2.0 E-governance Definitions and concepts:

*E-governance is use of information and communication technologies to support good governance. Hence it is defined as,*

*Electronic Governance is the application of Information Technology to the process of Government functioning to bring about*

- **Simple**
- **Moral**
- **Accountable**
- **Responsive and**
- **Transparent Governance**

(www.mit.gov.in as on Dec 2005)

**Simple:** Simple would mean simplicity of the laws, rules, regulations, processes and procedures in government. The multiplicity of laws and their complexity together with the requirements to fill in a number of forms drive citizens to intermediaries resulting in delay in securing services and creating scope for corrupt practices. Abolishing outdated and irrelevant laws and rewriting new laws is essential for simplicity. Some of the new laws for single window digital signature are required for effective introduction of e-governance applications.

**Moral:** The maintenance of high ethical standards in the system, are essential. ICT may help in improving ethical values due to usage of workflow based working. Systems can act as watch dogs.

**Accountable:** Every level in government pyramid is accountable for fulfilling goals and targets. All this involves considerable teamwork and sharing of the responsibility. A Rationally designed system of performance indicators is perceived to be answer to the demands of accountability in a government system.

**Responsive:** In this context of good governance means to be alive to the needs of the public and to exhibit the required degree of urgency in responding to such needs. It includes quality of service and its timeliness. Service delayed can mean service denied. Citizen charters are a set of assurances given by government agencies on the quality of service and the time limit for their delivery. Citizen
charter can play a very useful role in areas of public service involving grant of permissions, licenses, certificates, and clearances, redressal of complaints, registration of various kinds, etc. ICT can play a significant role in improving the responsiveness of governments. ICT streamlines the steps associated with the receipt of the request for a service, processing of the request and the delivery of the service.

**Transparent**: This is related to right to information for citizens. Citizens has right to know decisions taken by government. Transparency is applicable for procurement decisions, bid evaluation processes, assessment of taxes, appointments of public posts, disciplinary matters, allocation of resources etc. Transparency brings equity in public life. Transparency helps to reduce corruption. It enforces decision makers to act on cases in time since procedures are monitored by citizens.

( *E-government the science of the possibilities – book by Mr Satyanaraya, NISG*)

Yet another definition of e-governance,

Citizen centric e-governance (G2C) is aimed at connecting citizens to government by talking to citizens and supporting accountability, by listening to citizens and supporting democracy and by improving public services.

E-governance is the use of ICT for planning, implementation and monitoring of government programmes and projects and activities.

E-governance is a process of reforms in the way Government work, share information, engage citizens and deliver services to external and internal clients for the benefit of both government and the client that they serve.


**E-government definition from World Bank:**

E-Government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or
more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.

(http://web.worldbank.org)

Visualization of e-governance by Hon. Dr Abdul Kalam Ex-President of India

E-government is a transparent smart e-governance with seamless access, secure and authentic flow of information crossing the inter-departmental barrier and providing a fair and unbiased service to the citizen.

(Inaugural address at the International Conference on e-governance (ICEG 2003), IIT Delhi 18 Dec 2003 by Hon ex-president Dr Abdul Kalam


3. Citizen Centric E-governance in India, Strategies for Today, Vision For Future, Dr Vikas Kanungo, Chairman – SPEG- Society for promotion of e-governance

3.0 Differentiating the two Concepts E-governance and E-government:

E-Government and e-governance can be defined as two very distinct terms. E-Governance is a broader topic that deals with the whole spectrum of the relationship and networks within government regarding the usage and application of ICT. E-Government is actually a narrower discipline dealing with the development of online services to the citizen, more the e on any particular government service - such as e-tax, e-transportation or e-health. E-Governance is a wider concept that defines and assesses the impacts technologies are having on the practice and administration of governments and the relationships...
between public servants and the wider society, such as dealings with the elected
bodies or outside groups such as not for profits organizations, NGO’s or private
sector corporate entities. E-Governance encompasses a series of necessary
steps for government agencies to develop and administer to ensure successful
implementation of e-government services to the public at large.
Following table gives comparison of government and governance. Use of
electronic for these sectors defines e-government and e-governance.

<table>
<thead>
<tr>
<th>GOVERNMENT</th>
<th>GOVERNANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>superstructure</td>
<td>functionality</td>
</tr>
<tr>
<td>decisions</td>
<td>processes</td>
</tr>
<tr>
<td>rules</td>
<td>goals</td>
</tr>
<tr>
<td>rules</td>
<td>performance</td>
</tr>
<tr>
<td>implementation</td>
<td>coordination</td>
</tr>
<tr>
<td>outputs</td>
<td>outcomes</td>
</tr>
<tr>
<td><strong>e-Government</strong></td>
<td><strong>e-Governance</strong></td>
</tr>
<tr>
<td>electronic service delivery</td>
<td>electronic consultation</td>
</tr>
<tr>
<td>electronic workflow</td>
<td>electronic controllership</td>
</tr>
<tr>
<td>electronic voting</td>
<td>electronic engagement</td>
</tr>
<tr>
<td>electronic productivity</td>
<td>networked societal guidance</td>
</tr>
</tbody>
</table>

E-Government is the use of information and communication technologies (ICTs)
to improve the activities of public sector organisations.
E-Government (from electronic government, also known as e-gov, digital
government, online government or in a certain context transformational
government) refers to government’s use of information technology to exchange
information and services with citizens, businesses, and other arms of
government. E-Government may be applied by the legislature, judiciary, or
administration, in order to improve internal efficiency, the delivery of public
services, or processes of democratic governance. The primary delivery models
are Government-to-Citizen or Government-to-Customer (G2C), Government-to-
Business (G2B) and Government-to-Government (G2G). The most important anticipated benefits of e-government include improved efficiency, convenience, and better accessibility of public services.

What is E-Government?
E-Government refers to the use of ICT, particularly the Internet, as a tool to achieve better government.

What is E-Governance?
E-governance is the seamless integration of information and communication technologies (ICT) and Internet technology in the government workflow to enhance the efficiency, effectiveness, transparency and accountability of informational and transactional exchanges within government, between governments and government agencies of National, Municipal and Local levels, citizen and businesses, and to empower citizens through rightly and timely access and use of information and government services.

E-Governance is a process of reform in the way Governments work, share information, engage citizens and deliver services to external and internal clients for the benefit of both government and the clients that they serve.

(1. www.rileyis.com/publications/research_papers/tracking03/IntlTrackRptMay03n o4.pdf
2. http://www.electronicgov.net/about/introletter.shtml  Commonwealth Centre for e-Governance
3. www.electronicgov.net on 1 Sep 2007)

4.0 Evaluation Frameworks / guidelines for assessment for e-governance projects
4.1 International level
4.1.1 Gartner
4.1.1.1 Gartner's E-government Assessment Framework:
( 1. Gartner, Industry Research, Id number G00147284, Published on 28 march 2007, by Dr Andrea, Di Maio, Dr David McClure, Dr Richard G. Haris
2. Gartner : Industry Research : Id Number G00123390 as on 14 Oct 2004
It’s Time for A New Way to Measure Progress of E-government: Dr Andrea Di Maio

3. Gartner : Industry Research : Id Number : G00129824 as on 11 Aug 2005
European Commission Launches Measurement Framework for E-government Value By Andrea Di Maio

4. Gartner : Industry Research : Id Number G00126455 as on 24 March 2005
Australian Measure of the Public Value of IT is Good Start : Andrea Di Maio

5. Gartner : Industry Research : Id Number : G00129824 as on 11 Aug 2005
European Commission Launches Measurement Value : Andrea Di Maio

From www.gartner.com )

Gartner Inc is the world's leading Information Technology research and advisory company. Founded in 1979, Gartner is headquartered in Stamford, Connecticut, USA. and has 4,000 associates, including 1,200 research analysts and consultants in 80 countries.

The evolution of e-government strategies from online service processing to process transformation poses new challenges and requires a new way of examining benefits, risks and success. Gartner published, “A new e-government Assessment Framework” in March 2007 which has wider scope covering progress assessment criteria and results measures.

Key Findings:
E-government strategies are shifting their preoccupation from the quantity and take up services to interests in demonstrating operational efficiencies and streamlined citizen-centric interactions derived from joined-up government processes.

The likelihood of success for an e-government initiative depends on both the completeness of the vision and the sustainability of vision execution.

Gartner’s earlier evaluation framework in year 2000 was based on four phase model Presence, Interaction, Transaction and Transformation. Achieving e-governance strategies is balancing act among maximizing constituency services, realizing operational proficiency and achieving political returns. The concept as
e-government was not just about online presence but about creating value for constituents, hence Gartner revised the evaluation framework. It is aimed that revised framework needs to capture whether an entity’s e-government strategic objectives demonstrate an understanding of constituents needs and priorities, the most effective communication means and the right combination of service delivery channels and mechanisms. At the same time, the framework must help to formulate core questions about whether government organization involved in implementing the e-strategy have the right tools, resources, processes and political support required for future state vision to be realized.

This leads to assessing both the completeness of vision and the ability to execute.

Completeness of vision:

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Constituency understanding</td>
<td>Ability to identify constituents desires and incorporating in the projects</td>
</tr>
<tr>
<td>2</td>
<td>Constituent-centric strategy</td>
<td>This includes the most appropriate degree of integration between services and processes in different tiers of government</td>
</tr>
<tr>
<td>3</td>
<td>Service delivery strategy</td>
<td>The strategy for making services available through the appropriate combination of physical and electronic methods</td>
</tr>
<tr>
<td>4</td>
<td>Service deployment strategy</td>
<td>Operational issues, transformation needs</td>
</tr>
<tr>
<td>5</td>
<td>Transformation and innovation</td>
<td>Need for collaborative environment, clear integration of people, process and technology</td>
</tr>
<tr>
<td>6</td>
<td>E-government marketing strategy</td>
<td>Communicating clearly e-government plans through web-sites or advertisements</td>
</tr>
</tbody>
</table>
### Ability to execute

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Budget viability</td>
<td>Timely budget availability, common understanding between executive and legislative bodies that review and approve budget</td>
</tr>
<tr>
<td>2</td>
<td>Agility and adoptability</td>
<td>Flexibility to accommodate regulatory changes, re-skilling programs for employees</td>
</tr>
<tr>
<td>3</td>
<td>Political support</td>
<td>The contribution of e-government program to create short term and long term positive political returns</td>
</tr>
<tr>
<td>4</td>
<td>Constituent service capacities</td>
<td>Depth and breath of services, time/money and quality indicators for constituents value</td>
</tr>
<tr>
<td>5</td>
<td>Organization and governance</td>
<td>The ability of the organizations to meet its goals and commitments</td>
</tr>
<tr>
<td>6</td>
<td>Operational efficiency</td>
<td>Performance measurement</td>
</tr>
</tbody>
</table>

#### 4.1.1.2 Gartner’s framework for Public-value-of-IT (PVIT):

PVIT defined as measures that demonstrate how IT-related changes and investments contribute over time to improve constituent service, operational efficiency and political return.

**Constituent service level:**

This can include offering financial benefits for constituents (lower cost of interaction or access to documents and more rapid reimbursement or subsidies), new services leading to constituent benefits and greater focus on constituent needs.
Operational efficiency:
These are operational costs reductions or other financial benefits, streamlining supply chains, lower inventory costs, new revenue streams, higher productivity, and faster merging of administrative processes.

Political returns:
This can mean the satisfaction of political goals, an increase in consensus, and a positive impact on society (for example wider reach on information, better connection with remote constituents and closure of digital or cultural divides) and the economy (for example growth of small and midsize businesses, lower unemployment, growth of exports and trade balance).

4.1.1.3 E-governance Project Management skills (Gartner)
IT intensive projects in government often stress technical project management skills. To be more effective government should make following five changes in project management.

Recognize e-governance project complexities:
When responsibility, accountability and authority are aligned, individuals and teams can work effectively. Project management can vary in approach and the skills required, depending on the complexity of the business domain and the work itself. In more complex transformational projects, it often involves multiple application management and critical process, application and database integration work.

Embrace Business Process Change and responsibility:
Business process change is integral to the success of many IT-intensive projects in government. In fact, processes are becoming much more explicit in government enterprise architectures. Process changes are the first line of response to customer, regulatory and policy-based value chain requirements. Project managers must ensure that core government business processes are being engineered, documented and maintained with the same rigor as application software. The emphasis on process redesign means that workflow is becoming more transparent in government agencies. Modularization of functional
elements is expected to enable workflow to be externalized and thus transparent, flexible and adoptable. Project managers must ensure linkages to business reference models and process components of agency enterprise architectures.

**Capitalize on increased Project interdependencies:**
Traditional project management approaches that assume stand-alone projects in single office silos are much limited in their ability to handle the demands for larger, more integrated collections of related project initiatives. Integrated project teams, comprising business and IT managers with multidisciplinary skills, can capitalize on process and application reuse, if project management has activity views across related projects. Increasingly, project management offices also facilitate this coordination and interrelated cross project view among project managers.

**Manage key Project intersection points:**
The only way to ensure that service or performance results are achieved, provided everyone in the delivery works towards a common goal, using consistent work practices. Multidisciplinary project teams and competency centers are becoming essential to project oriented service delivery. The cross project view creates new requirements for project management as follows

- Quick and more consistent capture and access to knowledge (best and worst practices)
- Tools that manage status or link the deliverables across multiple projects
- Collaborative tools that enable tasks and resources to extend across projects
- Reporting and analytics that connect and analyze the activities or deliverables across projects

The traditional project management methods require a change. Knowledgeable project managers can no longer afford to exclusively focus on core time, cost, scheduling, resource tracking and extended responsibilities in such areas as scope and risk management. Awareness knowledge and management of technical and non-technical skill sets and support roles are inherent with project management jobs. Recognizing gaps in these skill sets and the absence of
clear role definitions, authorities and accountabilities is paramount to successful project outcomes.

