| Project Name | ANMOL |
|---:|:---|
| Institute/Organisation | State Child Protection Committee<br><br>(A registered Society under Society Registration Act. 1973) |
| Award Category Applied For:- | AWARDS SCHEME FOR EXEMPLARY IMPLEMENTATION OF E-GOVERNANCE INITIATIVES<br><br>**Category : INNOVATIVE USE OF ICT BY STATE GOVERNMENT PSUs'/ COOPERATIVES / FEDERATIONS / SOCIETIES**<br><br>──────────────────── |
| Address:- | Jawahar Bal Bhawan, Near IInd Stop, Tulsi Nagar, BHOPAL |
| City:- | Bhopal |
| PIN | 462001 |
| State | Madhya Pradesh |
| Country | India |
| Mobile | 09425012310 |
| Email | kalpana0092@gmail.com |
| | |

| Details of the Respondent | |
|---:|:---|
| Name: | Ms. Kalpana Srivastava |
| Job Title | Member, Secretary |
| Mobile | 09425012310 |
| Email | kalpana0092@gmail.com |
| Address | Jawahar Bal Bhawan, Near IInd Stop, Tulsi Nagar, BHOPAL |

# 1. Coverage – Geographical and Demographic:-

## (i) Comprehensiveness of reach of delivery centres:

The children of today are the future of tomorrow; this statement assumes special significance in our context as children (0-14 years) comprise one third of the total population in this nation. Every child should get a healthy environment, to shine in all spheres of life. Orphans are one of the less blessed segments in the major segment of future builders of the nation.

With a sincere mission to ensure that every orphan in M.P gets a family, **Anmol**" is the country's first state level e-initiative for monitoring children residing in Specialised Adoption Agency (SAA) across various centres in the state. Anmol is about ensuring transparency and trustworthiness in the SAA functioning and bridging gaps between parents interested for adoption and the centre from where the adoption is intended.

Anmol has its coverage across the state through 38 Shishu Grah and 20 Bal Grah. All these homes are well connected with Project Anmol to fast track the adoption process and clear the long waiting list of parents willing to adopt a child. Prior to Anmol the parents were supposed to register themselves in a particular home and would wait to adopt a child from the same home. The parents registered with one home could not access child from other homes where children were available. This resulted in creating long waiting list of both parents and children.

Initiation of Anmol has improved governance by linking each home to other. Parents, despite their location and their registration in a particular home can get child from any home across the state depending on availability of child. The entire system of tracking the child and parents is now available online.

Anmol has provided the opportunity to every Prospective Adoption Parents (PAP) from across the state to register themselves in any of the home in their vicinity and track their status online to access the child from any home of the state. Anmol covers the PAPs willing to adopt child from the entire population of the state. The homes functioning across the state under the umbrella of Anmol are as follows:-

- 38 Shishu Grah (0-6 years)
- 20 Bal Grah (6 years and above)

## (ii) Number of delivery centres

- 38 Shishu Grah (0-6 years)
- 20 Bal Grah (6 years and above)

**(iii) Geographical :**

(a)National level – Number of State covered : Madhya Pradesh

(b) State/UT level- Number of Districts covered – 51 Districts

(c) District level- Number of Blocks covered – 313 Blocks

Coverage of Population through homes



Please give specific details:-

**(iv) Demographic spread (percentage of population covered)**

Anmol covers the information on all PAPs applying for adoption and children staying in different homes. The homes are so established that they cover the entire population of the state. Numerous communication channels were effectively used to promote legal adoption through registered homes. Increasing popularity has led to increase in the number of orphan children brought to different homes by various institutions/ social organisations and by public. The procedures also have been effectively communicated across the state to sensitise willing parents for adoption.

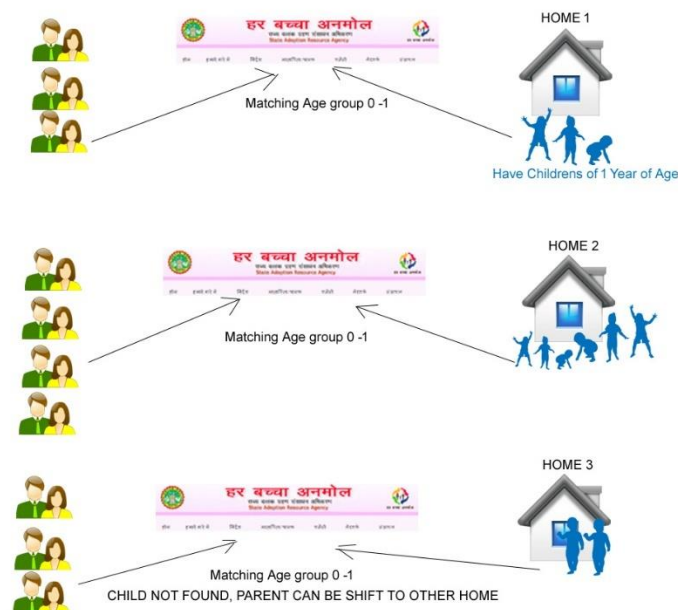Details of Team of nominated Project

| Name | Qualifications | Experience | Contribution |
|---|---|---|---|
| Mr. B. R. Naidu | M.A. | Rigorous experience of administration , management and taking initiatives for women empowerment | Providing overall guidance and monitoring of Anmol. |
| Ms. Kalpana Srivastava | M. A. (History), P. G. In Journalism | Administration, Policy formulation, implementation conceptualisation, and mentoring | Principal Architect. Contributed in overall framework, content planning, and designing |
| Ms. Prema Sethi | Post Graduate | Overall monitoring of Women and Child welfare schemes and ensuring effective implementation | Co-ordinating with all stake holders for designing the framework for Anmol. |
| Mr. Harish Khare | M.A. History | Implementation of women welfare schemes, Coordination, supervision, etc. | Managing human resource, facilitating access for e-governance. Designing structural and analytical framework, developing indicators, system management |
| Mr. Sharad Saxena | B.E. (C.S.) | data administration and management | Web designing & development, Data Base management, security measures, Infrastructural support, technical support, Band width and connectivity support. Data feeding, compilation, need for up gradation, changes required, preparation of reports etc. managing data base. Training, sensitisation for behavioural change, resource management. |
| Mr. Rishi Dubey | M.Com. | data administration and management | Data Analysis, reporting, and monitoring |
| Mr. Saurabh Mishra | M.B.A. | data administration and management | Data Analysis, reporting, and monitoring |

## 2. Situation Before the Initiative (Bottlenecks, Challenges, constraints etc. with specific details as to what triggered the Organization to conceptualize this project):

State Adoption Resource Agency (SARA) has been constituted in the state to facilitate legal adoption of children who stay in adoption homes. The system did not have an effective monitoring management system which could facilitate the parents willing to adopt a child. The process was handled manually and then entered in offline computers. Due to vast geographical outreach tracking of availability of child in a particular home was difficult and led to long waiting list of both parents and children.

