Chhattisgarh Online information for Citizen Empowerment - CHOiCE *

Shri Aman kumar Singh
And
Mounika Nandyala

1. Goals & Objectives

The basic goals & objectives of implementing CHOiCE (Chhattisgarh Online Information for Citizen Empowerment) Project are:

• To develop a robust system which can handle at least 30,000 named users and 3,000 concurrent users,
• To establish electronic citizen service centers across Chhattisgarh State to deliver more than 131 e-governance services.
• To ensure the stability, availability, and security of the service centers with a strong Server end support.
• To introduce a ‘single window’ experience for residents, enabling them to pay tax, electricity, and water bills, search for property records, and apply for passports online.
• To improve communication between government administrators and citizens by building an interactive Web portal to disseminate information and submit grievances.
• To adopt transparent, best-practice business guidelines, ensuring staff and residents track the progress of a payment or query, enhance efficiency and productivity as a result of automating manual processes.
• To lower the costs by adopting a centralized architecture, enabling the platform to be administered and supported from one location.
• To create a centralized database to store critical business data for accurate and correct information since these applications have legal implications and was to handle personal and private information of the citizens.
• This system is also destined to provide easy access to information by enabling senior managers and staff to access data across different departments via a web-based interface.
• This system also has one goal that data duplication by creating a single data entry point is also achieved.

2. Spread of Project service users

CHOiCE is a One Stop Window and integrated with other government departments like Municipality, District Collectorate, Urban Development Authority, Regional Transport Office, Panchayat, Rural Development Department & Social Welfare Department, Public welfare Department, Education Department, Health Department, Electricity Dept, and

*This chapter is re-produced with permission from the book "Transforming Government, eGovernance Initiatives in India.", Editors: RK Bagga, Piyush Gupta, Published by The Icfai University Press, 2009.
Police Department. Presently, more than 30 G2C and numerous G2B secured services for all the requirements of citizen are being provided. CHOiCE agents appointed by concern district collector work as notary and extension of government office as per rules framed under IT Act 2000. It is the only project which fully compliant with IT Act 2000. Entire work flow involving citizen interaction with government has been design to flow electronically so that 24X7 availability of government is ensured through these CHOiCE agents.

3. Services provided

Services Provided Under CHOiCE Project

- Certificates: Creation and distribution of certificates for income, domicile, caste, Birth, Death.
- Public Distribution Services (PDS): Issue of Ration Card etc.
- Grievance Handling: related to unfair prices, non-availability of doctor. Online filing and receipt of Information relating to the Right to Information Act.
- Link with other e-government projects: Registration, Land Records, Driving Licenses etc.
- Information Dissemination: Disseminating Information relating to government schemes, entitlements etc.
- Utility Payment: Payments relating to electricity, water bills property taxes etc.

4. Geographical spread of project implementation

In CHOiCE, Web based application has been developed which is easily scalable upto the limitations of internet availability. CHOiCE has an ability for an increasing number of organizations like Municipality, District Collectorate, Urban Development Authority, Regional Transport Office, Panchayat, Rural Development Department & Social Welfare Department, Public welfare Department, Education Department, Health Department, Electricity Dept, and Police Department to easily share a single distributed system.

5. Project Timelines and milestones

Project Timelines: The “CHOiCE” Project was formally inaugurated by the Hon’ble Chief Minister of Chhattisgarh along with Minster (IT), Secretary (IT) and CEO (CHiPS).The event was well publicized in all the national and local newspapers. The project was formally inaugurated at Raipur at the Collectorate Office on 30th October 2004. Project Rollout: - The project has been successfully rolled out in the city of Raipur and very soon it will be rolled out in the remaining parts of the State. Current Expansion:- The project has been rolled out in five districts of Chhattisgarh viz.
- Rajnandgaon
- Durg

*This chapter is re-produced with permission from the book "Transforming Government, eGovernance Initiatives in India.", Editors: RK Bagga, Piyush Gupta, Published by The Icfai University Press, 2009.
• Bastar
• Bilaspur
• Surguja

Future Expansion: - In Future the project will be rolled out in remaining 12 districts of the state.