**Establishment of Project management skills:**

In recognition of the growing project management complexities and risks associated with inexperience governments are stating to update and redefine certification processes for different project manager skill levels. Following three levels are defined.

Level 1: Managing a project within a division or department

Level 2: Managing a cross-cutting project or agency wide systems integration project across the departments

Level 3: Leading a large intergovernmental or government wide, high risk projects to success in each phase.

**4.1.1.4 Gartner’s Four Phases of E-government Model:**

( Gartner Research, Published on 21 Nov 2000, ID number TU-12-6113, Dr Christopher H Baum, Dr Andrea Di Maio )
The Gartner four phase model of e-government demonstrates the progression of e-government in the connected environment and identifies strategy and factors that contribute to success in each phase.

<table>
<thead>
<tr>
<th></th>
<th>Transformation</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Approval</strong></td>
<td>Searchable database, Public response/ E-mail</td>
<td>Competition Confidentiality /privacy fee for transaction E-authentication</td>
<td>Funding stream allocations Agency identify Big browser</td>
<td></td>
</tr>
<tr>
<td><strong>Existing</strong></td>
<td>Content Management, Increased support staff governance</td>
<td>Self services Skill set changes Portfolio Mgmt. Sourcing Inc Business staff</td>
<td>Job structures Relocation / telecommuting Organization Performance accountability Multiple program skills Privacy Reduces</td>
<td></td>
</tr>
<tr>
<td><strong>Streamline processes</strong></td>
<td>Knowledge Mgmt, email Best practices, Content management Meta data, data synch.</td>
<td>BPR Relationship mgmt. Online interfaces Channel Mgmt.</td>
<td>Integrated services Changes value chain New process / services Changes relationships G2G,G2B,G2C, G2E</td>
<td></td>
</tr>
<tr>
<td><strong>Web-site Makeup</strong></td>
<td>Search Engine Email Security Information Access 24x7 infrastructure sourcing</td>
<td>Legacy Sys. links New Applications New data structures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Phase 1: Presence:
This phase of e-government development is characterized by creation of simple web-sites. The primary goal is to post information such as agency mission, addresses, opening hours and possibly some official documents of relevance to public.

Phase 2: Interaction:
This phase is characterized by web-sites that provide basic search capabilities, host forms to download, and linkages with other relevant sites as well as e-mail addresses of offices or officials. This stage enables the public to access critical information online and receive forms that may have previously required a visit to a government office.

Phase 3: Transaction:
This phase is characterized by allowing constituents to connect and complete entire tasks online. The focus of this stage is to build self-service applications for the public to access online, but also to use the web as a complement to other delivery channels. Typical services that are migrated to this stage of development include tax filing and payment, driver's license renewal, payment of bills, permits and licenses. Additionally many governments put request for proposals and bidding regulations online as a precursor to e-procurement. This is the current stage of several agencies and the most immediate target for many e-government initiatives worldwide. It not only highlights the benefits of 24x7 availability but also provides opportunities to develop cross-agency common shared services.

Phase 4: Transformation:
This phase is the long term goal of almost all national and local e-government initiatives. It is characterized by redefining the delivery of government services by providing a single point of contact to constituents that makes government organization totally transparent to citizens. This phase relies on robust customer relationship management tools and new methods of alternative service delivery capabilities that reshape relationships between citizens, business and government. It also enhances the ability of constituents to participate more directly in government activities. Examples of transformation include highly
tailored web-site or virtual agencies where government information is pushed to citizens and where they can pay local property tax, renew driver’s license and apply for passport all in one place, with seamless interfaces back to the respective agencies involved in the transactions. This phase will also include the development of state-of-the-art intranets that can link government employees who work in different agencies. Government transformation will also include the design of extranets that allow the seamless flow of information and collaborative decision making among federal, state and local government agencies, private and non-profit partners and the public.

Requirement of cost, time and complexities increases from phase 1 to 4. Also constituent value enhances from phase 1 to 4.

Successful deploying an e-government initiatives in each phase requires government organizations to address and resolve a number of issues that can be categorized as follows,

**Strategy and policy:**
Existing policies, laws and regulations can be inadequate to address new kinds of internal and external relationships that enable e-government. For instance, publication and written response policies that are perfectly valid for paper documents often prove to be inadequate for electronic documents and exchange, copyright rules and transaction fees need to reassessed, funding mechanisms for different agencies may require significant change.

**People:**
The human factor is extremely important in any transformation process. Civil servants will have to change the way they work and interact with public and with colleagues. In some regions, where civil service is an alternative to unemployment and rigid rules exist to protect public employment, the radical changes caused by the transaction and transformation phases may encounter significant resistance. Costs will be incurred to displace, recruit, retain and retrain staff.

**Process:**
Most bureaucratic processes are built around the assumption of a hierarchical structure and the existence of a paper trail. Constituents’ centricity and electronic
interactions reverse some of these assumptions, and processes need to be redesigned accordingly. Examples are brand new processes include constituents relationship management, knowledge management, content management and channel management.

**Technology:**
The verities of information and communication technologies play a key role in different phases such as internet, wireless communication, application integration and security. Technology procurement and sourcing also change from phase to phase.

Gartner’s four phase model is generally taken as base for measuring e-governance status across projects or countries status.

**Score by stages , 2005 , Percentage Utilization**

<table>
<thead>
<tr>
<th>No</th>
<th>Country</th>
<th>Stage I Emerging</th>
<th>Stage II Enhanced</th>
<th>Stage III Iterative</th>
<th>Stage IV Transactional</th>
<th>Stage V Networked</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>U. S.</td>
<td>100</td>
<td>99</td>
<td>100</td>
<td>100</td>
<td>76</td>
<td>95</td>
</tr>
<tr>
<td>2</td>
<td>U. K.</td>
<td>100</td>
<td>99</td>
<td>99</td>
<td>100</td>
<td>76</td>
<td>95</td>
</tr>
<tr>
<td>3</td>
<td>Japan</td>
<td>100</td>
<td>94</td>
<td>92</td>
<td>37</td>
<td>56</td>
<td>76</td>
</tr>
<tr>
<td>4</td>
<td>India</td>
<td>100</td>
<td>77</td>
<td>72</td>
<td>17</td>
<td>17</td>
<td>55</td>
</tr>
<tr>
<td>5</td>
<td>China</td>
<td>100</td>
<td>75</td>
<td>71</td>
<td>5</td>
<td>24</td>
<td>54</td>
</tr>
</tbody>
</table>

**Characteristics of country websites**

**Per cent of countries**

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Description</th>
<th>2005</th>
<th>2004</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>One stop-shops (single windows)</td>
<td>47</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>Sources of archived information (laws, policy documents, etc.)</td>
<td>95</td>
<td>92</td>
<td>90</td>
</tr>
<tr>
<td>3</td>
<td>E-government portal</td>
<td>31</td>
<td>29</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>E-government policy statement</td>
<td>39</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Databases (e.g., web access to downloadable)</td>
<td>88</td>
<td>85</td>
<td>79</td>
</tr>
<tr>
<td>statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Wireless/WAP/ PDA access</td>
<td>4.5</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(United Nations global e-government readiness report 2005 from e-government to e-inclusion unpan/2005/14)

4.1.2 World Bank Infodev

The E-Government handbook for Developing countries

   A Project of InfoDev and The Center for Democracy & Technology infoDev,

The World Bank


E-government is the use of information and communications technologies (ICT) to transform government by making it more accessible, effective and accountable. E-government includes:

- Providing greater access to government information;
- Promoting civic engagement by enabling the public to interact with government officials;
- Making government more accountable by making it operations more transparent and thus reducing the opportunities for corruption; and
- Providing development opportunities, especially benefiting rural and traditionally underserved communities.

Moreover, e-government does not happen just because a government buys more computers and puts up a website. While online service delivery can be more efficient and less costly than other channels, cost savings and service improvements are not automatic. E-government is a process that requires planning, sustained dedication of resources and political will.
The Three phases of e-government:

E-government is not simply a matter of giving government officials computers or automating old practices. Neither the use of computers nor the automation of complex procedures can bring about greater effectiveness in government or promote civic participation. Focusing solely on technological solutions will not change the mentality of bureaucrats who view the citizen as neither a customer of government nor a participant in decision-making. Understood correctly, e-government utilizes technology to accomplish reform by fostering transparency, eliminating distance and other divides, and empowering people to participate in the political processes that affect their lives.

Phase 1: Publish – using ICT to extend access to government information:

Governments generate huge volumes of information, much of it potentially useful to individuals and businesses. The Internet and other advanced communications technologies can bring this information quickly and more directly to citizens. “Publish” implementations of e-government diverge widely in their design and content, but developing nations generally can start the process of e-government by publishing government information online, beginning with rules and regulations, documents, and forms. Enabling citizens and businesses to readily access government information without having to travel to government offices, stand in long lines or pay bribes can be a revolutionary advance for nations wracked by inefficient bureaucracy and corruption. Publish sites seek to disseminate information about government and information compiled by government to as wide an audience as possible. In doing so, publish sites serve as the leading edge of e-government.

Recommendations for Publish Projects:

- Begin with a strategy to get information online, with appropriate milestones.
- Post information of value to people in their daily lives, and emphasize local language content.
- Consider a mandate that all agencies publish a specified range of information online.
- Seek attainable results using available resources.
Design sites so they are easy to maintain, and sustain funding to ensure that information is updated regularly.

Focus on content that supports other goals, e.g. economic development, anti-corruption, attracting foreign direct investment.

**Phase 2: Interact – broadening civic participation in government:**

Publish sites, however rich in content, are just a first step. E-government has the potential to involve citizens in the governance process by engaging them in interaction with policymakers throughout the policy cycle and at all levels of government. Strengthening civic engagement contributes to building public trust in government. Interactive e-government involves two-way communications, starting with basic functions like email contact information for government officials or feedback forms that allow users to submit comments on legislative or policy proposals.

**Recommendations for Interact Sites:**

- Show citizens that their engagement matters, by informing them of the outcomes of their online comments.
- Break down complex policy issues into easy-to-understand components.
- Be proactive about soliciting participation; use traditional media to publicize online consultations.
- Engage citizens collaboratively in the design phase.

**Phase 3: Transact : Making government services available online:**

Governments can go further, by creating websites that allow users to conduct transactions online. Just as the private sector in developing countries is beginning to make use of the Internet to offer e-commerce services, governments will be expected to do the same with their services. Potential cost savings, accountability through information logs and productivity improvements will be important drivers.

**Recommendations for Transact Projects:**

- Target audiences that will have immediate use for the online services.
• Enlist the support of those who will be using the site and address the concerns of government workers whose role will change as a result of the innovation.
• Integrate e-government with process reform, streamlining and consolidating processes before putting them online.
• Recognize that initial investments in transact systems can pay off over time in terms of cost savings and increased revenue.
• Create a portal for transact services.

Five Elements of Successful E-Government Transformation:
• Process Reform
• Leadership
• Strategic Investment
• Collaboration
• Civic Engagement

Process reforms
Critical to the success of e-government transformation is the understanding that e-government is not just about the automation of existing process and inefficiencies. Rather, it is about the creation of new processes and new relationships between governed and governor.

Process reform Recommendations:
• Plan carefully - streamline and consolidate offline processes before putting them online.
• Don’t automate inefficiencies - eliminate them.
• Respond to local needs - draw on the ideas of those who will use the system and enlist their support.
• Try to focus projects from the user perspective.
• Dispel resistance of civil servants by training and incentives to support reform.
• Ensure commitment of resources for the long term
Leadership
In order to achieve the e-government transformation, elected officials and administrators are needed at all levels of government who understand the technology and the policy goals and who will push reform.

Leadership Recommendations:
- Create an office and designate a senior official as a focal point for e-government innovation, planning and oversight.
- Signal Presidential/Prime Ministerial support for the initiative to ensure that all relevant departments and agencies support it.

Strategic Investment
Governments will need to prioritize some programs over others to maximize available funds in view of tightly limited resources. This will necessitate clear objectives for programs and a clear route to those objectives.

Strategic Investment Recommendations:
- Define clear goals.
- Catalogue available resources, ranging from funding to personnel.
- Make short and long-terms plans, with expected expenditures, income streams and deadlines.
- Designate an officer or organizing body that will oversee planning and budgets.
- Consider multi-technology approaches. Some communities may not be ready for the Internet, but other technologies like radio may better serve their needs.
- Consultations with local communities will help ensure that they benefit from technology.

Collaboration
Governments will have to explore new relationships among government agencies as well as partnerships with the private sector and NGOs to ensure quality and accessibility of e-government. Agencies may have to overcome traditional reluctance to work with each other to maximize benefits of scale in e-government projects.
Collaboration Recommendations:

- In the planning phase, establish a consultative process that includes opportunities to hear from and speak with business, NGO’s and other government agencies. Explain the goals of the e-government initiative and solicit suggestions.
- Take private sector advice and experience into account when designing systems. Respond to identified needs.
- Create incentives for the private sector to become active participants in reform.
- Encourage cooperation and integration between departments/ministries of government.
- Local champions will help projects succeed. To decrease skepticism in local communities, directly involve local leaders by making them representatives, and by teaching them IT skills they can pass on to their communities.
- Create local ownership. In conjunction with the establishment of a local management committee or body, handover of e-government projects should occur as soon as possible.
- Federal agencies and state and municipal agencies and authorities need to partner to ensure a smooth reform in services.