One Prospective Adoption Parents (PAP) willing to adopt a child had to register in SAA in their respective location and then had to wait depending upon the availability of child in SAA. After an analysis of the situation it was observed that the family applying in a particular home could not adopt a child due its non-availability where as other homes had a child with no demand for the child. This resulted in long waiting lists in a particular home but in the other homes there were children but no demand. There was a necessity to synchronise the homes of the entire state through their database and bring them under one umbrella to enable the management not only to ease the monitoring process but also expedite the adoption process from the waitlist. The process flow prior to Anmol is illustrated below with an example.

| Home | Status on availability | Demand(PAP) | Remarks |
|------|------------------------|-------------|---------|
| Home 1 | 1 Child | 2 | One family can access the child |
| Home 2 | No Child | 1 | Unable to access |
| Home 3 | 1 Child | No family | No adoption |

Matching Age group 0 -1

HOME 1
Have Childrens of 1 Year of Age

Matching Age group 0 -1

HOME 2

Matching Age group 0 -1
CHILD NOT FOUND, PARENT CAN BE SHIFT TO OTHER HOME

HOME 3

The above illustration clearly indicates the availability of the child and family in Home 2 and 3, but due to lack of information and coordination, the child and family both are not able to connect. The old centrally developed online management system could not address this situation efficiently due to manual feeding of status on child's availability.

Geographically covering every district (M.P), adoption agencies and governing body was a tedious task and it took around six months to understand all the requirements and then to develop a prototype required to facilitate a complete solution.

Prior to Anmol there were several drawbacks with regard to addressing complaints/queries, providing first-hand information on the scheme & its benefits. Secondly, there was no such powered mechanism to monitor the progress. Thirdly, ensuring timely disposal of the cases was critical. The challenges of manual management were as under:-

| Functions | Prior to Anmol | Limitations |
|---|---|---|
| Registration | Manually done by visiting SAA | Access was limited to one centre only. |
| Validity | Filled manually by the employee. | Possibilities of changes in the records |
| Transparency | Uncertain | Prone to errors |
| Data collection and compilation | Manual, no backup in case of data lost. | Prone to errors. Retrieval of data was not possible. |
| Resource utilisation | | |
| Manpower | Excessive manpower | Limited budgets |

| Time | Time consuming | Delays in adoption process |
|---|---|---|
| Feedback | Time consuming, | Prone to bias feedbacks |
| Control | No specific methods | Dependency on agency/ districts |
| Flow of information | Dependency on homes | Information of other homes is restricted. |
| Tracking | Manually Done | Difficult to track the child and PAP in different tiers. |
| Coordination | Each adoption agency was functioning independently | Creating long waiting list due to non availability of PAP and or children in a particular home. |

# 3. Scope of Services/ Activities Covered (Relevance of choice of application for clients/ PSU, extent of e-enablement in terms of number of processes/services, extent to which step in each service/process have been ICT- enabled #)

Prior to Anmol tracking status of child manually was causing delays and resulting in huge waitlist. It was difficult to track the status of PAPs registered in different homes. The PAPs were also not aware of the status of their application. It was observed that all homes were functioning in isolation and there was an emerging need to bring these under an umbrella so that each PAP could take an opportunity to adopt a child from homes where the children are available.

SARA being the lead agency had to perform several functions to ensure smooth adoption process. The scope of services starts from the day when a child enters in a home to his/her adoption duly ordered by the Court and subsequently for next three years to check the child's concurrent growth. The scope of services to be rendered by it is as under:-

| Area | Scope of service |
|------|------------------|
| Activity Monitoring | • No. of children registered with homes<br>• Classification of children in different age group<br>• No. of PAPs registered<br>• Classification of PAPs in different age group<br>• No. of queries/problems received and resolved |
| Facilitating Adoption | • Tracking the status of PAPs<br>• Tracking the status of children<br>• Aligning all the homes<br>• Problems/ query handling |
| Process Monitoring | • Timely floating of advertisements<br>• Timely disposal of applications<br>• Linkages with CWC and Police for expeditious processing |
| Impact Monitoring | • No. of cases brought before the Court<br>• No. of children adopted.<br>• No. of waiting list cleared. |

## Relevance of choice of application

The need for Anmol was generated due to delays in facilitating the adoption process and delineation between all the homes functioning in the state. The long waiting list of PAPs were generated due to procedural delays and non availability of children in a particular home where the PAP had filed in application for adoption .

It was now necessary to choose an application which would facilitate SARA to extend its support and to track the status of PAPs and children registered/available in various homes across the state. The selection of ASP.NET technology was then made due to its feature of collection of data in huge volumes and preparation of analytical reports.

Anmol is a well-designed web portal and is operational across the state. Each corner of the state is under its outreach. The process of registration and tracking under the Anmol is as follows:-
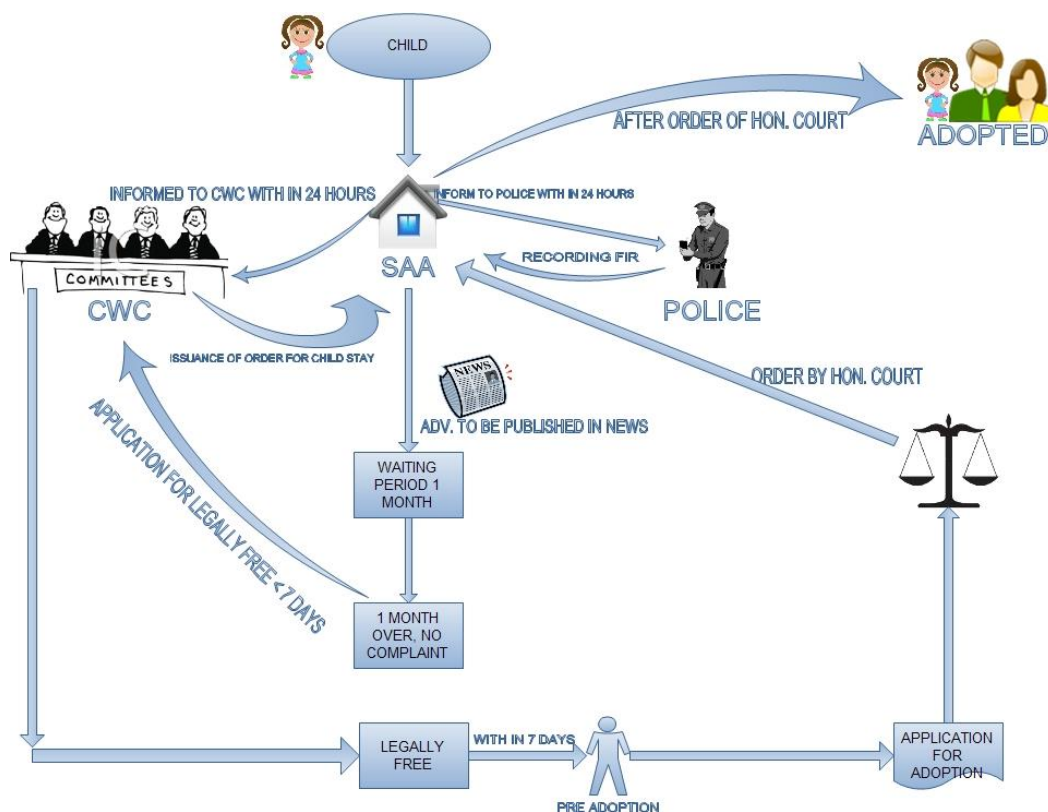
**Extent of E-enablement**

Anmol is accessible to four different types of users

- **Parents/ PAP**
- **Agency**
- **Admin**
- **Citizen**

The access and features available for each user are mentioned below.