Milestones

• CHOiCE is the biggest open source e-Governance project in our country.
• Digital workflow of documents from one office to another.
• The project is first of the sort in the country to use three level security which includes bio-metric authentications and digital signatures.
• For the first time in the country, Private Citizens (CHOiCE Agents) have been notified as Public Servants under IT Act thereby enabling them to process government document
• Robust Application Software which has been tested for 3000 concurrent user
• The project is IT Act 2000 compliant and provides legal validity to its electronic transactions.
• More than 2 lacs certificates already issued.
• Rural CHOiCE is also under implementation in the state as CSC project.

6. Direct cost and time savings to avail services

Cost savings to avail services The cost incurred by the user to use the services provided by CHOiCE , the government of Chhattisgarh exercises the powers conferred under section 90 read with section 6 of the Information Technology Act, 2000 (No. XXI of 2000). It has made rules to carry out Electronic Governance with respect to the Notified Citizen Services to provide any appointment, functions, regulation and liabilities of Authorised Citizen Services Agents; and to provide incidental or related matters thereto. The service charge for the Notified Citizen Services involving not more than one page each of application or the appropriate desired document, the charges to citizen are limited to Rs.15/- to be made at the time of making application and Rs.5/- at the time of printing the certificate. For Information Services and Public Grievance Redress Services, the charges are Rs.10/- and for using application status enquiry services through these agents Rs. 2/- needs to be paid by the citizens. For each additional document the agents are authorized to charge Rs.2/- extra.

Time savings to avail services: Availability of 24x7 online Government Services: This is in line with the true spirit of citizen centric governance. Normally, accessing governmental services is not an easy and pleasant experience. For some work, one has to visit offices repeatedly. Availability of services online at all time is a great effort in creating a responsive government.

7. Direct cost and time savings to deliver services

Cost savings to deliver services: Administrative and operational cost savings by streamlining the activities with vendors/suppliers. Type of Transaction Charge to citizen Choice Agent Share Government Share Utility provider to pay Certificates Rs 20.00 Rs

*This chapter is re-produced with permission from the book “Transforming Government, eGovernance Initiatives in India.”, Editors: RK Bagga, Piyush Gupta, Published by The Icfai University Press, 2009.
18.20 Rs 1.80 Rs 0.00 Utility Collection(Electricity) Rs 2.50 Rs 5.00 Rs 0.00 Rs 2.50 8.
Direct time savings to avail services (This refers to the actual time spent by the users for
availing selected services in the existing system as compared in the manual system. In
case a 3rd agency study has been done, kindly attach the said report as reference
documents)

Time savings to deliver services:
  • Faster decision making/ less of file movement.
  • CHOICE initiative has curtailed the waiting time for certain documents from 15-
    20 days to just 1-2 days.

8. Replication

After Raipur, The project has been rolled out in five districts of Chhattisgarh viz.
  • Rajnandgaon
  • Durg
  • Bastar
  • Bilaspur
  • Surguja
In Future the project will be rolled out in remaining 12 districts of the state.

9. Implementation model

CHOiCE has been designed as a solution for all citizen needs. It is implemented on
decentralized PPP model where any private person with requisite infrastructure and
qualification can be declared as CHOiCE agent.

10. Technologies

The entire development of CHOiCE is on Open Source Technology which is platform
independent, based on n-tier architecture which supports

  • Linux environment;
  • Localization (Unicode) support;
  • Authentication framework through Smartcard and Biometric (Fingerprint) devices;
  • Public Key Infrastructure (PKI) along with smart card for Privacy, Authenticity, Integrity & Non-repudiation;
  • MVC (Module View Controller) Payment gateway Support for Payment Services.
  • IVRS (Interactive Voice Response System) implementation for Status Inquiry etc.
  • ENS (Electronic Notification Server) for alert messaging.
  • NMS (Network Management System) for network monitoring.