Civic engagement

The success of e-government initiatives depends on an engaged citizenry and, to that end, efforts to foster civic engagement are critical. The concept of e-government revolves around the citizen. E-government is not just a cost cutting or efficiency initiative, but rather is directed at bettering the lives of ordinary people. In order to develop this citizen focused vision, policymakers must keep the ordinary citizen in mind when designing systems. If at all possible, policy makers and designers should encourage stakeholders – both government and non government– to participate in defining what their shared vision of e-government should accomplish. And once that vision is clearly defined, leaders must communicate it across all sectors, not just to those who will implement it.
Civic Engagement Recommendations:

- Consult widely in designing systems.
- Design applications that are focused on the citizen.
- Combine e-government with legal reform efforts such as requiring public notice and comment in legislative and regulatory processes.
- Keep in mind differences in local culture when seeking to engage citizens.
- Design engagement opportunities that build on successful models

Challenges and opportunities:—Considerations for the design of e-government programs:

Seventeen Challenges and Opportunities of E-Government Implementation:

- Infrastructure Development
- Law and Public Policy
- Digital Divide:
  - E-literacy, Accessibility
- Trust:
  - Privacy, Security
- Transparency
- Interoperability
- Records Management
- Permanent Availability and Preservation
- Education and Marketing
- Public/Private Competition/Collaboration
- Workforce Issues
- Cost Structures
- Benchmarking /Qualitative Methods

4.1.2.2 Framework for the assessment of ICT pilot projects:

The framework is designed to interpret or judge ICT pilot projects for their proof of concept. Assessment covers the combination of evidence and data gathering of the project purpose oriented M & E system, additional evidence or data required for proof of concept along with the interpretation or judgments made on the data from a forward looking perspective as does it make efforts to achieve the Millennium Development Goals. It should be possible to derive answer relationship between alleviation of poverty and ICT.

Framework has two components as

**Project purpose questions:** Related to M & E of the ICT project

**Research questions:** Assess ICT project as tool for measuring development

Mainstreaming ICT tools for development and poverty reduction

Enabling Access for all

Scaling up private sector-led ICT innovation, investment and new business creation

**Project purpose questions:**

- What were the project objectives in terms of poverty interventions, have they been met?
- What have been the outcomes / impacts of the project both in the immediate short term and in the longer term on the full range of project defined stakeholders and beneficiaries?
- What were the processes which led to the outcomes?
- What were the context and conditions that led to the outcomes?
- Are the project outputs and / or outcomes sustainable and under what conditions?
- Have the project outcomes had an unintended impact on the wider social economic and policy environment?

**Research questions:**

- Infodev strategy is focused on addressing on how effectively harness ICT as tools to fight poverty and promote broad based sustainable development.
• Is there an identifiable relationship between the outcomes of the ICT pilot and the processes that might lead to the achievement of the Millennium Development Goals?
• What conditions are needed to replicate or scale up the ICT projects and what might be impact of scalability?

4.1.3 Impact Assessment of ICT for Development Projects: ICTD and NISG

( ICTD project newsletter Nov 2005, From i4d magazine, Nisg and ICTD magazine as on 1 sep 2007 http://www.i4donline.net/ )

About i4d The i4d (Information For Development) print magazine is one its kind, and is intended to provide a much-needed platform for exchange of information, ideas, opinions and experiences, both inside and outside the Information and Communication Technology for Development (ICT4D) sector. While several electronic publications do currently exist, i4d is perhaps the first that addresses the need by utilizing the strength and potential of the print media. )

ICTD research is related to find link between Information and development. Assessment of ICT for Development projects pertains to problems of sustainability, measuring the extent of empowerment to communities, linkage between ICT goals and development goals and accountability of institutions. This research methodology called as “Outcome Mapping ′, which is a process that combines monitoring, evaluation, learning and dynamic modification to achieve the best impact.

Monitoring is a systematic collection of data to provide management with an indication of a project progress.

Evaluation is a systematic and objective assessment of on going or completed project including its design, implementation, and results. Evaluation leads to more informed decisions allowing those involved in the project to learn from experience and to be accountable to stakeholders.

Assessment indicators:
• Performance indicators, relating inputs to outputs
• Effectiveness indicators, relating outputs to usage
• Cost-effectiveness indicators relating inputs to usage
• Cost-benefit indicators, relating inputs to outcomes
• Impact indicators, relating usage to outcomes and domain characteristics

**Evaluation ways:**

• Internal or self – evaluation
• External evaluation
• Internal evaluation with consultant
• Independent evaluation

Evaluation should be conducted using participatory techniques to be effective. In the complex development projects with multiple stakeholder participation and both technology and development objectives the process must involve all stakeholders in feedback evaluation. One of the method would be an assessment of progress made based on the objectives. Another is to evaluation of the impact or outcomes based on board development goals. Millennium development goals as have been used as global and national indicators.

4.2 National level:

4.2.1 E-governance Assessment Frameworks ( EAF Version 2.0 )

Prepared by Prof : T P Rama Rao, Prof V V Venkata Rao and Prof S C Bhatnagar, IMA, Ahmedabad Center for Electronic Governance, Shri J Satyanarayana, CEO, National Institute for Smart Government ( NISG ), Hyderabad, Prepared for E-governance ( Assessment & Replication Division ) E-governance and replication group, Department of Information Technology, Government of India , May 2004

http://www.mit.gov.in as on 1 sep 2007 )
Framework for Assessment of E-governance Projects:

4.2.1.1 Need for an assessment framework:
The department of Information Technology Government of India, has felt it necessary to create a rational framework for assessing e-governance projects on various dimensions mainly for following reasons.

Significant investment of resources into e-governance projects:
Since 1990, large scale budget is allocated to e-governance projects for government departments central and state to penetrate IT usage and IT literacy in government sector. As per IT policy of Government of India published in 1998 each department is advised to allocate budget up to 3 - 5 % for IT related activities. In effect number of e-governance projects is under taken for better services, better efficiency and transparency. But their impact analysis is not available for further decisions.

Subjective assessment & value judgment:
The rating of e-governance projects is currently based on individual subjective assessment. There is no authentic institutional mechanism for ensuing a rational and objective assessment of the projects. Such a situation is a detrimental to a healthy development and growth of the e-governance sector.

Large National plan ahead:
The e-governance National Action plan has large scale outlay for next few years. A significant portion of National Action Plan involves replication of successful projects across different geographical areas of the country. This Assessment framework will identify successful projects which can be replicated across states covering entire country.

Canalizing ongoing efforts in the right directions:
It is desirable that a set of instruments is available to the administrators of e-governance projects to appreciate the various attributes of a e-governance projects, apply midcourse corrections, where needed and steer these projects in the right directions.
Facilitate funding agencies to take rational view.

4.2.1.2 Objectives of an Assessment Framework:
This framework is designed with following specific objectives.
To assess whether and to what extent a given e-governance project has the characteristics of a good e-governance project delivering value to stakeholders.

To guide in funding of a e-governance projects at various stages of their life-cycle (newly started, roll-out, scaling up, replication)

To provide guidelines for mid-term assessment of ongoing initiatives, so that mid course corrections, if any, can be applied.

To provide guidelines for shaping future e-governance projects

To provide material for e-governance training programs

To enhance the trust and confidence of stakeholders by enabling creation of a knowledgebase of all e-governance projects rated as per trusted framework

### 4.2.1.3 Categories of the e-governance projects:

Following types of e-governance projects are covered for this framework.

- Government to Citizens in Urban Environment (G2C-U)
- Government to Citizens in Rural Environment (G2C-R)
- Government to Business (G2B)
- Government to Government (G2G)

The framework is applicable to small, medium and large scale projects.

### 4.2.1.4 Categories of the framework:

Framework has two tier instrument for a summary assessment (SA) of the project and second tier for a detailed assessment (DA) with different attributes.

SA can be used for quick assessment.

### 4.2.1.5 Attributes to be assessed:

The framework is comprehensive, holistic and satisfies objectives defined above. The framework will provide authentic and unambiguous answers to questions like the following.

How far has the project succeeded in achieving its purpose and objectives?

Has the project been designed and developed in with all the technological features that are elegant and confirm to widely accepted architectures and standards?
Is the project sustainable over long periods of time, with or without the motive force that initiated the project?
Is the project cost effective in terms of return on investment or in terms of cost per transaction?
Is the project replicable in other geographies?
In order to derive answers to above questions the attributes which should be measured are of following types.

**Service Orientation:** Efficiency, user convenience and citizen centricity are major attributes

**Technology:** Attributes to be considered are architecture, compliance to standards, inter-operability, security, scalability and reliability.

**Sustainability:** Sustainability of the project depends on the organizational sustainability, commercial sustainability and legal sustainability.

**Cost effectiveness:** The cost effectiveness will have to accessed from the view points of stakeholders (Citizens, service providers, government).

**Replicability:** The factors contributing to replication are functional replicability, technological replicability and commercial replicability.

Attributes for all above types are tabulated in following table. Attributes related to citizen centric applications are considered for large scale e-governance projects. These attributes should be measured before rollout of the e-governance project and after and both values should be compared In the scale of five or in terms of percentages.

<table>
<thead>
<tr>
<th>NO</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td><strong>Service-orientation Efficiency attributes:</strong></td>
</tr>
<tr>
<td>1</td>
<td>Speed of delivery of service</td>
</tr>
<tr>
<td></td>
<td>Compliance to committed service time frame</td>
</tr>
<tr>
<td></td>
<td>Quality of service</td>
</tr>
<tr>
<td></td>
<td>Simplicity of user actions required for obtaining the service</td>
</tr>
<tr>
<td></td>
<td>Percentage of users benefited through e-service compared to conventional channels</td>
</tr>
<tr>
<td>Percentage of Socially or economically users benefited through e-service</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>

2 **Service-orientation** ** user convenience attributes** :

- Ease of access to the service
- Convenience of service timings (24 x 7 operations)
- Single window access to several services
- Integrated services enabling access to several agencies (govt departs) through one request
- Mechanisms for problem resolution and exception handling
- Locations for service deliveries
- Web based service deliveries

3 **Service – orientation** : **Citizen –centricity attributes**

- Degree of alignment of the service design to citizens requirement
- Grouping of services around user’s requirements and behavior patterns
- User interface in local language
- New services and their relevance to citizens
- Reduction of visits to high level government officers or offices
- Knowledge of service provider on the services offered

**B Technology** : **Architecture attributes**

1 Comprehensiveness of the architecture to meet the needs of the project
- Conformance of architecture with national and international architecture
- Mechanism in place for enforcing the compliance to architecture
- Provision for inter-operability
- Extent of the use of Open source software systems

2 **Technology** : **Attributes for standards**

- Extend of compliance of the project with open standards
- Mechanism in plane for enforcing the compliance with standards
- Extent of design and adoption of metadata standards

3 **Technology** : **Security attributes**

- Design of security architecture and policy
- Extend of compliance with security architecture
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanism in place for enforcing to security policy</td>
<td></td>
</tr>
<tr>
<td>Mechanism in place for users to make secure electronic</td>
<td></td>
</tr>
<tr>
<td><strong>4 Technology : Scalability attributes</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which the design permits scalability</td>
<td></td>
</tr>
<tr>
<td>Degree of scalability of project to cover target users completely</td>
<td></td>
</tr>
<tr>
<td>Extent of scope for incorporating enhanced hardware interfaces</td>
<td></td>
</tr>
<tr>
<td>Extent of scope to work with alternate power and connectivity solutions</td>
<td></td>
</tr>
<tr>
<td><strong>5 Technology : Reliability related attributes</strong></td>
<td></td>
</tr>
<tr>
<td>Degree of availability, disaster recovery systems</td>
<td></td>
</tr>
<tr>
<td>Degree of accuracy</td>
<td></td>
</tr>
<tr>
<td>Consistency of response times</td>
<td></td>
</tr>
<tr>
<td>Availability of service level agreement</td>
<td></td>
</tr>
<tr>
<td>Availability of alternate service delivery channels in case of system breakdowns</td>
<td></td>
</tr>
<tr>
<td><strong>C Sustainability : Organizational sustainability attributes</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Existence and functioning of an organizational structure for managing the project</td>
</tr>
<tr>
<td></td>
<td>Extent and accuracy of training imparted to employees of the organization</td>
</tr>
<tr>
<td></td>
<td>Role clarity and degree of employee-buy-in – change management</td>
</tr>
<tr>
<td></td>
<td>Degree of involvement of employees in the project design, development and roll-out</td>
</tr>
<tr>
<td></td>
<td>Continuity of top champions of the project for 3-5 years</td>
</tr>
<tr>
<td></td>
<td>Existence and effectiveness of user groups and service reviews</td>
</tr>
<tr>
<td>2</td>
<td><strong>Sustainability : Commercial sustainability attributes</strong></td>
</tr>
<tr>
<td></td>
<td>Amenability of service delivery through PPP mode</td>
</tr>
<tr>
<td></td>
<td>Strength of PPP arrangement</td>
</tr>
<tr>
<td></td>
<td>Stability, expertise and commitment of service delivery agents (if PPP)</td>
</tr>
<tr>
<td></td>
<td>Collection of user charges</td>
</tr>
<tr>
<td></td>
<td>Arrangements to ensure availability of service during user convenient time slots</td>
</tr>
<tr>
<td><strong>Period of continuous functioning of the project after launch without showing symptoms of decline through reduced number of transactions</strong></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Economic benefit to the users in rural areas</td>
<td></td>
</tr>
<tr>
<td><strong>3 Sustainability : Legal sustainability attributes</strong></td>
<td></td>
</tr>
<tr>
<td>Extent of business process re-engineering undertaken</td>
<td></td>
</tr>
<tr>
<td>Amendments carried out at Acts and Rules related to provision of the service</td>
<td></td>
</tr>
<tr>
<td><strong>D Cost-effectiveness : Attributes</strong></td>
<td></td>
</tr>
<tr>
<td>Extent of reduction of direct cost to user compared to earlier system</td>
<td></td>
</tr>
<tr>
<td>Extent of reduction of indirect cost involved in repeated visits</td>
<td></td>
</tr>
<tr>
<td>Extent of cost reduction to government</td>
<td></td>
</tr>
<tr>
<td>Enhanced revenue / benefit to the government</td>
<td></td>
</tr>
<tr>
<td>Degree of reduction in corruption</td>
<td></td>
</tr>
<tr>
<td>Recovery of Capital cost</td>
<td></td>
</tr>
<tr>
<td>If PPP commercial viability for private partner</td>
<td></td>
</tr>
<tr>
<td><strong>E Replicability Functional Replicability Attributes</strong></td>
<td></td>
</tr>
<tr>
<td>1 Degree of generic processes introduced compared to processes which are location specific</td>
<td></td>
</tr>
<tr>
<td>Degree of resemblance / alignment of the application software to product rather the bespoke software</td>
<td></td>
</tr>
<tr>
<td>2 <strong>Replicability : Technological Replicability attributes</strong></td>
<td></td>
</tr>
<tr>
<td>Multiple Platform feasibility</td>
<td></td>
</tr>
<tr>
<td>Ease of installation of the systems in new locations</td>
<td></td>
</tr>
<tr>
<td>Extent of parameterization for customization</td>
<td></td>
</tr>
<tr>
<td>Feasibility of replication only few modules of the system ( sub system independence )</td>
<td></td>
</tr>
<tr>
<td>Quality of project documentation</td>
<td></td>
</tr>
<tr>
<td>Quality of user manuals and use of local language for user manual</td>
<td></td>
</tr>
<tr>
<td>3 <strong>Replicability : Commercial Replicability attributes</strong></td>
<td></td>
</tr>
<tr>
<td>Replication arrangement with application developer</td>
<td></td>
</tr>
<tr>
<td>Commercial viability</td>
<td></td>
</tr>
</tbody>
</table>
Weightages for attributes:
Weightages could be different for different type of projects. Those should be assigned as per importance of attribute to a particular project.