**Parents /PAP**

Once registered, they can check the availability of child in different homes in the State. System generated waiting number is issued to the agency and to the parents. Regular update on their application status is visible on the dashboard after logging in with their credentials.

**Agency**

Agency needs to register with its details. PAPs and Children at different stages, any time so that it can be monitored by the admin.

**Admin**

Admin monitors all children and homes; it is enabled to view the status of children availability in respective homes and can generate reports too for a specific duration as and when required (monthly, quarterly or annually).

Following are the screen shots for Anmol:-

# ADMIN PANEL

**जानकारी जोड़ें**

- नई दत्तक संस्था जोड़ें
- अनुदान जोड़ें

**रिकॉर्ड देखें**

- दत्तक संस्था का रिकॉर्ड देखें
- संस्था का लॉग इन विवरण देखें
- शिशु/ बालक/ बालिकाओं का विवरण
- माता/ पिता/ पालक का विवरण
- संस्थाओं में आंकडें
-
- संस्था की मासिक जानकारी
- अनुदान देखें
- वेब स्टेटिस्टिक्स देखें
- दत्तक आंकडें देखें

**एडमिन अपलोड**

- समाचार एवं कार्यक्रम जोड़ें
- दत्तक आंकडें अपलोड करें

**संस्था जानकारी अनुमोदन**

- विशेष शिशु अनुमोदित करें
- संस्था परिपत्र अनुमोदित करें
- संस्था समाचार अनुमोदित करें
- संस्था फोटो अनुमोदित करें

# AGENCY PANEL

SEWA BHARTI MADHYA BHARAT MATRYA CHHAYA BHOPAL, Bhopal

- संस्था विवरण जोड़ें
- संस्था विवरण देखें
- संस्था में पदों का विवरण जोड़ें
- संस्था में पदों का विवरण देखें
- नया शिशु/ बालक/ बालिका जोड़ें
- शिशु/ बालक/ बालिका देखें
- शिशु/ बालक/ बालिका का अन्य विवरण जोड़ें
- शिशु/ बालक/ बालिका का विवरण देखें
- विशेष शिशु/ बालक/ बालिका जोड़ें
- विशेष शिशु/ बालक/ बालिका देखें
- संस्था की मासिक जानकारी भरें
- संस्था की मासिक जानकारी देखें
- संस्थागत समाचार एवं कार्यक्रम
- संस्थागत समाचार एवं कार्यक्रम देखें
- संस्था गैलरी में फोटो जोड़ें
- संस्था गैलरी फोटो देखें
- संस्था में पंजीकृत माता/ पिता/ पालक
- प्रतीक्षा सूची

# CHILD INFORMATION IN AGENCY

शिशुगृह / बालगृह मे बालक/बालिका की जानकारी

लॉग आउट  | Sewa Bharti Madhya Bha ▼ |

| | शिशु की फोटो | ID | CWCName | Agency | District | ChildID | ChildSource | ChildSourceOther | ChildReporterName | ReporterAddress | ChildCategory | ChildCategoryOther | SurrenderReaso |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Edit Delete | | 8 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | 2 | कोर्ट आर्डर | लागू नहीं | Amit | NA | निराश्रित | लागू नहीं | NA |
| Edit Delete | | 9 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | 9 | कोर्ट आर्डर | लागू नहीं | Amit | NA | स्वयं प्रस्तुत हुआ | लागू नहीं | NA |
| Edit Delete | | 10 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | 10 | नर्सिंग होम/हॉस्पिटल | लागू नहीं | Amit | NA | गुमशुदा | लागू नहीं | NA |
| Edit Delete | | 11 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | 11 | कोर्ट आर्डर | लागू नहीं | Rahul | NA | निराश्रित | लागू नहीं | s |
| Edit Delete | | 12 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | 12 | पुलिस | लागू नहीं | Amit | NA | निराश्रित | लागू नहीं | NA |

# CHILD INFORMATION IN AGENCY

CWC-Bhopal

लॉग आउट

| शिशु की फोटो | संस्था | ChildID | शिशु का नाम | शिशु का लिंग | शिशु की प्रवेश दिनांक | शिशु का पंजीयन दिनांक | ID | CWCName | Agency | District | UserName | ChildID | ChildSource | ChildSourceOther | ChildReporterName | ReporterAddr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 2 | Rahul | बालक | 21-07-2014 00:00:00 | 20-07-2014 12:43:49 | 8 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 2 | कोर्ट आर्डर | लागू नहीं | Amit | NA |
| | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 9 | Sona | बालिका | 19-07-2014 00:00:00 | 20-07-2014 12:45:06 | 9 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 9 | कोर्ट आर्डर | लागू नहीं | Amit | NA |
| | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 10 | Vishal | बालक | 08-07-2014 00:00:00 | 20-07-2014 12:46:19 | 10 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 10 | नर्सिंग होम/हॉस्पिटल | लागू नहीं | Amit | NA |
| | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 11 | Sonali | बालक | 10-07-2014 00:00:00 | 21-07-2014 17:32:49 | 11 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 11 | कोर्ट आर्डर | लागू नहीं | Rahul | NA |
| | Sewa Bharti Madhya Bharat Matra | 12 | Rizwan | बालक | 21-07-2014 00:00:00 | 21-07-2014 17:40:59 | 12 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra | Bhopal | sewabhartibpl | 12 | पुलिस | लागू नहीं | Amit | NA |

# CHILD INFORMATION IN CWC

| | ID | CWCName | Agency | District | UserName | ChildID | ChildSource | ChildSourceOther | ChildReporterName | ReporterAddress | ChildCategory | ChildCategoryOther | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Edit Delete | 9 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 9 | कोर्ट आर्डर | लागू नहीं | Amit | NA | स्वयं प्रस्तुत हुआ | लागू नहीं | N |
| Edit Delete | 10 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 10 | नर्सिंग होम/हॉस्पिटल | लागू नहीं | Amit | NA | गुमशुदा | लागू नहीं | N |
| Edit Delete | 11 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 11 | कोर्ट आर्डर | लागू नहीं | Rahul | NA | निराश्रित | लागू नहीं | s |
| Edit Delete | 13 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 13 | कोर्ट आर्डर | लागू नहीं | Amit | NA | निराश्रित | लागू नहीं | N |

# ADMIN PANEL FOR DATE EXTENSION

समय उपरांत बाल कल्याण समिति की अनुमति संबंधी जानकारी की दिनांक आगे बढ़ाने हेतु पत्रक

| | ID | CWCName | Agency | ChildID | ChildName | PermissionDay |
|---|---|---|---|---|---|---|
| Edit Delete | 8 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 2 | Rahul | 2 |
| Edit Delete | 9 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 9 | Sona | 2 |
| Edit Delete | 10 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 10 | Vishal | 2 |
| Edit Delete | 11 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 11 | Sonali | 7 |
| Edit Delete | 12 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 12 | Rizwan | 7 |
| Edit Delete | 13 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | 13 | Manish | 7 |