*This chapter is re-produced with permission from the book "Transforming Government, eGovernance Initiatives in
India.", Editors: RK Bagga, Piyush Gupta, Published by The Icfai University Press, 2009.
The CHOICE system utilizes an Oracle Database on the Sun Solaris operating system and is integrated with the back-end applications of 10 government departments. Robust authentication features ensure the security of confidential information. The system also supports interactive voice response (IVR) capabilities and cell phone text messaging. The application is also required to be portable enough on Thin Client on Linux environment along with biometrics, PKI & smart card.

11. Capacity building

A very important feature witnessed by the implementation of the CHOICE project in the state has been attitudinal change amongst Service Officers and citizens. Now, several government functionaries from different departments are collectively working on the same network to service citizens in an integrated fashion. This activity is changing attitudes of government administrators, who earlier suffered from apathy and low morale in their work. It was imperative for the success of the project that the staff became emotionally involved in the project. The strategy is to send home the message that the individuals selected for CHOICE have a very special responsibility on them – that of taking the state to the next millennium. The self-esteem and image of the workers went up substantially, as they now perceive themselves as computer professionals working in an excellent environment. The citizen attitude towards the government has also changed as a result of an increased sense of trust and reciprocity developing between citizens and the state. With CHOICE, the government is seen as being providing a reasonable level of service without corruption.

12. Process Reforms

The CHOICE system utilizes an Oracle Database on the Sun Solaris machines, with Linux operating system and is integrated with the back-end applications of 10 government departments. Robust authentication features ensure the security of confidential information. The system also supports interactive voice response (IVR) capabilities and cell phone text messaging. The application is also required to be portable enough on Thin Client on Linux environment along with biometrics, PKI & smart card. Back-end processes of Government functioning has been completely automated and there is no paper transaction at all. Movement of documents is also on electronic mode. For the first time in country, Private Citizens have been notified as Public Servants under IT Act. This enables CHOICE agents to process Government documents.

13. Project Financials/Sustainability

The CHOICE system utilizes an Oracle Database on the Sun Solaris machines, with Linux operating system and is integrated with the back-end applications of 10 government departments. Robust authentication features ensure the security of confidential information. The system also supports interactive voice response (IVR) capabilities and cell phone text messaging. The application is also required to be portable enough on Thin Client on Linux environment along with biometrics, PKI & smart card.

*This chapter is re-produced with permission from the book "Transforming Government, eGovernance Initiatives in India.", Editors: RK Bagga, Piyush Gupta, Published by The Icfai University Press, 2009.
Back-end processes of Government functioning has been completely automated and there is no paper transaction at all. Movement of documents is also on electronic mode. For the first time in country, Private Citizens have been notified as Public Servants under IT Act. This enables CHOiCE agents to process Government documents.

- The project is on open source hence there is no additional licensing cost for horizontal proliferation of project;
- There is political and administrative support in the implementation of the project;
- More than two lakh certificates have been transacted through this portal and project seems to have achieved the critical mass

14. Project Teams and Leadership

CHOiCE has two authorized committees- the project directing committee and the project steering committee to carry out the project and for any consultation with relation to the stake holders. The Project Directing committee is headed by district collector and the Project Steering committee is headed by the Secretary Urban administration. All the stake holder departments such as Panchayat, Education etc. have their representatives in these committees. Even the agents are invited in the meetings of these committees for their feedback. The main functions of committee chaired by the district collectors as Project Director are:

- Coordinate various activities between govt. departments / agencies / bodies, CHiPS, CHOiCE agents and other stake holders in the project.
- Review progress of utilization of CHOiCE services by various departments.
- Issue orders etc for effective implementation of CHOiCE.
- Appoint CHOiCE Agents for setting up of CHOiCE centres.
- Execute Agreement with CHOiCE agent.
- Publicize CHOiCE services offered & CHOiCE agents.
- Monitor the performance of CHOiCE centers through MIS reports/other mechanism and issue periodic guidelines / instruction on the same.
- Ensure a fair and transparent system at CHOiCE centers including handling of cash, sharing of revenue, display of services with rate list etc.
- Any other issue pertaining to implementation of CHOiCE in the respective districts.