4.2.1.6 Instruments for Assessments:
Depending upon project scope in urban and rural areas or type of project or its citizen centric nature attributes from above should be selected for measuring. Based on selected attributes suitable questions should be designed for concerned stakeholders. These questionnaires should be used as study instrument for collecting data.

Background project information should also be collected.

Project Background:
The primary set of data required to evaluate all types of projects is the project background data, which may be categorized as Project context, Project objectives, and project services. Sources for such data are mainly project documents.

Project context: Project context helps us to categorize the project and analyze its data from various aspects. Following table gives items for project context data.

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>State</td>
</tr>
<tr>
<td>2</td>
<td>Government Sector ( Agriculture, Revenue, Education, Local bodies Etc )</td>
</tr>
<tr>
<td>3</td>
<td>Target population</td>
</tr>
<tr>
<td>4</td>
<td>Demographic profile (Composition of population)</td>
</tr>
<tr>
<td>5</td>
<td>Project Domain (G2C-U, G2C-R)</td>
</tr>
<tr>
<td>6</td>
<td>Target group / Expected beneficiaries (Citizens, Farmers)</td>
</tr>
<tr>
<td>7</td>
<td>Stakeholders of the project (Beneficiaries, government departments, vendors)</td>
</tr>
<tr>
<td>8</td>
<td>Stage of the project (Pilot, phase I, Roll out, Enhancements)</td>
</tr>
<tr>
<td>9</td>
<td>Scale of the project (Small, medium, large / pilot or regular)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------</td>
</tr>
<tr>
<td>10</td>
<td>Implementation mechanism (In-house, private, govt, agency, PPP)</td>
</tr>
<tr>
<td>11</td>
<td>Type of access to services (Portal, kiosk, delivery station, office desk)</td>
</tr>
<tr>
<td>12</td>
<td>Type of service delivery context (BOO, BOOT, govt own–private run etc)</td>
</tr>
<tr>
<td>13</td>
<td>Background &amp; tenure of project manager (Project managers at different stages of project)</td>
</tr>
<tr>
<td>14</td>
<td>Sources of funds and amounts (one-time, recurring loans, grants)</td>
</tr>
<tr>
<td>15</td>
<td>Sharing of expenses (Between govt and service providers)</td>
</tr>
<tr>
<td>16</td>
<td>Sharing of revenue (Between govt and service providers)</td>
</tr>
<tr>
<td>17</td>
<td>Ownership of hardware and system software (Government or service provider)</td>
</tr>
<tr>
<td>18</td>
<td>Ownership of application software, Who owns the IP? (Government or service provider)</td>
</tr>
</tbody>
</table>

**Project objectives:**

Project objectives should be studied from project documents and should be defined clearly. Questions should be designed to collect data for measuring percentage fulfillment of objectives. Objectives should be assigned important rank. Some of the objectives may be from following list.

- Minimizing distance to access
- Extending access to un-served groups
- Introducing transparency
- Simplifying transaction procedures
- Minimizing cost to citizens
- Minimizing cost to government (Internal efficiency)
- Increasing the government revenue
- Improving the time to transact (citizens, government)
- Offering new services
- Modernization / adoption of Best practices
Project Service:
Each project offers several services to achieve the stipulated objectives. To evaluate the benefits perceived by stakeholders, it is necessary to collect all the categories of services. Subsequently data should be collected for all services for analysis.

Online transaction services: Bill payment, application submission, ration card, complaint, pension payment, results, return filing, counseling etc

Information dissemination: Forms, rules, acts, news, events, tenders, market prices etc

Respondent Background:
Respondents profile information should be collected for segment wise analysis.
Profile items: Stakeholder type (citizen, government employee), Gender, Caste, religion, age group, income group, education, occupation. Depending upon project items from profile should be selected based on its applicability to project.

Model template for assessment:
Each attribute short listed for a project should be tabulated in spreadsheet with weightages and its score for deriving final marks for each type of attribute.

4.2.1.7 Assessment methodology (SA and DA)
The evaluations are to be conducted completely under free atmosphere. The process should not be handed over to project management staff or the service provider. There must be total autonomy to sample design, selection of respondents and locations. Similarly, there must be total freedom to administer the questionnaires. Each project to be accessed must give consent and fully cooperate in conducting the study.
Sampling size should be selected based on project locations and respondents.
Assessment should be carried out in two steps summary assessment and detailed assessment.

Summary assessment:
It is suggested that summary assessment be conducted on a small sample. It should start with collection of data on the project (and similar projects) from secondary sources to facilitate development of a broad framework for evaluation.
The study should include interviews and administration of questionnaires on a small sample of respondents of a representative sample of stakeholders. Summary assessment should offer broad insight into the ground realities of the project and provide inputs to sharpen the understanding of the project objectives, identification of stakeholders, control groups, affected groups etc. and help us refine the data collection instruments. Authorization for conducting the interviews and collection of data should be obtained during this stage from concerned authorities. To a large extent the data collection should be done in a natural environment, preferably without giving prior notice to the concerned parties so that it is not biased.

**Detailed assessment:**
The detailed study should be based on scientific sampling plan, which is refined by the exploratory study. The sampling plan should be detail out the location wise and type wise number of stakeholders to be surveyed. The sampling plan must include all stakeholders and representative geographic locations. It should include reasonable sample size of those who are not users of the e-governance project (control groups) and those who are affected by new system. Separate instrument may be developed for each group.

**4.2.1.8 Computing Assessment scores:**
Scores 0-5 are assigned for each question. Scores should be added for each type of attributes such as Service orientation, Technology, sustainability, Cost-effectiveness and replicability. Depending upon importance of attribute weightages can be assigned to derive scores.

**4.2.1.9 Interpreting Assessment scores:**
The total score obtained by a project clearly gives an overall assessment of the project. However project should be assessed individually for each segment. Following table gives prima facie assessment of the strength of a project for further investment decisions.
<table>
<thead>
<tr>
<th>Sr no</th>
<th>Score Range</th>
<th>Category</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70 and above</td>
<td>Extremely Good</td>
<td>Qualifies for replication and further investments</td>
</tr>
<tr>
<td>2</td>
<td>50 to 69</td>
<td>Good</td>
<td>Scope for marginal improvement</td>
</tr>
<tr>
<td>3</td>
<td>40 to 49</td>
<td>Satisfactory</td>
<td>Amendable to improvements through corrections and gap filling</td>
</tr>
<tr>
<td>4</td>
<td>Below 40</td>
<td>Poor</td>
<td>Not worthy of pursuing further</td>
</tr>
</tbody>
</table>

**Summary and Conclusions:**

The above two tier assessment method will help to decide which projects can be replicated across the states.

Values need to be measured in concrete terms as has been proposed in the methodology. However, given verity of context in which e-governance applications are built, it is impossible to monetize the value.

Judgment is likely to play a significant role in trading off specific benefits delivered across different dimensions to arrive at an overall value for purpose of comparison across projects. A committee of experts can be used to exercise this judgment.

**4.2.2 Evaluation Framework from IIT, Delhi**

( *Book: Evaluating e-government: Dr M P Gupta and Dr Jaijit Bhattacharya Department of Management studies, IIT, Delhi and Dr Ashok Agarwal, CSI Evaluating E-government*)

**4.2.2.1 Evaluating E-government:**

Even though there are a large number of e-governance projects in different phases of implementation and many claims of significant successes, there is overall a lack of sharing of information of success or failures of these projects. Due to the frequent transfers of project champions this e-governance project
knowledge base is not documented. Virtually very little knowledge is gained from actual field visits. There seems to be a major gap between documented claims and actual reality.

Return on investment is not the primary objective when e-government projects are conceived. They are mostly driven to achieve operational efficiency and effectiveness in service delivery.

Methodologies may be classified in terms of the degree of hardness or softness i.e. based on the clarity and nature of the influential variable of a problem situation.

**Hard technologies:**

Multiple objectives are reduced to a single metric, that the nature of the problem is agreed upon, even through a good solution may be difficult to find, that the most important factors can be quantified and reliable data collected, that a model, often mathematical or computer based can be used to generate solutions.

**Soft methods:**

Soft methods can be characterized by the fact that these assumptions can not be generally made. Typically there might be several decision makers or stakeholders involved with different opinions and possibly conflicting objectives and definitions of the problematic nature of the situation, there may be difficulties in quantification of many important factors, transparency and accessibility of the model will be very important thus often ruling out mathematical models.

**4.2.2.2 Multi-methodology:**

Hard methods would demand good analytical mind with mathematical and computing skills while soft methods require people skills and the ability to facilitate often stressful and contentious workshops.

In applying any problem solving method there is a need to create a balance between the need to remain sufficiently quantitative to be applicable and rigorous and sufficiently flexible to be relevant in terms of both audience and methods. This allows the possibility of combining methods or techniques together in a particular intervention a practice known as multi-methodology. Multi-methodologies are suitable for e-governance projects due to its hybrid nature.
Broad categorization of methods:

- **Hard Measures**
  - Cost benefit analysis
  - Benchmarking in e-government

- **Soft Measures**
  - Scoring method
  - Stages in e-governance
  - Sociological angle

### 4.2.2.3 Hierarchy of Measures:

6 levels

**Hard Measures:**

**Cost - benefit analysis:**

There has been attempts to examine information technology (IT) capital investments (including software) and capital stock whether these investments are justifiable by calculating marginal benefits and costs of IT related investments. There is strong evidence that IT investment is not meant to cut costs but to achieve better customer service and quality.

The biggest drawback about cost-benefit for e-governance projects is that the true monetary value of benefits such as increased quality, faster service, flexibility, better customer or citizen service or improved working conditions for employees cannot be ascertained.

**Benchmarking in e-government projects:**

Benchmarking is a option which provides a method of evaluating performance against best practices while also providing strategic guidance.

One form of benchmarking is through metric benchmarking which provides numeric measures of performance, like

- IT expenses as percent of total revenue
- Percent of down time

However, benchmarking may be difficult in India, since best practice values are not available and comparing wit international benchmarks may not reflect true picture.
Soft measures:
E-government project aims at intangible benefits such as improved decision making, customer or citizen satisfaction and increase in employees’ productivity. All such benefits are dependent on information value. Soft approaches employ multi-dimensional attribute measures of information value, which is the context of e-government. Simultaneously consideration of multiple attributes facilitates the understanding of the extent and depth of the problem.

Scoring methods:
In scoring methodology key performance issues are identified and weight is assigned. Finally weighted average of all attributes is calculated. The approach can incorporate both tangible and intangible benefits.

Stages of e-government:
The four stage model of US can be refereed for finding our stage of e-governance project. Based on technical, organizational and managerial studies of several examples, e-government is found to be an evolutionary phenomenon and therefore, e-government initiatives should be accordingly derived and implemented.

Four stages are:
Cataloguing: Online presence, catalogue presentation, downloadable forms
Transaction: Services and forms are online, working data base supporting transactions
Vertical integration: Local systems linked to higher level systems within similar functioning
Horizontal integration: Systems integrated across different functions, real one-stop shopping for citizens

Sociological Angle:
An opinion survey would be useful to gauge the responses of employees' adaptability and responsiveness of the new system. The area that could be looked into include bureaucratic hurdles faced in moving toward an alternative delivery arrangement, the level of transparency and accountability of the
employees in new collaborative arrangements and the likely road ahead for e-government.

**Hierarchy of measures:**

The framework ‘return on e-government’ refers to developing a functional view of the government organization, identifying specific functions at various levels of administration to analyze how IT is able to improve those functions and develop a measurement of performance for them.

<table>
<thead>
<tr>
<th>Hierarchy in performance</th>
<th>Change that is measured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1: Return on investment</td>
<td>Rupees</td>
</tr>
<tr>
<td>Level 2: Total cost and revenues</td>
<td>Rupees</td>
</tr>
<tr>
<td>Level 3: Improvement in quality of</td>
<td>Time, planning, managing, degree of automation, cost of control</td>
</tr>
<tr>
<td>Level 4: Quality of decisions</td>
<td>Frequency of failures / reversal of decisions, number of alternatives examined, time required for decisions, availability of decision support system, cost of decision</td>
</tr>
<tr>
<td>Level 5: Value of information</td>
<td>Usefulness, in terms of validity, accuracy, clarity, frequency, sufficiency, timeliness, reliability, relevancy, message content and cost</td>
</tr>
<tr>
<td>Level 6: System characteristics</td>
<td>Staff required, response time, inputs, outputs, data bank, infrastructure, MIS, error rate, flexibility, degree of automation, simplicity etc</td>
</tr>
</tbody>
</table>

2. Summary of e-governance Evaluations: Prof T P Rama Rao, Center for Electronic Governance, IIMA April 2004 www.iimahd.ernet.in/egov
3. Studying the developmental Impact of e-governance initiatives An Exploratory Framework, Shirin Madon)
5.0 SWOT analysis of e-governance:

Following SWOT analysis is at the high level. It indicates the e-governance challenges. Four aspects are covered namely Political, Social, Economical and Technological.