# CHILD INFORMATION FOR CWC APPROVAL

बाल कल्याण समिति की अनुमति की प्रतीक्षा रत बालक/बालिका की जानकारी

CWC-Bhopal

| शिशु की फोटो | संस्था | CWCName | ChildID | शिशु का नाम | शिशु का लिंग | शिशु की प्रवेश दिनांक | शिशु का पंजीयन दिनांक | प्रतीक्षा | ID | CWCName | Agency | District | UserName | ChildID | ChildSource | ChildSourceOther | ChildReporterNam |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | CWC-Bhopal | 9 | Sona | बालिका | 19-07-2014 00:00:00 | 20-07-2014 12:45:06 | No | 9 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 9 | कोर्ट आर्डर | लागू नहीं | Amit |
|  | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | CWC-Bhopal | 10 | Vishal | बालक | 08-07-2014 00:00:00 | 20-07-2014 12:46:19 | No | 10 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 10 | नर्सिंग होम/हॉस्पिटल | लागू नहीं | Amit |
|  | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | CWC-Bhopal | 11 | Sonali | बालक | 10-07-2014 00:00:00 | 21-07-2014 17:32:49 | No | 11 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 11 | कोर्ट आर्डर | लागू नहीं | Rahul |
|  | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | CWC-Bhopal | 13 | Manish | बालक | 21-07-2014 00:00:00 | 21-07-2014 17:46:41 | No | 13 | CWC-Bhopal | Sewa Bharti Madhya Bharat Matra Chhya Bhopal | Bhopal | sewabhartibpl | 13 | कोर्ट आर्डर | लागू नहीं | Amit |

## Extent of ICT enabled services

| S. No. | Services Rendered | Current status |
|---|---|---|
| 1 | Information on SARA | •Online. |
| 2 | Reporting services | •Online |
| 3 | Retrieval of reports | •Ease of retrieval at every tier. Segregation of reports beneficiary /village/project/block/district wise. |
| 4 | Floating | •On Google search |
| 5 | Communication | •Through SMS for expeditious service. |
| 6 | Linkages | •Through mobile applications. |
| 7 | Feed back/ support system | •Online through help line desk. |
| 8 | User friendly system | •Available in Hindi for bettering the outreach. |
| 9 | Tracking status of PAP and Children | •No. of waitlisted PAPs , Children.<br>•No. cases legally free by CWC.<br>•No. cases in Court.<br>•No. of adoption facilitated. |
| 10 | IVRS (Interactive Voice Response System) | • Receiving calls and providing support at every tier to PAPs |

## Help Desk

This is one of the critical panels on the board that has led to convenience to the end user. Help desk is accessible to any citizen for complaints or queries etc. The built in system ensures that the complaints/queries are disposed timely by the use of technology. The Help desk staff can view the complaints/ feedbacks and suggestions and they respond accordingly.

Help desk is smoothly organised to solve end to end queries.

a. Registration and generation of ID (ticket no.)

b. Problem analysis

c. Sorting with knowledge base with support team

d. Response & acknowledgement

e. Closure of Request.

## 4. Strategy Adopted

**(i) The details of Base Line Study done**

Prior to Anmol, an inadequate manual system was in place for ensuring timely adoption process. To come up with the right solution (software development), department ensured that the problem and problem areas were identified completely first by doing a baseline study.

There were meetings with concerned persons and detailed surveys on a fixed set of questions. That was our primary research which was done block as well as district wise and every feedback was filtered through objectively so as to identify problem areas and ensuring that research was going in the right direction. Secondary research was done by technical department under the guidance of the administrative department to study the solutions, models or prototypes that had been implemented in developed countries. As this was the first of a kind initiative in the country so there was no model or prototype to observe within the country. The technical department was clear from the beginning on the integration, flexibility and simplicity of proposed solution. There was flexibility to review this research weekly to ensure that there was no error. The complete baseline study took 3 months.

**(ii) Problems Identified**

Snap survey of the scheme provided a clear vision to the management on the grey areas where the system needs to be fine tuned. Some of the areas where the problem persists were:-

| Process | Problem areas |
|---|---|
| Parent Registration | • Parents had no option but to go to adoption homes and register manually, the home sent the data to SARA and then monitoring activity started. <br> • At the time of registration there was no integration of database of other homes and registered child / PAPs. |
| Monitoring | • Only manual areas for monitoring. <br> • Unable to check the current status of child/PAP regularly. |
| Transparency | • Parents / public were not able to view the details as to how many children are available in the homes. <br> • There were illegal activities involved in adoption of |

| | children which encouraged corruption. |
|---|---|
| Ease of Access/ Language Barrier | • Not able to provide the details in easier medium to the public for awareness of the program.<br>• Integration with mobile was required. |
| Feedback / Complaint Resolution Centre | • No Helpline. |

## (iii) Roll out/Implementation Model

The next stage was to get a prototype of the solution required, to solve problems identified in the allocated timeframe and resources. The technical department took a month to study the research and proposed a solution that would follow Scrum methodology. In the meantime they came up with hardware solutions to ensure no time lag in smooth functioning of proposed solution with complete load.

Srum is one of the iterative and incremental agile software development frameworks for managing software development. This methodology suited our strategic planning so that the technical and administrative development team reach a common goal. We have a talented team of technical people and administrative people who worked in close online collaboration as well as face to face communication.

This methodology enabled development team to adapt with unpredicted challenges as requirements changed, so there was space for adaptability and flexibility compared to the Waterfall model. The algorithm and logic were developed in a months' time with proper documentation right from the beginning.

This was followed by development of web application in incremental parts, which was sequentially tested and approved. Database development was a tedious task that involved integration of data available at different homes and agencies with upcoming registration of parents. Strict care was taken in data feeding to avoid any discrepancies; it was accomplished by trained and efficient data entry operators. The complete development process took around 4 months, which was followed by real testing (A/B testing) from a fixed set of potential; users *(all 4).* Web application was ensured to run smoothly on all current popular browsers like Mozilla, Chrome, Opera and Internet Explorer. Feedback were collected again, district wise in documented form and changes were incorporated as finally discussed.

The developed solution is web based which is itself self-explanatory and easy to use. However a few agencies or home that was not well aware of the technology were provided with a small demo/training at their respective locations by trained professionals.

**(iv) Communication and Dissemination Strategy and approach used**

Effective campaigning has been taken up to promote Anmol. Various publicity advertisements through advertisement, hoardings, etc. have been under taken to make the public and PAPs aware about Anmol. Anmol further has developed effective communication between agency, PAPs and children. It has been able to develop a strong interface between various stakeholders through use of mobile applications, web and help desk. The communication strategy used for Anmol is as under:-
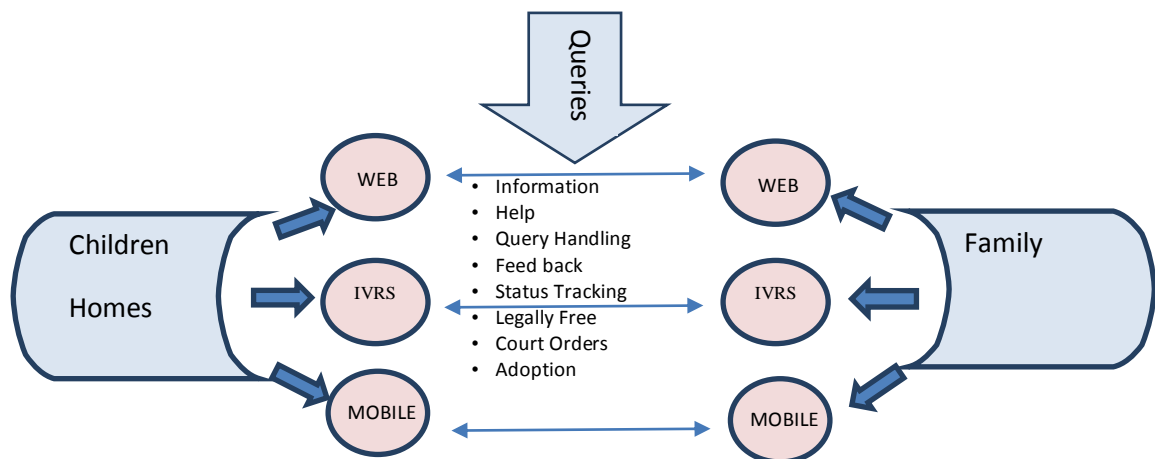
# 5. Technology Platform used-

