. Different units, technology, applications may be used for measuring data or same term maybe used with different meaning in different departments. Many government departments have no standards policy [11]. Thus, while creating applications they do not take into considerations the issue of standards or interoperability. There are thus many components to system non-interoperability,

- Lack of transparency and inter-departmental coordination in data collection.
- Not being able to follow good internal record-keeping practices.
- Missing interconnections between datasets by different departments and cross-verification
- Bottlenecks in web publishing, especially due to not using content management systems and centralizing web publishing authority within a department.

2. Resistance to Change:

The employees in government ministries/departments, particularly at the state and the local level, lack awareness about the significances of open governance public as well as to themselves. As such, the employees are resistant to any changes in the way of working or in embracing technology. The Government, therefore, needs to organise change management workshops as well as functional trainings to bring about a change in the mindset and enhance skills in the mindset and enhance skills of employees at various levels [11].

3. Data Unreliability:

At accuracy of the information is not guaranteed by the government. There is lack of incentives for the government agents to provide quality information as well as lack of civil society accountability programmes checking government data for accuracy [6]. These reliability issues have been faced by most of the citizens and opaque methodologies used for data collection makes it difficult to assess the quality of information.

4. Cost of information:

With the increasing awareness enabled by RTI, open data and e-Governance initiatives, there is an increase in overall cost of delivering information to its citizens [8]. Therefore, there is a need for continuous funding of such initiatives through government or private sector. Since most government data was not initially opened, they are not in machine readable format.

5. Privacy & Security:

Privacy and maintenance of anonymity wherever required is another challenge. Whenever a citizen gets into any transaction with a government agency, he/she shares personal information, which can be subject to misuse through hacking, phishing and spamming. Like western counter parts, an increasing number of people are now becoming aware and concerned about their privacy. Thus, the citizens need to be ensured that the information flow would pass through reliable channels and seamless network. There will be three basic levels of access exists for e-government stakeholders: no access to a Web service; limited access to a Web-service or full-access to a Web service, however when personal sensitive data exists the formation of the security access policy is a much more complex process with legal consideration [21]. A lack of clear security standards and protocols can limit the development of projects that contain sensitive information such as income, medical history.

6. Digital Divide:

The digital divide refers to the separation that exists between individuals, communities, and businesses that have access to information technology and those that do not have such access [15]. Social, economic, infrastructural and ethno-linguistic indicators provide explanations for the

presence of the digital divide [1]. Economic poverty is closely related to limited information technology resources. Economic poverty is not the only cause of digital divide. It can also be caused by the lack of awareness among the people. Even some of the economic stable people don't know about the scope of e-Governance [16]. Awareness can only help to bring users to that service delivery channel once.

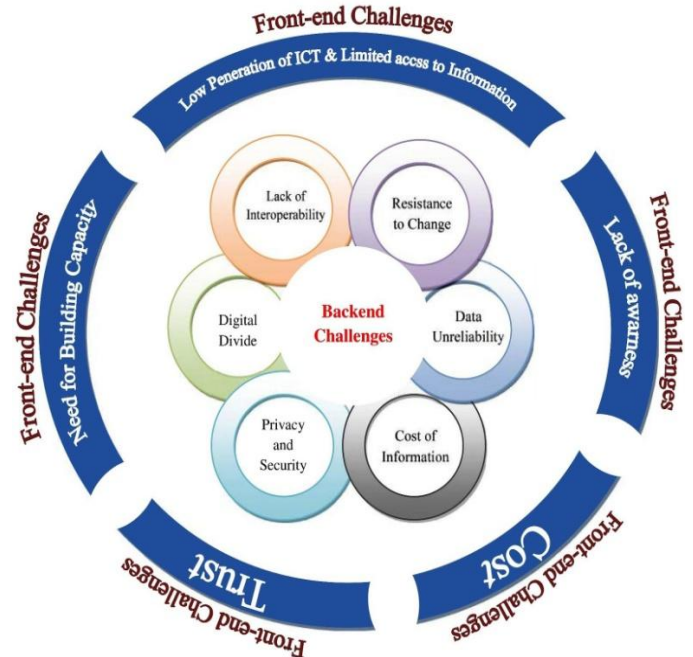


Figure 1: Front & Back-end Challenges

IV. CURRENT CHALLENGES OF E-GOVERNANCE IN INDIA

- A. Lack of effective project management tools and methods.
- B. The knowledge of project management concepts is very low in Government officials forming part of the e-Governance team.
- C. During the project initiation, the baseline data is not captured which is useful for bench marking of activities.
- D. No control of central IT agencies during project execution. The decision making process is generally left to individual line ministries and departments since funding comes from them.
- E. No monitoring of cost and schedule at project checkpoints.

V. SOME SUGGESTIONS/SOLUTIONS TO ABOVE CHALLENGES

- A. Government needs to have their own project management tools.
- B. Project tracking tool should be integrated to the tasks/ activities of the project and these should be monitored instead of status reports with only long text paragraphs being generated for monitoring the project status.
- C. Complete transparency/ work break down/ what are

the issues blocking the project progress should be provided in the PM tools. Projects should be tracked through milestone based approach and evaluation done at various critical checkpoints.

- D. Cost, schedule, quality milestones checkpoints should get included as part of the project deliverables.
- E. Proper baseline study should be performed for proper monitoring of the project.

VI CONCLUSION

During the last few years, many initiatives have been taken by different state governments in India for using IT as a tool in the functioning of Government so as to provide better services to citizens. In this paper we have made an attempt to summaries key areas which should be focused upon when a country wishes to position itself to be seriously moving towards e-Governance in a comprehensive way. This is a change, a transition that cannot be stopped since it is part of a global movement. Cooperation from government officials and staff will contribute to a smoother transition. Given the current high level of political commitment and largely adequate sources of funding, India is likely to soon emerge as a leader in e-Governance.

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