( [http://www.iicd.org/articles/IICDnews.import1857 as on 1 sep 2007 by Dr Michlel Backus reprt prepared in April 2001](http://www.iicd.org/articles/IICDnews.import1857 as on 1 sep 2007 by Dr Michlel Backus reprt prepared in April 2001) )

**Political Aspects:** Political aspects related to e-governance are formulation of strategy and policy, laws and legislation, leadership, decision making processes, funding issues etc.

**Political aspects – Implementation and maintaining of e-governance solutions:**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combination with democratization reforms</td>
<td>Budget</td>
<td>External funding</td>
<td>Bureaucracy</td>
</tr>
<tr>
<td>Internet as pull factor</td>
<td>Cyber laws not in place</td>
<td>Competitive edge</td>
<td>Piracy, misuse</td>
</tr>
<tr>
<td>Modern image</td>
<td>No expertise about technology</td>
<td>Transparency causes natural change of process</td>
<td>Corruption</td>
</tr>
<tr>
<td></td>
<td>Slow decision making process</td>
<td>Reinvent government</td>
<td>Maintaining disorder</td>
</tr>
<tr>
<td></td>
<td>Hierarchy in organizations</td>
<td></td>
<td>No transparency</td>
</tr>
<tr>
<td></td>
<td>Short term approach</td>
<td></td>
<td>Political instability</td>
</tr>
</tbody>
</table>
due to elections

Slow integration and reforms

Resistance

**Social aspects:** Examples of some of the social aspects related to e-governance are level of people, education, employment, income, digital divide, rural areas, cities, rich vs poor, literacy, IT skills.

**Social aspects - Implementation and maintaining of e-governance solutions**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>People eager to learn IT skills</td>
<td>Basic education poor</td>
<td>Employment increases</td>
<td>Brain drain IT skilled people after training</td>
</tr>
<tr>
<td>Skilled people availability</td>
<td>Trainers needed</td>
<td>Education system improves</td>
<td>Resistance of people</td>
</tr>
<tr>
<td>Possibility of export product</td>
<td>Low IT literacy</td>
<td>People learn structural jobs</td>
<td>Digital divide privacy</td>
</tr>
<tr>
<td></td>
<td>Use of different languages</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public acceptance of self-service models</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shortage of skills</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Economic aspects:** Economic aspects related to e-governance are funding, cost-saving, business models, e-commerce.
**Economic aspects: Implementation and maintaining of e-governance solutions**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weakness</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-governance good argument for external funding</td>
<td>Investors</td>
<td>Cost efficiency through e-governance</td>
<td>Corruption</td>
</tr>
<tr>
<td>Transparency of businesses</td>
<td>Budget control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right to information act</td>
<td>E-service cost may be more to citizens</td>
<td>New businesses</td>
<td></td>
</tr>
</tbody>
</table>

**Technological aspects**: Technology may be bottleneck for e-governance. The aspects are software, hardware, infrastructure, internet connectivity, IT skilled manpower, maintenance, safety and security issues.

**Technological aspects: Implementation and maintaining of e-governance solutions**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everything is new so no negativity</td>
<td>Shortage of IT skilled manpower</td>
<td>Hardware availability</td>
<td>Dependency of technology</td>
</tr>
<tr>
<td>IT policy for internet upto last mile</td>
<td>High cost of internet</td>
<td>Data standards</td>
<td></td>
</tr>
<tr>
<td>Increase in awareness level</td>
<td>Lack of IT standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-governance centers to guide</td>
<td>Costs of software licensing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power availability in rural areas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.0 Impact of Information Technology Policy released during July 1998 by Government of India:

(Planning commission Resolution, New Delhi, 25 July 1998, NO IT-TF/5/98, Published by the controller of Publications, Delhi)

Government of India had issued Information Technology Policy in 1998 with the assumption that Information Technology is the agent of transformation of every facet of human life which will bring about a knowledge based society in twenty-first century. Major objective was delivering services as close to citizens as possible within minimum intermediation and at affordable cost.

The mission of IT policy was to make India an infotech superpower in the shortest period of time, an effective awareness building campaign shall be launched for the removal of all infrastructural bottlenecks.

IT policy has major agenda to ensure fast internet connectivity till last milestone, up to village level. Private ISP’s (Internet Service Providers) were permitted to provide internet access anywhere in India, till then only VSNL connectivity was available. The procedure was also made simplified for setting up ISPs. Due to this major step infrastructural growth is now seen for availability of dialup connectivity, broadband connectivity or mobile connectivity. This spread of internet access is one of the necessities for releasing e-governance citizen-centric applications. IT education was also given high importance in IT policy to ensure IT manpower as per needs in private and government sector.

Following were important decisions from IT policy, 1998 which has demonstrated impact on e-governance projects.

- The monopoly of the VSNL on International Gateway for INTERNET shall be withdrawn and authorized public / government organizations will be allowed to provide INTERNET Gateway access including international leased circuits directly without going through VSNL gateways. Private ISPs are allowed to provide such Gateways after obtaining Security clearances for which the interface of private ISPs shall only be with DOT, which will set up a mechanism for obtaining security clearance from different security agencies.
• The ‘last mile’ linkages shall be freely permitted either by fiber optics or radio communication for IT application enterprises, IT promotional organizations and ISP’s. In case of radio linkages, coordination by the wireless adviser will be observed to avoid frequency interference.

• A citizen Charter for effective and responsive administration in terms of time bound service to the public shall be framed and implemented under the coordination of the Department of Administrative Reforms & public grievances and hosted on the internet web site “India Image “ of the Government of India. The DOP & T shall examine all the issues related to citizen – IT interface.

• Each Department / Agency in the Central Government and State Government shall be required to prepare a Five Year IT Plan.

• 1-3 % of the budget of every Ministry / Department shall be earmarked for applying IT in the Department / sector; this investment will include not only the purchase of IT products, IT software, but also for training and IT services; Re-appropriation of the Department’s budget for the IT sub-budget head shall be within the delegated powers of the Head of Department.

• India shall participate in international projects like “Government Online “ project of G-8 countries so as not only learn from experience of others but also to contribute to the global experience in planning and implementing projects to promote IT in Government.

• A Computerized Inventory of training pertaining to different areas shall be maintained.

• A computerized Inventory of Government’s best practices for electronic access shall be maintained.

• Government shall stipulate IT literacy as an essential requirement for all future Government and public sector employment; in the Annual Confidential Reports of Government employees, a column shall be introduced regarding contribution to IT utilization in the department / organization.

• A national Institute of Smart Government shall be set up to focus on all issues concerning IT-supported governance.
• State Institute of Public Administration shall be re-engineered to help bring about IT-responsive State Governments.
• Since 1998, after release of IT policy till today (during last nine years) one can notice achievement of objectives mainly in terms of penetration of internet services till village level, increased percentage of IT education and enhanced usage of ICT in government sector.

7.0 Objectives of E-governance:
( 1. E-government From Vision to implementation- book by – Subhash Bhatnagar
2. E-government the science of the possible - Book by Mr J Satyanarayana, IAS, Chief Executive Officer (CEO) National Institute for Smart Government, Hyderabad, Prentice Hali of India, New Delhi )

• Provide Government services anytime, anywhere, at affordable costs with local language to all citizens improving their quality of life
• Enable transparent and accountable service delivery to businesses and other stakeholders, leading to greater economic development and creation of employment opportunities
• Long term sustainability of the quality of service provision through innovation, process re-engineering, Public Private Partnership, citizen participation and automation of key departmental processes
• Moving all common services to Citizen Service Bureaus which would act as One-Stop-Shop for delivering various government services
• Leveraging intermediaries and public private partnerships to encourage usage and adoption of e-Governance and at the same time providing quality services and making the initiatives sustainable on a long term basis
• A paradigm shift from department based procedures / Initiatives to citizen oriented services is envisaged through necessary administrative and procedural reengineering as efficiency is the key ingredient to achieve the e-Governance Vision
• Promoting interdepartmental messaging service to support the electronic exchange of citizen data among government agencies and departments
• Improvement in the efficiencies within the government by way of consolidated databases that would provide relevant information faster and assist better enforcement of law by application of statewide common policies and regulations
• Derive synergies to reduce duplicity from cross departmental interactions in areas like: maintaining citizen databases, usage of Common applications, GIS mapping etc
• Facilitating access to political information and improving the means for political expression, discourse, mobilization and advocacy
• Enhancing the democratic quality of the political process and public administration through more transparency, accountability, participation and disintermediation
• Making the internal working of public administration more effective and efficient
• Enhancing the range and utility of public services and offer and making their delivery to citizens and business more accessible, efficient and responsive to the needs of all groups of clients
• Minimizing distance to access
• Extending access to un-served groups
• Introducing transparency
• Simplifying transaction procedures
• Minimizing costs to citizens
• Minimizing cost to Govt. (internal efficiency)
• Increasing the Govt. revenue
• Improving the time to transact for citizens & Govt.
• Offering new services
• Modernization/adoption of best practices
8.0 Overview of National E-governance Plan:

( www.mit.gov.in official web-site of Department of Information Technology, Government of India as on 1 sep 2007 )

The Government approved the National e-Governance Plan (NeGP), comprising of 27 Mission Mode Projects (MMPs) and 10 components, on May 18, 2006.

Vision of NeGP:

Make all Government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency & reliability of such services at affordable costs to realize the basic needs of the common man.

8.1 E-Governance initiatives across the country:

Over the past decade or so, there have been islands of e-Governance initiatives in the country at the National, State, district and even at block level. Some of them have been highly successful and are ready for replication across other States. Experiences from successes as well as the failures of the various initiatives played an important role in shaping the e-governance strategy of the country. The basic lessons that emerged from the various e-governance initiatives were:

- Need for political ownership at the highest level and a national vision for e-Governance for successful implementation of the programme
- A dedicated /team with a stable tenure from within the organization to conceptualize and implement the programme down the line
- New areas of public-private partnership in making e-governance possible should be continuously explored
- Defined architecture, standards and policies addressing issues of security, privacy, etc
- An urgent need to develop the basic core and support infrastructure for e-Governance such as Data Centres, Wide Area Networks and the physical access points for delivery of government services, which would be common to
all departments and where services could be delivered at the doorstep of the citizen in an integrated manner

- Need to start with small pilots before scaling-up, as IT projects take a long time to implement and often there are modifications to be incorporated along the way
- Issues of re-engineering and management of change are of paramount importance in comparison to technical issues associated with e-governance

Hence, need was felt for taking a holistic view towards the entire e-governance initiative across the country. Increasingly, it was perceived that if e governance was to be speeded up across the various arms of government at the national, state and local government level, a programme approach would need to be adopted, which must be guided by a common vision, strategy and approach to objectives. This approach would have the added advantage of enabling huge savings in cost, in terms of sharing the core and support infrastructure, enable interoperability through standards etc, which would result in the citizen having a seamless view of Government. With this background, the National e-governance Plan (NeGP) was formulated by the Government, for implementation across the country.

8.2 State : Mission mode projects (MMPS):

- Agriculture
- Commercial Taxes
- e-District
- Employment Exchange
- Land Records
- Municipalities
- Panchayats
- Police
- Property Registration
- Road Transport
- Treasuries
8.3 Land Records Phase I:
There is an ongoing project for digitization of land records, being implemented by Ministry of Rural Development (MoRD)

- Completion of data entry work including backlog validation and updating (Completed in 12 States)
- Providing legal sanctity to computerized RORs (Completed in 12 States)
- Stopping issue of manual RORs (Completed in 8 States)
- Setting up computer centers at Tehsils (Completed in 9 States)
- Web enabling (Completed in 11 States)

The collection of land revenue and the existence of the institutions of the State have been co-terminus. Maintenance of land records has now become more vital for administrators and creation of a land information system is one of the key issues facing governance today. Land records itself is a generic expression and could include records such as the Register of lands, Records of Rights, Tenancy and crop inspection register (RTC), Mutation Register, Disputed cases Register etc. It also includes primary information about land presented in terms of its geological information like the shape, size, landforms, soils; economic information related to land use irrigation and crops; and the information pertaining to the legal rights, registration and taxation.

Main objectives of Land Records MMP are:

- To facilitate easy maintenance and updating of changes which occur in land database such as changes due to availability of irrigation/natural calamities/consolidation/ or on account of legal changes like transfer of ownership, partition, land acquisition, lease etc.
- To provide for comprehensive scrutiny to make land records tamper-proof, this may reduce the menace of litigation and social conflicts, associated with land disputes.
- To provide the required support for implementation of development programmes for which data about distribution of land holdings is vital.
- To facilitate detailed planning for infrastructural as well as environment development.
To facilitate preparation of an annual set of records in the mechanized process and thereby producing accurate documents for recording details such as collection of land revenue, cropping pattern etc.

To facilitate a variety of standard and ad-hoc queries on land data.

To provide database for agricultural census.

**Core Services offered under the MMP are:**

- Issue of copy of Records of Rights
- Crop, Irrigation and Soil details
- Filing and Tracking of Status of Mutation Cases
- Availability and submission of forms

At present, a number of states have successfully completed the pilot project and a few are planning/proposing Statewide rollout (Punjab, Puducherry, Gujarat, Himachal Pradesh, Tripura, Sikkim and West Bengal).

