Management and Administration of E-Governance: Challenges and Opportunities in India

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Abstract
The use of a range of modern Information and Communication Technologies such as Internet, Local Area Networks, mobiles and the like by Government to improve the effectiveness, efficiency, service delivery and to promote democracy comes under the purview of e-Governance. The main objective of e-Governance is to “Make all Public 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”. Nonetheless in developing countries like India, where income level is very low and even most of the people are living below poverty line, most of the people are not even aware about the benefits of e-Governance policies. People do not use Information and Communication technologies frequently, there are number of problems in implementation of e-Governance policies. The present study highlights the main problems in the implementation of e-Governance in Public Sector Organizations in India.

Keywords: E-Governance, Administration, Challenges, Government, India

1. Introduction
E-Governance is the application of ICT (Information and Communication Technology) to provide government services to the citizens through internet. The term e-Governance came into existence with the advent of government websites in late 1990s. e-Governance or electronic Governance refers to the use of Information and Communication Technologies (ICTs) to provide citizens and organizations with more convenient access to the governments’ services and information (M A Al Sehri, 2011) In other words, e-Governance involves ICTs, especially the internet, to improve the delivery of government services to citizens, businesses and government agencies. "National Informatics Centre (NIC) of the Department of Information Technology is providing network backbone and e-Governance support to Central Government, State Governments, UT Administrations, Districts and other Government bodies."

E Governance can transform citizen service, provide access to information to empower citizens, enable their participation in government and enhance citizen economic and social opportunities, so that they can make better lives, for themselves and for the next generation. It is not limited to the public sector only but includes the management and administration of policies and procedures in private sector as well. The use of internet not only delivers the services faster but also brings more transparency between the government and the citizens. But in developing countries like India, where literacy rate is very low and so many people are living below poverty line, it is very much difficult for the government to provide its services to such citizens via internet.
2. Challenges for e-Governance in India
There are a large number of problems and challenges in implementation of e-Governance in Indian Public Sector Organizations as well as the general public and subsequent sections discusses some of them.

2.1. Environmental and Social Challenges
2.1.1. Diversity of Languages
India is a large country where people with different cultures and different religions live. People belonging to different states speak different languages. Due to the lingual diversity of the country it poses a huge challenge for e-governance initiatives. It enforces need to do governance (up to certain level), in local languages. Ensuring e-Governance in local language is a big task to achieve. The diversity of people in context of language is a huge challenge for implementing e-Governance projects as e-Governance applications are written in English language. English may not be understandable by most of the people; and the acceptance of English language in India is very low. Local language here should be the mode of preparing and programming such applications, so that the local people are able to use and take advantage of these them. Therefore, it becomes a challenge for the government to write e-Governance applications which are to be implemented for the whole nation in more than one language so that these may be acceptable to the users of a particular language.

According to an officer from NIC, success factors of e-Gov projects -

- 10% Technology
- 60% Process
- 20% Change Management
- Rest is luck

(http://www.it.iitb.ac.in/~prathabk/egovernance/challenges.html)

2.1.2. Low Literacy
Literacy can be defined as the ability to read and write with understanding in any language. A person who can merely read but cannot write cannot be considered as literate. Any formal education or minimum educational standard is not necessary to be considered literate. Literacy level of India is very low compounding the problem of non-implementation of e-Governance policies. Illiterate people are not able to access the e-Governance applications; hence the projects do not get much success.

2.1.3. Low IT Literacy
Much of the Indian people are not literate and those who are literate, they do not have much knowledge about Information Technology (IT). Most of the people in India are not aware about the usage of Information Technology. So, in India, having such low level of IT literacy, the question of implementation of e-Governance projects arises. We can safely say that IT illiteracy is a major obstacle in implementation of e-Governance in India. So, first of all Indian people must be made aware about the usage of Information Technology.

2.1.4. Recognition of Applications
Recognition of the e- Governance facilities by the citizens is another huge challenge. It is a challenge to make all the citizens well aware of the facilities offered by the e-governance and have their trust in it, so that citizens should be ready to accept these facilities.

2.1.5. User Friendliness of Government Websites
Users of e-Governance applications are often non-expert who may not be able to use the applications in a right manner. Such users need guidance to find the right way to perform their transactions.
Therefore, government websites must be user friendly so that more and more people can use them easily. Hence, these websites can be more effective. If government websites will be designed in an easier format only then these will be more usable for non-expert users of IT.

2.1.6. Accessibility of Services
The concept of e-Governance is claims for increased efficiency and effectiveness of the government, but these goals will be achieved only if the service will be available to all or majority of the citizens. Therefore every service should be accessible by anybody from anywhere and anytime. Even as the users of Internet are growing but, still there is a major part of Indian population which is not able to access e-Governance activities for variety of reasons, for example some people may have limited access to Information and Communication Technologies and devices. Therefore, government has to provide internet access through public terminals as a part of their universal access efforts.