**(i) Description**

Hosted Server

The server is powered with Intel Xeon X3440 quad core processor (2.5 GHz) which is sufficient to handle the current load as well as increasing load in near future. Allocated band width of 5000 GB with a speed of 100 MBPS. Hard-disk has an enormous capacity of 500 GB SATA for data storage. The entire system is hosted at ZNet Live's U. S. Datacentre which is one of the top three hosting providers in India.

The Intel Xeon X3440 quad core processor is ideal for our requirements, to manage operations more effectively and efficiently, and to protect and secure the most important asset — information. Based on Intel's Core micro architecture it is designed to deliver better performance on multiple application types and user environments at a substantially reduced power envelope.

**Virtualization**- Provides Virtualization support, combined with multiple cores, provides maximum power and performance per square foot.

**Quad-core processing with 8MB Smart Cache-**. Significant performance headroom, especially for multi-threaded applications, helps boost system utilization through virtualization and application responsiveness. The large on-die 8MB shared L3 cache minimizes data latency, helping to improve performance and power efficiency.

**Operating System**

**Window Web Sever 2008 R2**

Windows Server 2008 R2 supports up to 64 physical processors or up to 256 logical processors per system. Server Core includes a subset of the .NET Framework, so that applications like ASP.NET web sites and Windows PowerShell 2.0 can be used.

This version packaged with salient features like reduced boot time, improved efficiency of I/O operations consuming less processing power, and generally improve the speed of storage devices, especially iSCSI.*( iSCSI is used to facilitate data transfers over intranets and to manage storage over long distances).*

**Programming Package**

**Database -** SQL server 2008 R2

We deployed SQL server 2008 R2 as Anmol database system. It enables creating high end memory and supports 256 logical processors. This coupled with server installed manages our real time system well and creates space for analysing data and with negligible tolerance for data latency and is scheduled write to a table first. It facilitates monitoring multiple inputs streams simultaneously.

SQL Server 2008 R2 adds certain features to old SQL Server 2008 including a master data management system branded as Master Data Services, a central management of master data entities and hierarchies. SQL Server 2008 R2 has an amazing feature of power pivot for share point. It is an end user tool and processes and analyses large amount of data in seconds. The data is generated in Unicode and further reduces the disk space.

**ASP.net**

The web based Anmol is developed on ASP.Net technology. This technology drastically reduces the amount of code required to build large applications. It has built-in Windows authentication and per-application configuration making all applications safe and secured. The ASP.Net technology provides better performance by taking advantage of early binding, just-in-time compilation, native optimization, and caching services right out of the box. The ASP.NET framework is complemented by a rich toolbox and designer in the Visual Studio integrated development environment. WYSIWYG editing, drag-and-drop server controls, and automatic deployment are just a few of the features this powerful tool provides. Provides simplicity as ASP.NET makes it easy to perform common tasks, from simple form submission and client authentication to deployment and site configuration. The technology itself monitors the pages, components and applications running on it. If it notices any memory leaks, infinite loops, other illegal activities, it immediately destroys those activities and restarts. ASP.net coupled with Server 2008 R2 is a standard industry bundle that caters to the requirements of real time running applications plus it is backed by excellent customer service of Microsoft.

### (ii) Interoperability

Anmol functions on ASP.NET technology. It supports COM component architecture. COM components have different internal architecture from .NET components; hence they are not innately compatible. Anmol built its applications on COM objects for their middle tier services, since one cannot write off the INVESTMENTS on these solutions. That is, to migrate to ASP.NET there needs to be a way for the new ASP.NET Web pages to use the old, legacy COM components.

In order to have a COM component used through an ASP.NET Web page, a Runtime Callable Wrapper (RCW) is being used. The RCW translates specific calls from the ASP.NET Web page into COM-specific invocation requests on a COM component. When using RCWs, our ASP.NET Web page is talking to just another .NET component instead of talking to a COM component.

The following graphic depicts the RCWs role. On the left is the .NET Application. The legacy COM component on Anmol supports ASP.NET Web page to work with. In the middle sits the RCW, which accepts incoming requests from the ASP.NET Web page, translates them so that they can be handled by the COM component, and then passes them onto the COM component. Essentially, the RCW acts as managed proxy to the unmanaged COM component.
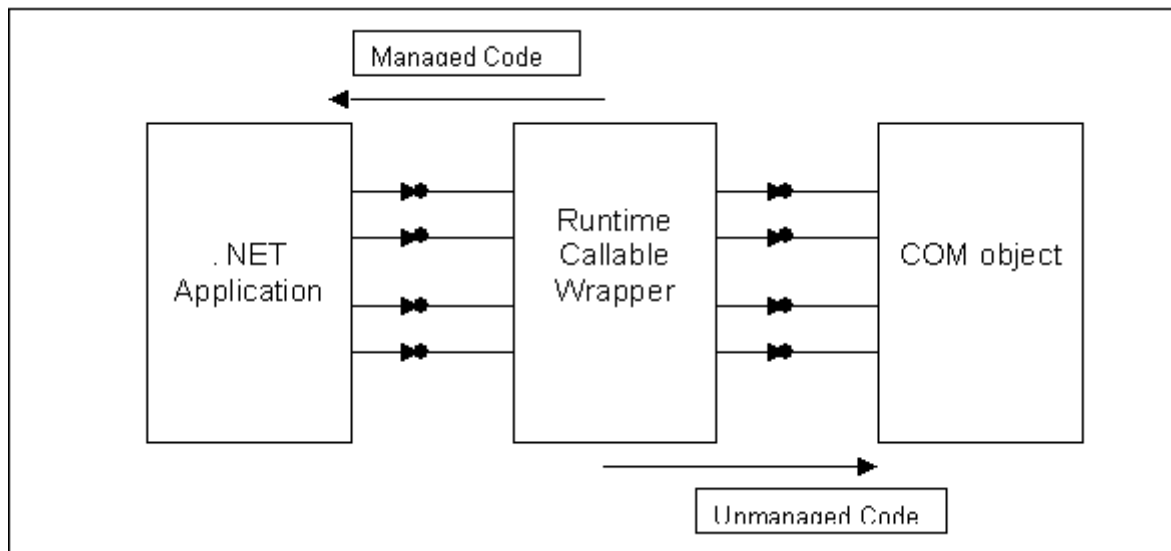


Every method call goes onto RCW and not the object itself. RCW manages the lifetime management of the COM component.