The main functions of the state Project Steering Committee are:
- To monitor the implementation and usage of CHOiCE services.
- To take decision with regard to effective implementation of CHOiCE services.
- To decide on time frame for sunset on manual procedure.
- To decide on further inclusion of services under CHOiCE project.
- To coordinate between various stakeholders at State level.

Technological parameters are observed by the technical committee on

---

*This chapter is re-produced with permission from the book "Transforming Government, eGovernance Initiatives in India.", Editors: RK Bagga, Piyush Gupta, Published by The Icfai University Press, 2009.*
• Technological parameter environmental change and forerunners of the technology change
• Substance of such technology changes as well as report and identify possible consequences
• Measure and observe the speed and direction of the new technology
• Time frame and future roadmaps of new technology change

15. Key project Outcomes

1. **Sustainability:** Any IT solution is successful only when it is sustainable with a wide range of audience and so is CHOiCE. Though CHOiCE is intended to serve the purpose of the general public and address all the services very efficiently, it is sustainable because it is indirectly enabling all the government dignitaries at various levels to be abreast with the latest technology and thus in-turn is also helping them to erase their fears of losing their jobs to the tech savvy generation.

2. **Usage:** Reduction in corruption, increase in transparency and accountability of the government.

3. **Usefulness:** Designed to improve program and management effectiveness, efficiency and accountability.

4. **Satisfaction:** This is in line with the true spirit of citizen centric governance. Normally, accessing governmental services is not an easy and pleasant experience. For some work, one has to visit offices repeatedly. Availability of services online at all time is a great effort in creating a responsive government.

5. **Empowerment:** Through CHOiCE, the e-literacy level at grass-root level has increased and also CHOiCE helps to bridge the digital divide between the rich and the poor.

16. Service users Feedback Mechanism

• As and whenever official/ casual meeting of officers is arranged, oral feedbacks are collected.
• CHOiCE helpdesk centre has been successfully running in CHiPS office
• Feedback is also collected by feedback form.

17. Implementation Challenges

The main challenge for the state was to create a system through which state citizens may avail services from public offices with care, courtesy and utmost ease. CHOiCE kiosk centers are to provide a wide range of services including connectivity, information, IT education, e-governance and e-commerce. The project involves a complete 360-degree view of all Citizen Government interactions and offers Citizens choice amongst modes of payments, obtaining information of forms, submitting the same, tracking them and getting delivery of the end service/ products in a variety of ways including in person, through authorized nominee, through phone, through fax, through the web, through the
post or through private franchised intermediaries operating from street-corners. This mainly includes establishing efficient centralized database to facilitate easy information retrieval and eliminate data duplication.