( *Ministry of Rural Development http://rural.nic.in/* )

**8.4 Municipalities:**

The National Mission Mode Project (NMMP) for Municipalities is one of the Mission Mode Projects that has significant citizen interaction, since municipalities provide a large number of basic services for millions of citizen living in India’s urban centres. It is envisaged that MMP for municipalities would provide a major fillip to the Government of India’s Ministry of Urban Development’s urban reform agenda. The vision for the National Mission Mode Project for e-governance in Municipalities is to leverage the ICT opportunities for sustained improvement in efficiency and effectiveness of delivery of municipal service to citizens. The Key Objectives of the MMP include,

- Provide Single Window services to citizens on any time, any where basis
- Increase the efficiency and productivity of ULBS
- Develop a single and integrated view of ULB information system across all ULB’s in the state
• Provide timely & reliable management information relating to municipal administration for effective decision making
• Adopt a standards-based approach to enable integration with other related applications
• The overall structure for the NMMP scheme has been divided into three tiers i.e. Centre, State and Urban Local Body (ULB) level. MMP, in its current form, envisages covering all ULBs in class 1 cities (423 in total) during the period 2006-07 to 2010-11.
• In order to achieve its vision and objectives, NMMP envisages implementation of various application modules covering the following services / management functions within ULBs:
  • Registration and issue of birth and death certificate
  • Payment of property tax, Utility Bills and Management of Utilities that come under ULBs
  • Property Tax
  • Water Supply and other Utilities
  • Grievances and suggestions
  • Building plan approvals
  • Procurement and monitoring of projects
  • E-procurement
  • Project/ward works
  • Heath program
  • Licenses
  • Solid Waste Management
  • Accounting system
  • Personnel Information System.
  • Grievances Handling, including implementation of the elements of the Right To Information Act, Acknowledgement, Resolution monitoring

Ministry of Urban Affairs (http://www.urbanindia.nic.in/moud/moud.htm)

8.5 Integrated MMPs:
  • CSC
• e-BIZ
• e-COURTS
• e-Procurement
• Electronic Data Interchange (EDI) For Trade (eTrade)
• National e-governance Service Delivery Gateway
• India Portal (www.india.gov.in)
(www.mit.gov.in/
www.thehindubusinessline.com/2005/03/15/stories/2005031502100500.htmlwww.egovservices.org
www.egovonline.net/news/news-details.asp
www.ciol.com/content/281107101825.aspx
www.i4donline.net/news/news-details.asp)

9.0 Good governance and E-governance:
(http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.asp
Web-site of United Nations Economics and Social commission for Asia and the pacific as on 1 sep 2007)

Good Governance:
Good governance has 8 major characteristics. It is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law. It assures that corruption is minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making. It is also responsive to the present and future needs of society.
Good governance:

Good governance is considered the single-most important factor for national development and poverty alleviation. It is based on certain key characteristics which are presented below.

The key attributes of good governance include the following:

**Participation:**

Participation by both men and women is a key cornerstone of good governance. Participation could be either direct or through legitimate intermediate institutions or representatives. Representative democracy does not necessarily mean that the concerns of the most vulnerable in society are taken into consideration in decision-making. Participation needs to be informed and organized. This means freedom of association and expression on one hand and an organized civil society on the other.

**Rule of law:**

Good governance requires a fair legal framework that is enforced impartially. It also requires full protection of human rights, particularly those of minorities. Impartial enforcement of law requires independence of judiciary and an impartial and incorruptible police force.

**Transparency:**

Transparency means that decisions are taken and enforced in a manner that follows rules and regulations. It also means that information is freely available and directly accessible to those who will be affected by such decisions and their
enforcement. Transparency also implies that enough information is provided in easily understandable forms and media.

**Responsiveness:**
Good governance requires that institutions and processes try to serve all stakeholders within a reasonable time-frame.

**Equity and inclusiveness:**
A society’s well-being depends on ensuring that all its members feel that they have a stake in it and do not feel excluded from the mainstream of society. This requires all groups, but particularly the most vulnerable, to have opportunities to improve or maintain their well-being.

**Effectiveness and efficiency:**
Good governance means that processes and institutions produce results that meet the needs of society while making the best use of resources at their disposal. The concept of efficiency in the context of good governance also covers the sustainable use of natural resources and the protection of the environment.

**Accountability:**
Accountability is a key requirement of good governance. Not only governmental institutions but also the private sector and civil society organizations must be accountable to the public and to their institutional stakeholders. Who is accountable to whom varies depending on whether decisions or actions taken are internal or external to an organization or institution. In general, an organization or an institution is accountable to those who will be affected by its decisions or actions. Accountability cannot be enforced without transparency and the rule of law.

**Strategic vision and consensus orientation:**
Good governance requires a long-term, strategic approach evolved through a consensus process. There are several actors and diverse viewpoints in a given society. Mediation of different interests in the best interest of the whole community should be reached on a broad consensus. It also requires a long-term perspective on what is needed for sustainable human development. This can only result from an understanding of the social context of a given society or community.
Governance involves the processes of decision-making and implementation of decisions – converting society’s inputs and outlays to outputs, outcomes and impacts. It involves the interplay of multiple actors – the state, the civil society and the private sector. It also involves multiple processes and relationships that involve institutions, delivery mechanisms and framework of rules and regulations.

The 10th Five Year Plan document of India provides a useful approach to examine the issues of governance, whether they are restricted to political, economic or civic governance or looked at holistically. It views governance as the process of intermediation involving a continuous interplay of three elements, each representing a specific set of deliberate arrangements – institutions, the delivery mechanism and the supportive and subordinate framework of legislations, rules, and procedures.

Institutions – adopted or created arrangements - both formal and informal, to bring about predictability, stability and efficiency in managing the social, economic or political transactions in any society are important.

The delivery mechanism - including the executive apparatus adopted or evolved by the institutions for implementing the agenda and the objectives for which the said institutions have been created.

The supportive and subordinate framework of legislations, rules and procedures – formulated for delivering and meeting the stated responsibilities of the concerned institutions. The changing role of government and the role of the state are major factors influencing the process of governance. Quite often governance is confused with the government. It is to be noted that governance is an inclusive process as opposed to government which is uni-directional and generally authoritarian and secretive in its functioning and approach.

Good Governance looks at the total picture that takes the market, the state and the civil society into its canvass. The ultimate objective of good governance is to bring goodness in all the three spheres, i.e., the state, the market and the civil society. Good governance has also emerged from the new global concerns in human development and development related concerns.
Governance is defined as the manner in which power is exercised in the management of a country’s economic and social resources for development (World Bank). Following this definition, the World Bank has identified three distinct aspects in the conceptualization of ‘Governance’ such as (a) the form of political regime (b) the process by which authority is exercised in the management of country’s economic and social resources and (c) the capacity of government to design, formulate and implement policies and in general discharge government functions.

The increasing and vital role of information technology has added a new dimension to the rhetoric and practice of good governance. E-governance connects the citizen and government with ease and speed and hence has a pivotal role in the governance agenda.

The concept of good governance has also emerged from the felt need called the New Public Management which began in early 1980s, to improve public service efficiency. The core values around which New Public Management works is economy, efficiency and effectiveness.

**E-governance being use of ICT for better government functioning, it is a tool for achieving good governance.**

10.0 The role of ICT for Good Governance:

- Improve quality of governance products and services being currently provided
- Provide new governance services and products
- Enhance participation of people in choice & provision of governance products & services
- Bring new sections of society under the governance sphere (including those who are most likeable to remain excluded - namely the poor, the illiterate, the differently disabled, indigenous people, the migrants and displaced people)

11.0 Scope of e-governance internationally and in India:

E-governance projects in developed counties is based on larger perspective to improve living conditions and convert systems in totality to ICT based usage
using full potential of ICT. Hence, ICT has become an effective and mainstream tool of poverty reduction and sustainable development.

In developed or industrial countries ICT project delivery model is based on self-service through the internet while in developing countries like us it is hybrid model of automated and manual processes. Population using ICT services and its spread up to illiterate people is challenge for ICT projects in India.

Large number of ICT projects in India by Central and State government are undertaken. Many of them are reached to implementation status. Huge funds are allocated for computerization, so fund is not an bottleneck for e-governance in India. Large numbers of web-sites are hosted for public usage by different departments. RTI (right to information) act can be used as basis for which information can be put on web-sites. However, very few projects evaluation or impact analysis is carried out. Hence, experiences are not well documented. Large number of repetitive projects are being executed. Use of standards and integration across departments is missing to a great extent.


12.0 Potential benefits of e-governance projects:

- If ICT projects are integrated considering services required to citizens from all departments together, will provide one stop services to citizens. It should be possible to receive birth certificate, driving license, ration card or passport at one single citizen facilitation counter. Today all these applications may be
existed but citizens have to approach with lot of details to separate citizen centers. Databases are not integrated. This can be achieved by formulating ICT projects at government level rather than at departmental level.

- E-governance is expected to deliver cost-effective and easy to access citizen services result in enhanced transparency, convenience and empowerment, less corruption and revenue growth.
- Improve processing of transactions both within the government and other agencies
- Minimizing the distance between citizens and government by using web enable services
- It is possible to design ICT application which can increase transparency level if project leader desires and ready to take risks
- ICT projects can minimize cost to government for offering services
- Government revenue can be maximized due to proper ICT based follow up method such as issue of timely notices for payment of bills
- New services can be added such as monitoring the status of citizens cases on web or at citizen facilitation centre, electronic fund transfer etc
- Better accessible and faster public service delivery translate into time and resource saving for citizens
- Enhanced accountability reduces corruption
- Creates trust in public institutions / government departments
- Helps for economic and political development

13.0 Overview of Citizen Centric E-governance Applications:
During last 10 -15 years e-governance has taken up different stages. Initially back end processes were computerized mainly to save routine office works. These applications had improved efficiency within government departments but it had hardly any impact on citizens. Phenomenon growth of ICT and its spread since 1998 till grass root level has changed the mind set of e-governance leaders to visualize Citizen Centric e-governance applications. Large numbers of citizen centric applications are now in place in almost all states. Services are being
offered at Citizen Center, specially set for offering services in which Citizens can walk-in and get the service from window operator. Windows are manned either by government employees or by BOT operators. Hence, citizens mainly from rural areas need not have to worry about actual operations of computers. Some of the services are also offered on web-sites but only marginal usage is noticed. Majority of citizens prefer to visit the Citizen centers and avail services.

Partial list of the Citizen Centric e-governance service:

- Issue of Certificates (Birth/death, cast, economic, BPL etc)
- Issue of Licenses (Driving, Shop, Business etc)
- Issue of affidavits (Birth date, name change etc)
- Ration card
- Passport
- Income tax return
- Pension payment
- Payment of bills (Telephone, electricity, water bills)
- Tax payment (Corporation taxes)
- Land Records (issue of record of rights 7/12)
- Application submission for services (Driving license renewal, water connection request)
- Complaints

13.1 Citizens Expectations:
Computerized services provided by government should be simple to understand for all categories of citizens to educated - uneducated or urban - rural population of India. Government services should improve quality of life and should not only improve upon interaction with government.

List of expectations:
- Integration of Services
- Training of operations
- Cost effective solutions, cost should be less than current manual services
• One stop service centers for all departmental services, single point citizen interface
• All most all services are planned only up to taluka level, those should be extended up to village level
• Local language interface
• Mobile phone interface to e-governance applications useful for illiterate rural population
• Security of application
• Easy accessibility
• Harassment free service delivery
• No malpractices for payment of fees for service
• Correct information usage
• Service availability
• Transparency

13.2 Challenges in CCEG (Citizen Centric E-governance) applications:
It is utmost impossible to undertake single integrated e-governance application covering all government Citizen related services. This will call for massive reforms and designing workflow based working within government departments. Departmental head works as project champion for e-governance applications. He has to introduce workflow based concepts and define service delivery commitments. Government departments are undertaking separate projects which do not talk to each other. But it is essential to integrate citizen centric applications by linking these separate sustained applications to satisfy citizens’ needs. Such efforts are yet to be a reality in e-governance scenario since there is no single authority which is responsible for such projects. Organizational structural changes are essential to undertake integrated e-governance projects at government level. Codifications standards are not established, hence not followed same across e-governance applications even within department. It is noticed that separate codification pattern is in use even for district, taluka and village or crop codes.
Meta data standards and E-governance standards are under development by Department of Information Technology. But, government department are not enforced to use same hence variety of data usage is reality. It is essential to link usage of integration standards with project fund release at highest level in government. Since data standards are not followed across the departments large projects are running parallel. Land Records Computerization and Agriculture census are the example for duplication of efforts. This leads to mismatch of data and wrong information generation. Village form 12 gives crop details which is base for conducting agriculture census.

Majority of authorities are strongly against sharing of data due to security and confidentiality. Policy decision in this regards is essential to be issued for creating free exchange of information and data. Right to Information actually permits departmental head to openly release the data. Data for properties registered with registration department is not accessible to corporations to raise property taxes. Such automatic procedures will create correct data and will reduce scope for malpractices.

Web-sites for information availability are not developed from citizens point of view they are prepared department wise which makes difficult to derive required information.

Information usage for decision making is hardly noticed even if workflow based applications are in use for last few years. Usage of BI (Business Intelligence) should be introduced as a concept.

**14.0 E-governance Centers in India and their role:**

**14.1 Centre for e-governance (CEG), DIT Government of India**
Department of Information Technology, Ministry of Communications and Information Technology, Government of India has set up a centre for E-governance with following objective.

Centre for e-Governance (CEG) has been functioning at Electronics Niketan, Department of Information Technology, New Delhi, since August 2000. The Centre show cases several e-governance applications and solutions that have been successfully deployed in the various organizations in the country. It has
Aims & Objectives:
Objective of the Department of Information Technology

- To make India, a Global Information Technology Super Power and a front-runner in the age of Information revolution.
- To bring the benefits of electronics to every walk of life and to develop the Indian electronics industry as a global player.