### (iii)    Security concerns

The website follows an extremely cautious approach when it comes to collecting personal details / information about the beneficiary. The information fed in the system is not disclosed to anyone for any purpose. No Cookies can be transferred onto the visitor's site. The database is maintained in SQL Server 2008 R2., other security hardware and firewalls used. The information is placed

in public domain for checking and verification, however, change in data base is exclusively done through the access centres by field functionaries.

MS SQL Server 2008 R2 Microsoft SQL Server 2008 R2 is used for effective configuration management, strong authentication and access control, powerful encryption and key management capabilities, and enhanced auditing. SQL Server 2008 has been audited for HIPAA and PCI Data Security Standard Compliance, and SQL Server 2008 Enterprise completed Common Criteria IT security evaluations at the Basic Assurance Level EAL1+ and at Evaluation Assurance Level EAL4+ with compliance

The MIS is secured with passwords. Separate passwords were assigned to each project data centres and other centres so that the access in the project domain by any other user would be denied.

### (iv) Any issue with the technology used

The present technology for Anmol uses SQL SERVER 2008 R2 Express which has Maximum memory utilized (per instance of SQL Server Database Engine) 1 GB. Now as the target audience i.e. PAPs and children is increasing rapidly there is a need to upgrade this to SQL SERVER WEB Edition.

### (v) Service Level Agreements (SLAs) (Give details about presence of SLA, whether documented, whether referred etc. )

Selecting a good Hosting provider requires multiple considerations like Core hosting expertise, best in class infrastructure, Reliable, Customizable Offerings and Transparency in hosting environment, Cost efficiency and a Robust Service Level Agreements. Keeping this in view a service level agreement was done with Z-Net India. This SLA guarantees quality server which provide world class infrastructure that translate into great reliability and uptime. The SLA ensures that the network will be available 100% of the time in a given month.

Network uptime includes functioning of all network infrastructure including routers, switches and cabling, but does not include services, daemons, software running on your server, or hardware failure on a server. Network uptime means the network itself will be up and available. In situations where a client runs a cluster or redundant server they can take advantage of the 100% uptime guarantee by eliminating a single point of failure in their hardware.

The SLA guarantees that the critical systems, including power and HVAC, will be available 100% of the time in a given month, excluding scheduled maintenance. If downtime is less than 60 minutes then 5% of the monthly fee will be refunded. This ensures the cost and service effectively also. The SLA also provide hardware guarantee.

# 6. Enhancement of Productivity (Give details about impact on volume of transactions handled per employee, Productivity of machines/ resources#)

Anmol covers information on all parents who have registered themselves for adopting a child. It also covers information on all children staying at various homes across the state. Anmol has resulted in reducing the long waiting list and provided space for management to develop a strong interface between all the homes across the state. Anmol caters to the resolution of cases in a very effective manner. The population is segregated in terms of age of parents and children. Anmol has a unique feature of tracking the entry of child by local authorities, Police, and public. It also facilitates the process of tracking the growth of children once he/she is admitted to a particular home. Their health, education and skill development are being taken care of by the home and tracked effectively by Anmol.  Anmol is running successfully and has gained acceptance from users in a short span of time.

Here is the web statistics of parents visiting user area of ANMOL

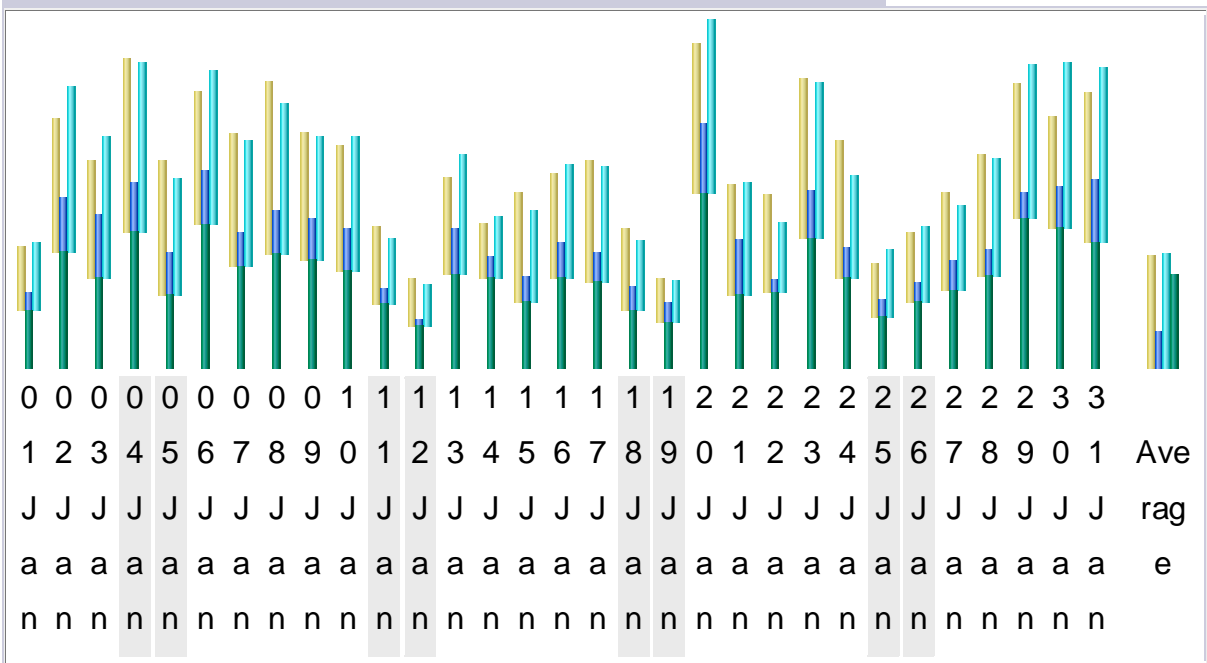| Summary | | | | | |
|---|---|---|---|---|---|
| | Unique visitors | Number of visits | Pages | Hits | Bandwidth |
| Viewed traffic * | 958 | 1,105 (1.15 visits/visitor) | 11,954 (10.81 Pages/Visit) | 38,493 (34.83 Hits/Visit) | 967.68 MB (896.74 KB/Visit) |
| Not viewed traffic * | | | 3,836 | 13,486 | 83.11 MB |

* Not viewed traffic includes traffic generated by robots, worms, or replies with special HTTP status codes.