18. Key Lessons learnt

- A comprehensive feasibility study required for a project of this scale: This particular project started as office automation project and later scaled up to a fully fledged e-government project. For proper scheduling, impact assessment, resource planning, resource allocation etc a comprehensive feasibility study is required. In absence of such a study, there is a danger of project missing direction, desired objectives etc.
- Proper scheduling using networking techniques to be done before starting the project: This is very much required to keep project on track. There are good networking techniques available like Critical Path Method (CPM), PERT etc. Scheduling also helps in planning and allocation of resource, budget allocation etc. In CHOICE project, there was time overrun of almost two years. This could have been avoided had there been proper scheduling of various activities of the project.
- Activity wise resource planning and allocation very much required to avoid cost/time overrun. As discussed in the above point, this is an important part of project planning and execution and should be done properly.
- Importance of a ‘Clear cut plan’: The government should have a clear, coherent and rational plan for an e-government application. The government should prioritize areas based on services with large citizen interface, amount of tax revenue, some prior involvement of IT etc.
- Effective change management the key to success for such projects: Of all the factors that contributed to the success of the project, this is one of the most important. In fact, a successful e-government project can attribute, in time and effort distribution, 45 per cent to change management, 35 per cent to the re-engineering of processes, a mere 15 to 20 per cent to other factors. To circumvent predictable and formidable opposition from the intermediaries who stood to lose from these changes, the project did not confront them directly, rather dealt with them tactically and strategically. Care should be taken not to antagonize the lower rungs of bureaucracy. The government should decide that such projects in the future will be led only by public administrators who have been trained to understand technology rather than by technical specialists trained to manage.
- Importance of Infrastructure and Choice of technology: Appropriate physical infrastructure is absolutely necessary for the application of IT solutions. The choice of software is very important. An e-government application should design to be flexible and scalable to accommodate new services, statutory changes in registration Perdue and new computing environment. Also, making a successful transition from a manual to an electronic process demands changes to a number of established work procedures. Process re-engineering in most effective manner is
needed to realize the promised benefits and deal with the challenges of the new medium. Also related elements, such as legislation, had to be updated.

- **Change Control System and Configuration Management** – Because of their adverse effect on project cost schedule objectives, project managers usually resist changes. As a result, disagreements over the necessity for changes and the impact of changes on project scope, cost, and schedule are a common source of conflict with functional managers and clients. Often these disagreements have to be resolved by upper management and require renegotiation of contracts. One way to reduce the number of changes and their negative impact on project performance is to employ a formal system for change review and control. Since changes, like other aspects of project work, must be defined, scheduled, and budgeted, the process of drafting and implementing changes is similar to the original planning process. To quickly process and communicate the many changes a large project can generate, a formal change control system is used. The purpose of this system is to review and authorize design and work changes, weeding out all but the necessary ones, and to make sure that related work is also revised and authorized.

- **Designing a Citizen centric Service Delivery Mechanism** – The number of access points have to be sufficient to be within easy reach, and citizens also need to be trained to use the service delivery portals. Local language interfaces needs to be built. States with significant illiterate populations have to create access points where assistance is provided. Intermediaries such as volunteers, kiosk owners, etc often play a positive role in applications where information is disseminated to illiterate population. The design of website is critical. It should be simple to search for information and the information should be complete. Citizens should not have to follow up a web site access with a visit or a call. If several departments have web sites, then there should be a common look and feel, which minimizes learning on the par of citizens.

- **By ensuring shared values with advocates of change**, a sense of ownership can be generated amongst employees. Participative design where employees’ feedback and involvement helps shape the new initiative and system can contribute to greater acceptance. Training and education of all levels of employees can help mitigate fear of the unknown and reduce resistance.

**Project Contact Details**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Aman kumar Singh</td>
<td>Special Secretary (IT, BT &amp; CM)</td>
</tr>
<tr>
<td></td>
<td>Information Technology</td>
</tr>
<tr>
<td></td>
<td>DKS Bhavan, Mantralaya,</td>
</tr>
<tr>
<td>Mounika Nandyala</td>
<td>Additional CEO</td>
</tr>
<tr>
<td></td>
<td>Chhattisgarh infotech &amp; biotec</td>
</tr>
<tr>
<td></td>
<td>DKS Bhavan, Mantralaya,</td>
</tr>
</tbody>
</table>

*This chapter is re-produced with permission from the book "Transforming Government, eGovernance Initiatives in India.”, Editors: RK Bagga, Piyush Gupta, Published by The Icfai University Press, 2009.*
Raipur - 492 001
Chhattisgarh
ceochips@nic.in
hr-chips@nic.in

Raipur - 492 001, Chhattisgarh
mounika.nandyala@idhasoft.com

*This chapter is re-produced with permission from the book "Transforming Government, eGovernance Initiatives in India.", Editors: RK Bagga, Piyush Gupta, Published by The Icfai University Press, 2009.