2.1.7. Confidence on Technologies Provided by the Government
The implementation of public administration functions via e-Governance requires that the user must be confident and comfortable while using the technology. He must also trust the technology that he/she is interacting with. The government should provide the measures so that the users can trust the technology provided to them. The government has to make a balance between ensuring that a system prevents fraudulent transactions and the burden that extensive checks can take place on people who are honest.

2.1.8. Population
Population of India is probably the biggest challenge in implementing e-Governance projects. As population is considered to be an asset to the country but it also offers some other challenges like establishing person identities. There is no unique identity of individuals in India although Indian government is making efforts for providing unique identity to its citizens. Apart from this, measuring the population, keeping the database of all Indian nationals and keeping this database updated and then providing the e-governance services to the whole population is cumbersome.

2.1.9. Lack of Integrated Services
Most of the e-governance services which are offered by the state or central government are not integrated. Lack of communication between different departments of the government may be its major cause. Therefore, the information that resides within one department has no or very little meaning to some other department of the government.

2.1.10. Lack of Awareness in People
Most of the people in India are not aware of the benefits of e-Governance services. Even the governments do not pay much attention to make the people aware about e-Governance activities. Unawareness is a major challenge in the implementation of e-Governance projects.

2.2. Economic Challenges
2.2.1. Cost
In developing countries like India, cost is one of the most important obstacles in the path of implementation of e-Governance where major part of the population is living below poverty line. Even the politicians do not have interest in implementing e-Governance. A huge amount of money is involved in implementation, operational and evolutionary maintenance tasks. These costs must be low enough so that to guarantee a good cost/benefit ratio.

2.2.2. Transferability of Applications from one Platform to Another
E-governance applications must be independent from hardware or software platforms. Therefore, these applications can be used at any platform irrespective of the hardware or software and from one
platform to the other platform. These applications should also help on possible reuse by other administrators.

2.2.3. Maintenance of Electronic Devices
As the Information Technology changes very fast and it is very difficult even for those who have access to computers to update the existing systems very fast. Regulations of different devices and their different characteristics may vary and the system in use must be capable to handle all the emerging needs. Maintenance is a key factor for long living systems in a rapidly changing technical environment.

2.2.4. Low per Capita income
Per capita income means how much each individual receives, in the terms of money, of the yearly income generated in a country. This refers to what each individual receives if the yearly national income is divided equally among everyone. Per capita income of India is low as compared to many other countries. Therefore, people cannot afford on-line services provided by the government which is a challenge for implementation of e-governance.

2.2.5. Limited Financial Resources
The Gross Domestic Product (GDP) is one of the measures of national income and a country’s economy. GDP is defined as the total market value of all final goods and services produced within the country in a given period of time. GDP of a country is the measure of its financial strength. India has limited financial resources so as to implement and maintain the e-Government projects properly.

2.3. Technical challenges
2.3.1. Interoperability
Interoperability is the ability of systems and organizations of different qualities to work together. The e-Governance applications must have this characteristic so that the newly developed and existing applications can be implemented together.

2.3.2. Scale of Applications
E-Governance projects have to be designed to scale from the day one. E-Governance is supposed to affect every citizen of the country, so e-Governance applications must have the scale to interface with every citizen.

2.3.3. Lack of Integrated Services
Most of the e-Governance Services being offered by state or central governments are not integrated. This can mainly be attributed to Lack of Communication between different Departments. So the information that resides with one department has no or very little meaning to some other department of Government.

2.3.4. Privacy and Security
A critical obstacle in implementing e-Governance is the privacy and security of an individual’s personal data that he/she provides to obtain government services. With the implementation of e-government projects, some effective measures must be taken to protect the sensitive personal information of the people. Lack of security standards can limit the development of e-Government projects that contain personal information such as income, medical history and the like.

3. Geographical Problems: Corporate networks reside on reliable and controlled networks. Government networks have to go into all areas which are even unfriendly to live. It is, however, costly to wire up all the villages in the country. So, e-Governance systems must have to use the wireless networks like existing cellular networks so that the applications reaches into remote areas irrespective of the geographical inaccessibility.
4. Scope of Applications
The very first step in creating a good application is to define its scope very well and everything else comes later. The applications which are provided by the Government, their scope must be known in advance for the accurate implementation of e- Governance projects.

5. Tried and Tested Technologies
Technology tends to get out of date very fast. Our government may not be in position to buy new servers every year. So, it is better and safer to use technologies and products which are tried and tested for longer periods of times than using the latest ones.

6. Conclusion
Day by day usage of Information Technology is growing very fast; Indian government should make many efforts to provide services to its citizens through e-Governance. Although Indian government is spending a lot of money on e-Governance projects but still these projects are not successful in all parts of India. Due to lack of awareness in people, language barriers, privacy for the personal data of the people and so on pose challenges which are responsible for the unsuccessful implementation of e- Governance in India. Government must take some actions to make the people aware about the e- Governance activities so that people may take full advantage of these activities and e- Governance projects can be implemented successfully. The participation of people can play a vital role in implementation of e-Governance in India.

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