Vision of the Department:
- To make India an IT Super Power by the Year 2008. The vision translates into a mission – ‘Move works to India’. The Vision objectives are:
  - Creation of Wealth
  - Employment Generation
  - IT led Economic Growth

Role of the Department of IT:
- Pro-active facilitator
- Pro-active motivator
- Pro-active promoter
- Spread of IT to masses and
- Ensure speedy IT led development

Contact Details:
Program Directors, Centre for E-Governance, Department of Information Technology Ministry of Communications and Information Technology, Government of India Electronics Niketan, CGO Complex, Lodhi Road, New Delhi 110 003

(http://www.mit.gov.in/ as on 1 sep 2007)
14.2 IIMA - The Centre for Electronic Governance (CEG):

The Centre for Electronic Governance (CEG) was set up at the Indian Institute of Management, Ahmedabad (IIMA) in October 1999. The Centre was established by IIMA for an initial period of three years (Phase I) with the support of four leading IT companies – Oracle India Pvt. Ltd, HP (formerly Compaq) India Pvt. Ltd, SCO India and CMC Ltd.

During Phase I, the objectives of the Centre comprised identifying applications for developing 'Proof-of-Concept' prototypes, and disseminating knowledge and skills for successful implementation of e-governance amongst the bureaucracy and other stakeholders. After the success achieved in Phase I, the Centre decided to continue its research activities for three more years (Phase II, up to October 2005) with its own resources.

In Phase II, CEG has been focusing on knowledge dissemination activities and developing its portal as a knowledge resource on e-governance in India. In addition to the past activities rooted in the Centre’s main objectives, research on frameworks for evaluating e-governance readiness, project proposals, and other related activities are undertaken.

**The main objectives of the CEG are to**

- Identify ICT applications that can provide improved services to citizens and help the public administration in improving planning, monitoring and administrative processes.
- Demonstrate the feasibility of implementing such applications by specifying broad architecture, detailed design and creating prototype application software (wherever feasible).
- Disseminate the work of the Centre to public administrators and other agencies that promote and use e-governance.

Within the broad framework of these objectives, the Centre takes up the following types of activities:

- Developing conceptual papers on strategies that state governments can follow to introduce e-governance.
• Working with specific departments / programmes to identify opportunities for developing ICT applications.
• Designing such ICT applications, identifying hardware and software resources that would be required to implement such applications.
• Developing the software as Prototypes (wherever feasible) to demonstrate the feasibility of building such applications.
• Conducting cost-benefit analysis of e-governance projects and preparing comprehensive evaluation reports.
• Documenting case studies of successful e-governance applications already developed in the field.
• Designing workshops for sensitizing senior echelons of public administrators.
• Developing papers, reports and films to disseminate the output of the Centre.

**Contact details:**
Centre for Electronic Governance,  
Indian Institute of Management,  
Vastrapur, Ahmedabad-380 015.  
Phone: +91-79-2632 4834  
(http://www.iimahd.ernet.in/egov/ as on 1 sep 2007)

**14.3 National Institute for Smart Government (NISG), Hyderabad:**  
National Institute for Smart Government (NISG), Hyderabad is a not-for-profit company incorporated in 2002 with NASSCOM (National Association of Software and Service Companies), Central and State governments being the principal promoters.

NISG is being shaped as an institution of excellence in the area of e-governance with focus on Strategic Planning, developing appropriate architectures and standards, providing high-level consultancy services and capacity building at the national level. NISG is constituted under a Public Private Partnership model with a view to combine the immense potential and resources of the private sector with the principles of accountability and transparency of the public sector. The goal of
NISG is to lead the nation to a preeminent position in providing integrated online services to the citizens and businesses.

The vision of National Institute for Smart Government (NISG) is to establish itself as a centre of excellence in e-government and to become the focal point of major e-government activities in India and in the region.

Guiding Principals of NISG:

- Leveraging partnerships and alliances
- A less paper office – with digital workflows
- Making impact through web presence
- Being a repository of knowledge on e-Government
- Maintaining the highest professional standards in its functioning

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Hyderabad-500032 (Andhra Pradesh) INDIA
Tel: 91 040 23006683/84, 23002983/84     Fax: 91 040 23006685
E-mail: info@nisg.org
(http://www.nisg.org as on 1 sep 2007)

15. Experience survey of Citizen centric e-governance applications:

15.1 : Citizen centric e-governance Applications within Maharahstra

15.1.1 Courts:

Project name: District courts Computerization in Maharhastra

Project Description: Client / server based software is developed to improve productivity of the judicial staff for efficiently disposal of and follow up cases registered with various Courts. Software also provides ICT based Judicial Services to the Judges, Advocates / Lawyers and Citizen to interact with each other. Software caters for workflow based back-end process development and also provides excellent web interface to Citizens providing almost all services.

Location/scope: All districts (35) and taluka (358) courts in Maharahstra

Services: Case information for status of the court cases and court orders for Citizens on web
Use of Touch screen kiosk and display screen to disseminate most relevant information in the Courts

Making case information available using interactive Voice Response system

Grievance reprisal system for citizens

Facilities to Citizens:

- Filing of case and generation of acknowledgement receipt.
- Information about objections / registration of case is made available at query counter.
- Case Status can be immediately informed to the litigant.
- Case History can be shown to the litigant.
- Daily Board to be made available on Facilitation Centre.
- Copying Branch, Extension Counter can be opened.
- Receiving application for certified copy, delivery of copy, and transaction about balance payment (refund/deposit) may be made at the counter.
- Information normally asked in Nazarat about deposit of amount by the party can be answered immediately.
- **Check the status of the case:** This facility helps in knowing the next date, viewing Roznama, history of the case etc. This facility can be used by knowing the case number, 15 digit case code or just by typing the parties’ name.
- **View the orders and Judgments:** One can view the orders or judgments given in specific case. Daily the Judgments and orders are uploaded on the web site.
- **Check the readiness of the copy:** After applying for the certified copy in the court, one can check about the readiness of the copy.
- **View the Cause list / Daily boards**
- Download various forms required to be filled in the courts
- All court related manuals are made available on web

Current Case Status: This will display the online status of the case being heard on the respective day. The display may be on a TV or Screen located centrally
in court premises as like railway timing status displayed on railway station. The status will display the Case No (Along with the name of the appellants and advocates) which is currently being heard in the respective Court. It will also display the case which is next due for hearing. This will enable the people to manage properly the time schedule and will guide to proceed to the respective court rooms.

In fact all the queries that are normally asked and satisfied by Court Administrative are made available.

**Outcomes:**
- Efficient system of court management
- Drastic reduction of pendency for number of cases speedy disposal of cases
- One stop centre for all activities.
- Persons coming to court will not be miss-lead.
- Unnecessary rush in the court and departments like copying and nazarat will be avoided.
- More transparency in Administration.
- Immediate compliance for certain works.

**Earlier problems:** Pendency period was too long, not possible to monitor and difficult to access court orders without use of query system.

**Features:**
- Provide all back-office activities of the Judiciary online.
- Facilitate Judicial Management to track the critical issue of Pendency.
- Provide online interface for the Citizens / Advocates to query the system.
- Assessment of the officer / judges automatically based on handling of cases
- Local language interface
- Most economical model due to use of open source technology

**Timeframe:** Project started in 1997 implemented in all locations during 2003
Software platform: LAMP (Linux-OS, Apache-Web Server, MySQL-RDBMS, PHP-Scripting Language), C Application developed by National Informatics Centre, Pune

Drawbacks: Nil

(http://court.mah.nic.in/courtweb)

15.1.2 Project name:

SETU: The Integrated Citizen Facilitation Centers (SETU) at Collector office and Thashildar offices for offering services using ICT

Project Description: SETU centers are set to offer various services to citizens mainly services offered by Revenue department. Services such as issue of certificates, permits and affidavit etc more than 100 services are being offered. SETU centers are managed by Setu Society. Setu Society is A Society promotion of Excellence and Transparency in public administration for better Understanding of the requirements of the citizens in their interface with Government.

Location/scope: Revenue offices, all district (28) and majority of Taluka offices (298)

Services: Issue of Certificates, permits and affidavit

Single window clearance of 83 important certificates (includes renewal of leases, permits & licenses)

- Quick redressal of public grievances
- Common registry of letters, petitions for all sections of the office.
- On line pendency monitoring of all above
- To provide services after office hours & on holidays also in order to save Time, -- Money & Energy of the public

Outcomes: Faster services to Citizens

Features:

- Transparency
- Public Accountability
- Responsiveness
• Sensitivity
• Speed decision making
• Openness

**From the citizens perspective**

• One-stop forum for citizens
• Prompt settlement of the routine matters
• Facilitation on formalities
• Reduce visits; increase confidence in the administrative process
• A Quality front end
• Empowering citizens through easy dissemination of information
• Quality output.
• Certificates / documents must be clear and legible and on a good quality paper, preferably without any cutting of sentence, etc.
• Service on holidays and after office hours.
• The center must work on convenient hours. This must operate on at least
  2-shift basis, and on holidays.
• Possibility of transacting other business
The center may provide other facilities like ATM's, banking, PCO, photocopying, stamp sale, digital photography, tea / coffee, etc.

**From the Government’s perspective**

• At no extra cost to the government
• Instead of creating new posts, it should be possible to run such centers through NGO's co-operative of unemployed youth on an annual contract or be set up on a BOT basis.
• Accountable Government through well-defined citizen’s charter
• Easy monitoring to ensure timely disposal
• Use managerial time to reform the administrative process
• Escalation if the designated levels fail
• Efficiency not at the cost of credibility
Rule based system and controls built in the program should identify any deviations before any certificate / permission is issued. Continuous updating of record room with disposed references and files should also be ensured.

**Timeframe:** Operational since 1999

**Software platform:** As per BOT, majority Linux

**Cost:** SETU is undertaken as BOT project

**Drawbacks:** Back office is not automated.

- Services of other departments are not included.
- Software package is not uniform, each BOT vendor has developed his own software, hence no uniformity.
- BOT vendors work is not monitored on regular basis.


[www.redhat.in/](http://www.redhat.in/)


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**15.2  Citizen centric e-governance Applications within India**

**15.2.1  Project Name:**  **VOICE:** Vijaywada (versatile) Online Information Centre (VOICE) by CMC Ltd, Andra Pradeash

**Project Description:** Voice delivers municipal service, Departmental work automation, Citizen interface, Town planning, taxation, public health, estate, and engineering departments are covered.

**Scope/locations:** Five Kiosks, one million people, 70% revenue is through taxation

**Services:** Building approvals, birth/death certificates, tax collection (property, water and sewerage taxes), advertising space availability, online status of tax payment, grievance registration, issues of trade licenses

**Outcomes:** Reduced corruption, convenient access to services, increases revenue of municipal government, quicker services, 97% grievances are solved.

**Earlier problems:** Bribery, harassment, frequent trips, officers un-accessible

**Features:** Use of lotus notes for grievance workflow, use of GIS, Data entry outsourced, Mr Arvind Kumar Municipal commissioner’s involvement in project
monitoring and designing, good core team, system is being operated by municipal staff, major administrative reform

**Timeframe:** 18 months implementation Rolled out Mat 2000

**Software platform:** D2k, oracle 8.x, shree-lipi, min 2000/nt, client / server

**Training:** Software usage: 220 staff members, Basic IT training to 60 officers, system administration to 8 core team members

**Cost:** Rs 18.7 million, 48% hardware and system software and 52% application development

**Drawbacks:** Project is not replicated. Limited Efforts at New Delhi, Raipur corporations

(ungan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN001773.pdf)

15.2.2 **Project name:** CARD computer-aided Registration of deeds Andhra Pradesh

**Project Description:** As per India stamp act, documents are required to be registered for transactions of immovable property, after paying stamp duty as per prescribed rates. Important documents as will, property dealings etc. Many number of type of documents are also registered for legal purposes. The registration procedure involves number of steps as valuation of property, preparation of legal documents on prescribed stamp paper with all enclosures, payment of stamp duty, transfer duty and registration fees, signature on documents in sub-registrar of office along with two witnesses, entries in the register book and handing over copy to citizens. The project consists with nine major tasks, and sixty four sub-tasks. The project was launched in May 1998 and all sub registrar offices were covered up to 2002.

**Locations / scope:** All 387 land registration offices in Andhra Pradesh, 90% revenue through stamp duty, 3.4 million documents per year, 60% documents are related to agriculture properties.

**Services:** Transparent and uniform valuation procedure accessible to citizens, online registration of documents (filing) using online method of scanning of the documents, photograph and finger print storage as identification
Outcomes: Registration act was amended for use of computers and storage of documents electronically. Transparency in valuation system, better document management system for storage, indexing and retrievals, Speedy registration procedure are introduced.

AP government decided to train senior public administrators for use of technology to led future e-government projects.

Earlier problems: Non-consistent valuation of properties, Several days to complete registration, high level of corruption, ill maintained storage of documents

Features: Implementation required considerable reengineering, field personnel involved in re-engineering, Head of the department visited throughout and conducted several workshops, supportive role of principal secretary and minister of revenue, Major data entry in-house and also outsourcing of data entry for EC, Seven versions of software in four months, Data processing officers were responsible for installation of software, inauguration at each sub-registrar office by local political leader which increased political awareness and support, Local language interface, networking of servers, website for registration information.

CARD Project attributes 45% change management, 35% re-engineering, 15-20% application software development, 5% other factors.

Software platform:

Training: 1200 data entry operators – 2 weeks
75 Data processing officers (DPO) – six months
9% project cost on training (Rs 13 million)

Training by private company

(http://apit.ap.gov.in/pages/e-Governance.htm

15.2.3 Project name: Government School Teachers transfers, Karnataka

Project Description: Teachers transfer procedure in Karnataka is fully made automatic, transparent and reducing corruption level to minimum is introduced
using ICT. Teachers are suppose to submit request for transfer in prescribe form with reasons. Also vacancy chart for teachers’ vacant posts is prepared. Priority of reasons is predefined in consultation with related departments. List of vacancies and request list of teachers are prepared and displayed at each district place. Any one can view. Based on these lists, teachers are counseled as per their priority seniority list. Transfer orders are printed there itself. The project is executed by education department.