## Monthly history
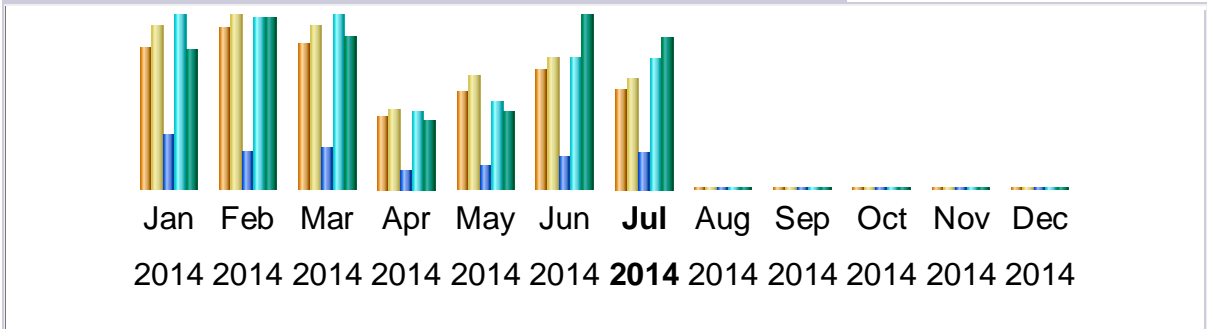


| Month | Unique visitors | Number of visits | Pages | Hits | Bandwidth |
|---|---|---|---|---|---|
| Jan 2014 | 958 | 1,105 | 11,954 | 38,493 | 967.68 MB |
| Feb 2014 | 1,081 | 1,216 | 7,878 | 36,572 | 1.17 GB |
| Mar 2014 | 986 | 1,107 | 8,973 | 37,488 | 1.04 GB |
| Apr 2014 | 490 | 544 | 4,244 | 16,962 | 487.24 MB |
| May 2014 | 655 | 757 | 5,098 | 18,417 | 531.37 MB |
| Jun 2014 | 800 | 891 | 7,105 | 28,106 | 1.23 GB |
| **Jul 2014** | 681 | 754 | 8,060 | 28,169 | 1.04 GB |
| Total | 5,651 | 6,374 | 53,312 | 204,207 | 6.42 GB |

## Days of month



01 Jan  02 Jan  03 Jan  04 Jan  05 Jan  06 Jan  07 Jan  08 Jan  09 Jan  10 Jan  11 Jan  12 Jan  13 Jan  14 Jan  15 Jan  16 Jan  17 Jan  18 Jan  19 Jan  20 Jan  21 Jan  22 Jan  23 Jan  24 Jan  25 Jan  26 Jan  27 Jan  28 Jan  29 Jan  30 Jan  31 Jan  Average
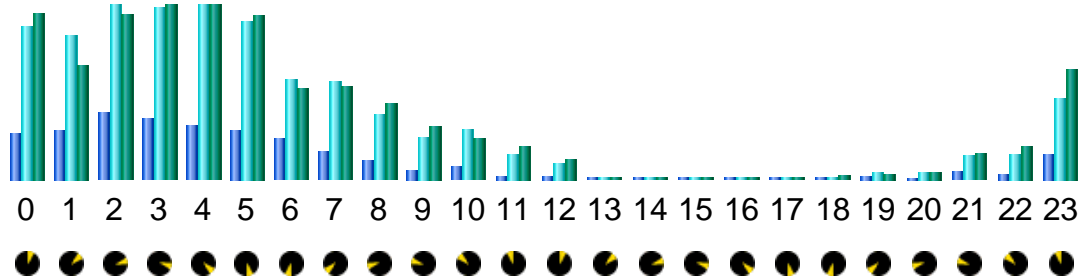
## Hours



| Hours | Pages | Hits | Bandwidth |
|---|---|---|---|
| 00 | 1,130 | 3,883 | 103.14 MB |
| 01 | 1,248 | 3,648 | 70.24 MB |
| 02 | 1,647 | 4,577 | 101.80 MB |
| 03 | 1,523 | 4,357 | 112.48 MB |
| 04 | 1,371 | 4,435 | 111.96 MB |
| 05 | 1,261 | 4,007 | 101.89 MB |
| 06 | 967 | 2,513 | 55.12 MB |
| 07 | 670 | 2,469 | 56.63 MB |
| 08 | 411 | 1,591 | 46.76 MB |
| 09 | 212 | 1,067 | 33.19 MB |
| 10 | 302 | 1,221 | 24.87 MB |
| 11 | 75 | 622 | 20.51 MB |

| Hours | Pages | Hits | Bandwidth |
|---|---|---|---|
| 12 | 57 | 356 | 11.51 MB |
| 13 | 1 | 31 | 1.11 MB |
| 14 | 0 | 0 | 0 |
| 15 | 12 | 20 | 295.93 KB |
| 16 | 3 | 32 | 1.12 MB |
| 17 | 4 | 26 | 510.89 KB |
| 18 | 7 | 39 | 2.09 MB |
| 19 | 81 | 153 | 2.50 MB |
| 20 | 40 | 161 | 4.67 MB |
| 21 | 157 | 563 | 16.11 MB |
| 22 | 133 | 655 | 20.65 MB |
| 23 | 642 | 2,067 | 68.54 MB |

## 7. Efficiency Enhancement (Give specific details about the following #)

### (i) Volume of Transactions Processed

Anmol as an efficient system has been able to satisfy all requirements of all type of Users that it has been developed to serve. There are no reports of lagging or crash down of system reported since. The percentage of adoptions has also increased by more than 50 % after this web application came into existence.



| | 2011-12 | 2012-13 | 2013-14 |
|---|---|---|---|
| ■ Adoption | 34 | 29 | 78 |
| ■ Waiting PAP | 1333 | 1512 | 912 |

The web application design, development, testing and implementation are done in planned phases, to avoid any case of data misinterpretation or system failure. As this web application is gaining popularity through word of mouth and there are plans in to do a public campaign to make people more aware of this platform. The volume of traffic is expected to grow by 200 % in coming six-eight months. Our current system is able to adapt o such traffic and perform efficiently.

However we have done an adaptive research before and are ready to make required changes in web –server services and expansion in hardware capabilities.

### (ii) Coping with transaction volume growth

Anmol aims at facilitating the adoption of child staying in different homes. The families who are willing to adopt a child are regularly applying to different homes. Easing the process through Anmol has resulted in increased number of registration from PAPs. The PAPs registered with homes are frequently contacting to homes for knowing their application status. The families who are not registered but willing to adopt a child are in touch with homes through help desk. Establishment of Anmol has helped in easing the process of handling transactions in volumes.

**(iii) Time taken to process transactions**

Anmol has enabled the management in reducing the time to process the transactions. It has improved the efficiency of SARA not only in processing the applications of PAPs for adoption but also tracking the status of applications. It has made the entire system responsive.

**(iv) Accuracy of output**

The manual processing of SARA functioning was confined to registration of PAPs and children in a particular home. The tracking of applications, its status and availability of children was very difficult. The waiting list was increasing regularly as there was no synchronisation between different homes across the state.

Anmol now enables SARA to fast track the process of registration of PAPs and children. The errors can be seen and resolved instantly. Anmol is providing all related information about the SARA, adoption procedures etc. on its panel and has a provision of eligibility check on board to ensure accuracy on the data provided by the beneficiary.

**(vi)  Number of delays in service delivery**

Anmol is a uniquely designed web portal which ensures timely registration and resolution of cases of adoption. To achieve the overall goal of the scheme, it was critical to ensure that each service has been timely provided.

## 8. Service Delivery – Business/ Client Centricity (Give details about Improvement in interaction with clients and outcome for clients, relevance of access points, Length and Breadth of services provided online etc. #)

Anmol has advantages in the following areas to its user:-

1. **Synchronised Communication Channel** – Communicating with and contacting adoption agencies has now become very easy and accessible to PAPs. Information regarding administrative orders are available through ANMOL. Monthly and quarterly information on adoption and waiting list status of Prospective Adoption Parents (PAP) and children is available in one click within 24-hour helpline facility. The queries are handled at a faster pace.

