e Government Technology Framework

APHRDI, 17th April 2017

Dr K S Vijaya Sekhar
Research Center for eGovernance
IIIT Hyderabad
eGovernance

- e-Government refers to the use of information and communications technologies (ICT) to improve the efficiency, effectiveness, transparency and accountability of government – World Bank.
- e-Government can be seen simply as moving citizen services online
- In its broadest sense it refers to the technology-enabled transformation of government
- Governments’ best hope to reduce costs, whilst promoting economic development, increasing transparency in government, improving service delivery and public administration, and facilitating the advancement of an information society.
E-Governance Project Lifecycle

Values
- Transparency
- Accountability
- e-Inclusion
- Access
- Choice
- Privacy
- Trust
- Purpose & role of Govt.
- e-Democracy

Needs Assessment
- Define clear vision & objectives
- Prioritization of services and projects
- Incorporate domestic and global learnings
- Identify institutional structures & capacities for implementation
- Define funding requirements
- Define monitoring and evaluation approach...

Critical assessment of current business processes and pain areas
- Best practices in similar environments
- Assess legal framework and current limitations
- Assess current ICT systems and their ability to support future plans
- Assessment of current capacities at all levels and their preparedness for e-governance...

Future State Definition
- Process reengineering and to-be process definition
- Identity IT enablement opportunities and requirements
- Define changes to the legal and regulatory environment
- Develop People change and capacity building plan
- Develop awareness and communication requirements...

Implementation approach and sourcing
- Define implementation approach and phasing plan (functional and geographic)
- Develop vendor evaluation and selection criteria
- Develop KPIs and performance levels for services and systems
- Develop RFP
- Bid evaluation and vendor selection

Develop and implement IT system
- Definition of detailed functional and technical requirements
- System design and development
- Software quality assurance, acceptance testing and auditing
- Training and capacity building
- Change management and project communications
- Project documentation
- Project go-live

Operate and sustain
- System operations and maintenance
- Software change management
- Rollout services and systems (functionality and geography)
- Objectives and benefits evaluation and reinforcement
- Sustained change, capacity building and communications...

Business Models
- System thinking / Dynamics
- Complexity studies
- Forensics
- Ontology & Metadata

Trends
- Digitization
- Mobile Governance
- Cloud Computing
- Social Media
- Analytics
- System thinking / Dynamics
- Complexity studies
- Forensics
- Ontology & Metadata

Source: NISG
Public Service Delivery Framework

The essence of democracy is that Citizens should access all necessary services from government in trouble-free manner

Repeated trips, travel expenses, time consuming and Middle-men corruption - Citizen’s are not comfortable

De-motivation for Government officials - More paper work, Long Internal procedures, Tedious record keeping

Technology Interface in Mid 90’s & early 2000’s (Win-win) to ignore Urban – Rural Digital Divide
National eGovernance Plan (NeGP) Vision

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

Mission Mode Projects (MMPs)
Central (13), State (14) and Integrated (7)

Infrastructure
State Wide Area Network (Data flow)
State Data Centre (Back-end)
State Service Delivery Gateway (Data Control) and
One lakh Common Service Centers (CSCs) to cover 6.40 villages across the country under Public-Private-Partnership (PPP)
e-Governance Service Delivery Framework

Figure 3: Service Delivery Architecture

Source: DeitY
Citizen / Common Service Centers

• To deliver Government, Private and Social services under 3-tier architecture
• State Designated Agency (SDA), State Center Agency (SCA) and Village Level Entrepreneur (VLE)
• Zonal setup
• 7,000 kiosks – 700 exclusively for women
• Uniform standards, signage for easy identity
• Push & Pull Services
• Digital Certificates, Citizen Charter
<table>
<thead>
<tr>
<th>Type of Contract</th>
<th>Duration (years)</th>
<th>What the Private Contractor Receives</th>
<th>Nature of Private Contractor Performance</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Contract (outsourcing)</td>
<td>1-3</td>
<td>Fee from government for performing a non-core service</td>
<td>Definitive, often technical type of service</td>
<td>Website design and management, ICT Capacity Building</td>
</tr>
<tr>
<td>Management Contract</td>
<td>3-8</td>
<td>Fee from government for the service and a performance-based incentive</td>
<td>Manage the operation of a government service</td>
<td>Call center staffing; Seat Management, Parking enforcement, regional water supply management</td>
</tr>
<tr>
<td>Lease</td>
<td>8-15</td>
<td>All revenues, fees or charges from consumers for the provision of the service; the service provider rents the facility from government</td>
<td>Manage, operate, repair, and maintain (and maybe invest in) a service to specified standards and outputs</td>
<td>Land for ICT Infrastructure Development, Existing airport or port facilities</td>
</tr>
<tr>
<td>BOO &amp; BOOT</td>
<td>15-25</td>
<td>The government mostly pays the service provider on a unit basis</td>
<td>Construct and operate, to specified standards, the facilities necessary for service provision</td>
<td>ICT Infrastructure; e-procurement systems; e-business portals; Network of Kiosks</td>
</tr>
<tr>
<td>Concession</td>
<td>15-30</td>
<td>All revenues from consumers service provision; the service provider pays a concession fee to the government and may assume existing debt</td>
<td>Manage, operate, repair, maintain and invest in public service infrastructure to specified standards</td>
<td>Telecom operations and expansion, New airport or seaport facilities, toll road or bridge</td>
</tr>
</tbody>
</table>
Nine Pillars of Digital India

1. Broadband Highways
2. Universal Access to Phones
3. Public Internet Access Programme
4. E-Governance – Reforming government through Technology
5. eKranti – Electronic delivery of services
6. Information for All
7. Electronics Manufacturing – Target NET ZERO Imports
8. IT for Jobs
9. Early Harvest Programmes

Source: DeitY
eGov Challenges

• Wired network is unreliable and expensive
• Language barriers with Computers
• Network bandwidth load balancing
• Is e-Gov really leads to Transparency & corruption free society?
• Is Mindset Change required for successful e-Gov initiative?
• Is e-Gov really reduce digital divide?
• Is AI / Data Analytics inroad into e-Gov means decreased employment opportunity?
• Is e-Gov on cloud means security risk?