**Location/scope:** 15,000 teachers transfers per year, 2000 per district

**Services:** Transfer request list published district wise with reasons priority, vacancy list also published, transfers by counseling method

**Outcomes:** Transparent hence drastically reduced corruption system, optimization of teachers and their postings, fast process of teachers posting

**Earlier problems:** High level of corruption, multiple issue of transfer orders by different authorities, political pressures, vacancy post mismanagement

**Features:** Decisions of transfers is based on predefined priority list. Reasons are terminal ill, suffering form serious illness, physically handicapped, spouse in government service, verge of retirement, working at same place more then 7 years, female applicants having less than three years of service remaining, male applicants having less than three years of service remaining etc.

- The system corrects the existing imbalances of too many posts and teachers in urban areas to the detriment of interior villages; and keeps the educational needs of children foremost in mind.
- It freezes posts and/or shifts posts where teachers are in excess or where additional teachers are not required.
- It reduces the trauma of teachers rendered surplus by giving them priority in transfers and placements.
- The system is technology (ICT)-aided, teacher-friendly, and gives no scope for any vested interest to creep in.

**Timeframe:** Developed in 2000

*(Towards Excellence in E-Governance, K.B.C.Saxena’ Management Development Institute, Gurgaon, India,)*
15.2.4 **Project name: SWAGAT:** State Wide Attention on Grievances by Application of Technology

**Project Description:**
E-Governance applications in the recent past have demonstrated the important role of the Information and Communication Technologies (ICT) playing in the dominion of rural and urban development. Several e-Governance projects have attempted to improve the reach, enhance the base, minimize the processing costs, increase transparency, and reduce the cycle times. Gujarat states have initiated the creation of GSWAN(Gujarat state wide area network) and State Wide Area Networks (SWAN) to facilitate electronic access of the state and district administration services to the citizens in Gujarat. SWAGAT (state wide attention on grievance by the application of new technology)is a combination of digital management and GSWAN technology to make public grievance system transparent, accountable and responsive for both side. It makes the travel of the grievance instant and the system below is sensitized and held accountable.

SWAGAT - State Wide Attention on Grievances by Application of Technology, is a unique online grievance redressal system to put the common man in direct touch with the highest office in administration.

Citizens can register a grievance on any day, & most should be resolved without need for recourse to the SWAGAT mechanism, but the 4th Thursday of every month is a SWAGAT day and citizens can walk in any district ‘Jan Sampark’ office and register their complaints. Complaints are divided in 3 categories. Policy matters, Long Pending and First Timer. The focus is on long pending issues. Complaints are entered ‘ON Line’, using package developed by NIC.

All complaints are registered and sent to the relevant departments for redressal. These departments have to be ready with their responses by 3 pm the same day. The DDO, Collector or the SP concerned have to remain present for the video conferencing meeting and the Chief Minister (CM) personally addresses these issues and recommends appropriate steps to resolve them.
The record has been preserved in the ‘SWAGAT’ package and the log is maintained for each case separately.

The ‘SWAGAT’ is an administrative tool, which increases the administrative efficiency of Government Machinery. With the CM himself keeping a vigilant eye on the pending issues, there has been a marked change in grievance redressal.

**Location/scope:** 2300 government offices spread over Gujarat from Taluka to state level CM office. Web application and Video conferencing is used to directly communicate with CM and senior officials by any Citizen. Application is in use since 2003 since then about 25,000 grievances have been effectively resolved.

**Services:** Complaints registration to any problem to any one in government.

**Outcomes:** e-Transparency is demonstrated by this application. The system has reduced the response time & cost of settling grievances: a benefit for both Government & citizens. The direct resolution of grievances, SWAGAT has had an even more powerful indirect impact in encouraging state officials to resolve grievances before they reach the SWAGAT stage, given the significant threat that the CM may become personally involved.

**Earlier problems:** It was not possible to expect any action on complaints, which may be serious in nature. Also citizen may not know whom to address the complaints. With SWAGAT citizens only have to make complaint with details. Posting it to appropriate office is done automatically. Due to complaint monitoring by CM himself complaints are being taken care off. Hence government functioning is become transparent and efficient.

**Features:** Effective use of ICT i.e. web and Vedio conferencing

**Software platform:** Web enabled

**Drawbacks:** Since only once a month complaints are monitored there may be lot many pending complaints.
15.2.5 Project name: Akshaya : Government of Kerala, integrated web-site for Gateway to opportunities, towards knowledge society
www.akshaya.net

Project Description: Akshaya is the large scale project of Kerala government to percolate ICT usage till individual families. E-literacy with minimum cost, village level internet facility to make use of number of services from government and private is aimed. Public private partnership model is used for implementation. The project has received number of awards and highly appreciated by media. Numbers of case study reports are available on site.

Location/scope: 5000 e-kendras ICT centers, spread over Kerala, each covering about 1000-3000 families managed as PPP centers
6.4 million people to get trained, released since Nov 2002
Creation of 50,000 employment, 80 project staff

Services:
Providing ICT and multimedia training, IT enabled vocational training
Proving ample content in local language relevant to citizens
Providing Skill set necessary to use ICT in daily life
Offering corporate services as business process outsourcing, hardware sales and services, travel and tour arrangement, financial services, rural e-banking
Internet facilities
Computer services for digital photography, word processing, graphics etc
Courier services

Outcomes:
E-literacy : At least one person per family is trained to use ICT service
5000 ICT centers are in operations offering services
Creating large scale employment about 1000 per district
Setting up of rural infrastructure for ICT which can be used by private and government
Cheaper communication facilities through internet for e-mail and chat
Facilities for children club, women club, farmer club’s
Access to ICT4D tools in telehealth, agriculture resource management
Increased PC and ICT penetration
Political members are aware of the project and visiting e-kendras
E-pay utility at one counter

Earlier problems: Such facilities were not available

Features: State level committee consists with political and IAS members and government senior staff, district level committee also includes members from local bodies. The project is integrated across government departments.

Timeframe: Project initiated in 1998, first rollout in one pilot district and then state wide rollout since Nov 2002

Software platform: Web –enabled

Training: E-learning features

Cost: 500 cores public investment, Turn over 21,000 per center

Drawbacks: NIL

(www.akshaya.net/-web-site of Kerla government
www.keralaitmission.org/web/sec3/
www.thehindu.com
indiagovernance.gov.in
www.i4donline.net)

15.2.6 Project name: MCA21: e-governance project of Ministry of Company Affairs to offer all services electronically using almost paperless procedures

Project Description:
Ministry of Company Affairs (MCA), Government of India (GoI) has initiated MCA21 program,(Providing 21th century services) for easy and secure access to MCA services in a manner that best suits the businesses and citizens. The program goals have been set as follows keeping in mind stakeholders' needs:

Business: enabled to register a company and file statutory documents quickly and easily

Public: to get easy access to relevant records and effective grievances redressal
Professionals: to be able to offer efficient services to their client companies

Financial Institutions: to easily find charges registration and verification

Employees: to ensure proactive and effective compliance of relevant laws and corporate governance

MCA21 is envisioned to provide anytime and anywhere services to businesses. Project is being executed using PPP model, TCS will execute the project for 6 years and will hand over to MCA for usage.

Location/scope: PFO at all regional offices and all services using web portal

7.26 lakhs companies

Services:

Virtual Front Office (VFO): is set up where MCA services can be accessed using web portal and digital signature features.

The user can avail the following services on MCA21 portal:

- e-Filing
- Viewing public document
- Requesting certified copies
- Registering investor complaint
- Tracking transaction status
- Introduction of anywhere, anytime secure electronic filing for MCA transactions;
- Adaptation of all statutory forms to e-forms for electronic filing;
- Use of Digital Signatures to ensure the security of electronic forms and documents in conformity with the Information Technology Act, 2000;
- Convenient multi-modal methods of payment encompassing existing payment mechanism and electronic payment options using credit cards and Internet banking;
- Access to the services optimized for use from a typical home Internet connection;
- MCA offices to use best-in-class information technology solution that will include electronic workflows and sophisticated document storage and retrieval systems, with significant paper reduction;
• 53 of Physical Front Offices located nationwide that will provide facilitation services for electronic filing;
• Nearly 5 crore pages of legacy corporate documents digitized for on-line access using Internet;
• Easy reporting of grievances by investors through MCA portal for easy and speedy redressal;
• Use of technology solutions that allow easy adaptation of evolving technologies while providing the robustness and scalability to the system;
• National Data Center to provide uninterrupted 24 x 7 operations;
• High bandwidth nationwide connectivity across all offices of MCA and facility to allow access to several thousand users at the same time;
• Disaster Recovery Mechanism with a state-of-the-art facility to restart operations within 12 hours in the event of a natural or man-made disaster.

**Physical Front Office (PFO):** Physical front offices are set at RoC’s where citizens can submit paper based documents and designated staff or agency using digital signature provides services to citizens using portal.

**Outcomes:**
• Expeditious incorporation of companies
• Simplified and ease of convenience in filing of Forms/ Returns
• Better compliance management
• Total transparency through e-Governance
• Customer centric approach
• Increased usage of professional certificate for ensuring authenticity and reliability of the Forms / Returns
• Building up a centralized database repository of corporate operating
• Enhanced service level fulfillment
• Inspection of public documents of companies anytime from anywhere
• Registration as well as verification of charges anytime from anywhere
• Timely redressal of investor grievances
• Availability of more time for MCA employees for monitoring and supervision
Features:
Setting up the Digital Signature/PKI delivery mechanisms and associated security requirements
Back office activities are computerized such as registration, scrutiny, and submission of yearly documents etc using workflow based procedures.
Payment by credit card and internet banking and also using challan payment

Timeframe: Project launched on 18 Feb 2006, Project contract on 1 March 2005

Software platform:

Training:

Cost: 345 crore

( http://pib.nic.in/release/release.asp?relid=19851
http://www.mca.gov.in/ )

15.3 Citizen centric e-governance Application world wide:

15.3.1 Project name: Directgov the official government web-site for Citizens of UK

Project Description: Directgov is the website of the UK government providing information and online services for the public. The content is developed by representatives from the many government departments that contribute to the site, working with a central Directgov team.
It provides information from across government departments and elsewhere on topics ranging from completing your driving test and parental leave to finding a job or a local service. One can find information and services by searching or browse by topics, such as:
money
employment
travel
education
and find information by audience groups, such as:
disabled people
the over 50s
parents

Access government services online
Citizens can complete a number of government services online – from booking a driving test and taxing a car to renewing ones passport or applying for a student loan.

**Location/scope: web based**

**Monthly figures**

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<th>Visits</th>
<th>Unique users</th>
<th>Page impressions</th>
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**Services:** Citizens can get information direct from government
Access to information and online services 24 hours a day, seven days a week
Help and advice via mobile and digital service
Access to local and central government services
A user friendly and secure service
Directgov is available on every internet-enabled mobile phone. Citizens on their move or if he can not have access to a computer, he can use phone to get the latest travel information, find nearest doctor, learn about help with childcare costs and much more.
Directgov can be accessed through TV
Main links are Directories, Contacts, Do it Online, News room
Browsing can be done either by subject or by people type (Young people, Parents, Disabled people, Over 50’s, Britons living abroad, Caring for someone).

All related information and related services are provided at same access point. Contact details as Contact point, address, phone number, text phone, fax, e-mail and web-site address is provided.

Online services are categorized by subject or department and link is provided after step by step explanation.

**Outcomes:**

Government interface redesigned and integrated across various departments and organizations to make it from Citizens point of view. It is much more than just linking various web-sites. Step by step explanation for all information and services is provided.

Directgov was launched in April 2004, replacing the UK online portal. Rather than just providing links to government departments as UK online had done, Directgov carried its own material, designed around users’ needs. The first three sections were for motorists, disabled people and parents.

It is Simple to use and understand.

**Earlier problems:**

As part of the Transformational Government strategy, an annual report was published in January 2007 stating that hundreds of government websites would be shut down "to make access to information easier" for people. In future, most government information will be streamlined through two main 'supersites' – either Directgov (for citizens) or Businesslink.gov.uk (for businesses).

**Features:** Access is provided using Citizen –id with number of security features as passwords and digital signature.

**Timeframe:** launch in April 2004


15.3.2 Project name: Citizen Service Centers in Bahia, Brazil

Project Description:
The state government of Bahia has created Citizen Assistance Service Centers (SAC) that bring together federal, state, and municipal agencies in a single location to offer the services that citizens most frequently need and use. The centers have been placed in locations convenient to the public, such as shopping malls and major public transportation hubs.

Location/scope: 3 Large size SAC   15 Medium size SAC
   5 Small size SAC   500 services being offered
   SAC facilities using mobile vehicle

Services:
The SAC centers bring multiple government services together in a single location. At this time (June 2001), 29 different service agencies are part of the SAC system. Participating agencies include the State Department of Motor Vehicles, the Social Security Ministry, Secretary of Agriculture and Agrarian Reform, Municipal Public Services Secretariat, Labor and Social Action, Public Safety, the Federal Police, Small Claims Court, the State Water and Sanitation company, and Bahia's private electric company. Now a citizen can register their vehicle or get a driver’s license at the SAC. During the same visit, they can get a national identification card, apply for unemployment benefits, look for a new job, get a labor identification card, submit a legal case in small claim's court, get a passport, register a business complaint, check on their retirement eligibility and benefits, etc. Over 500 separate services are offered by the participating agencies.

Outcomes: Customer satisfaction studies are carried out every six months to evaluate the performance of the SACs. The public's evaluation has been tremendous. In the most recent survey, over 89% of citizens evaluated the SAC performance as "excellent." Meanwhile, 7.3% of citizens rated the SAC service as "good," while 2.1% considered it "acceptable," and only 1.3% said it was "bad."
The SAC experience in Bahia demonstrates that it is possible to bring about tremendous improvements in the quality and efficiency of government services without significant back end reengineering.

Selected as international replicable project

**Timeframe: Operational since 1995**

(Permanent URL for this page: http://go.worldbank.org/3RS8GBI6W0 unpan1.un.org/intradoc/groups/public/documents/un/unpan001039.pdf)