2. **Ease of Use** - Anmol is accessible through any modern age web browser like Internet Explorer, Google Chrome, Mozilla or Firefox. Automatic Alerts are enabled on registered E-mail and SMSs to PAPs and agencies. There is a special provison for disabled people; they also get information at his/her doorstep through SMS and/or e-mails. Information forms and fill in details are easy to access and feed in. They are regularly updated in database.

3. **Support /24 x 7 Helpline –** An efficient, dedicated and totally online helpline has been one of the most important parts in this web application which functions in 5 steps right from the generation of report to the closure of request. Prior to introducing the web based MIS, there were several drawbacks with regard to addressing complaints/queries, providing first-hand information on the scheme & its benefits.

4. **Help files and Information-** Easy to understand information and help manuals are available to guide users for registration and other process. There is a detailed list of SAA registered homes along with their respective addresses and contact details.

5. **Monitoring -** There has been a continuous watch from the admin area on the status of adoption rates; child growth .The population is segregated in terms of age of parents and children. Anmol has a unique feature of tracking the entry of child by local authorities, Police, and public. It also facilitates the process of tracking the growth of children once he/she is admitted to a particular home. Their health, education and skill development are being taken care of by the home and are being tracked effectively by Anmol.

# 9. Citizen Centricity (Give specific details on the following#)

**(i) Impact on effort, time and cost incurred by user**

PAPs have to no longer wait for the child of their choice. Geographically the user has more options in terms of adoption homes. They are allocated with a waiting number and notified accordingly on SMS and emails. Time and money is saved as Anmol has reduced unnecessary travel and communication cost.

Anmol is accessible through any modern age web browser like Internet Explorer, Google Chrome, Mozilla or Firefox. Automatic Alerts are enabling on registered E-mail and SMSs to PAPs and agencies. There is a special provision for disabled people; they also get information at his/her doorstep through SMS and/or e-mails. Information forms and fill in details are easy to access and feed in. They are regularly updated in database.

**(ii) Feedbacks /grievance redressal mechanism**

Prior to introducing the web based MIS, there were several drawbacks with regard to addressing complaints/queries, providing first-hand information on the scheme & its benefits. Secondly, there was no such powered mechanism to monitor the progress. Thirdly, ensuring timely disposal of the cases was critical. Introduction of web based MIS has enabled expeditious services to the end user in time. Help Desk is one of the critical panels on the board that has provided convenience to the end user.

Help desk functions in the following logical steps.

- Registration and generation of ID (ticket no.)
- Problem analysis
- Sorting with knowledge base with support team
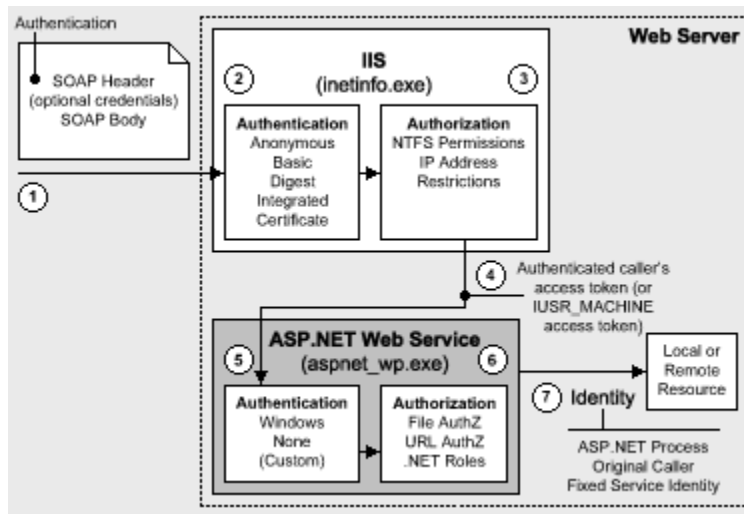- Response & acknowledgement
- Closure of Request
  Add Chart

**(iii) Audit Trails**

It is necessary to keep track of what changes were made to the database, and by whom. An audit log is prepared regularly on feedbacks received, complaints addressed, etc.

### (iv) Interactive platform for service delivery

- The ASP.NET Web services interactive platform architecture



## ASP.NET Web services interactive platform architecture

It illustrates the authentication and authorization mechanisms provided by ASP.NET Web services. When a client calls a Web service, the following sequence of authentication and authorization events occurs:

1. The SOAP request is received from the network. This may or may not contain authentication credentials depending upon the type of authentication being used.
2. IIS optionally authenticates the caller by using Basic, Digest, Integrated (NTLM or Kerberos), or Certificate authentication. In heterogeneous environments where IIS (Windows) authentication is not possible, IIS is configured for anonymous authentication. In this scenario, the client may be authenticated by using message-level attributes such as tickets passed in the SOAP header.
3. IIS can also be configured to accept requests only from client computers with specific IP addresses.
4. IIS passes the authenticated caller's Windows access token to ASP.NET (this may be the anonymous Internet user's access token, if the Web service is configured for anonymous authentication).
5. ASP.NET authenticates the caller. If ASP.NET is configured for Windows authentication, no additional authentication occurs at this point; IIS authenticates the caller.

   If a non-Windows authentication method is being used, the ASP.NET authentication mode is set to None to allow custom authentication.

6. ASP.NET authorizes access to the requested Web service (.asmx file) by using URL authorization and File authorization, which uses NTFS permissions associated with the .asmx file to determine whether or not access should be granted to the authenticated caller.

**(iv) Stakeholders consultation**

Detailed discussions were held with all stakeholders at regular intervals to design, frame and operationalise Anmol. All the valid suggestions were incorporated in designing of the system. The detailed consultation process is as follows:-

| Stake holders | No of consultation | Areas for consultation |
|---|---|---|
| Department of Women & Child Development | Regularly | Infrastructural support, technical support, Band width and connectivity support. Data feeding, compilation, need for up gradation, changes required, preparation of reports etc. managing data base. Training, sensitisation for behavioural change, resource management. |
| State data centre | Quarterly | Shadow Data securing, |
| CWC | 12, need basis | Validating instruments, renewal and online feeding. |
| Homes | Monthly | Domain use, data processing, filtering, sorting, management, high Bandwidth for heavy traffic, fast core processors, all browser support etc. |

## 10. User convenience (Give specific details about the followings #)

**(i) Service delivery channels**

Anmol is accesible through any popular browsers whether it's Internet Explorer, Google Chrome, Mozilla or Firefox. Automatic Alerts are synced on registered E-mail and SMS to PAPs and agencies. Anmol has a provision on its panel for disabled people; they also get information at his/her doorstep through SMS and/or e-mails.

**(ii) Completeness of information provided to the users**

Anomol on its portal provides all relevant information with regard to adoption process. Information forms and fill in details are easy to access and feed in. They are regularly updated in database. Any amendments made in the process also can be easily accessed through portal.

**(iii) Accessibility (Time Window)**

Reduced turnaround time for registration, adoption process and feedback/ complaint resolution. The system is online and can be accessed easily at one place from smartphone, tablet or a laptop. Every effort have been made to complete the adoption process and reduce the long waiting list with in the stipulated time.

**(iv) Distance required to travel to access points**

All the homes are now well connected to Anmol. The user can acess all the information online from his/her smart phone or using cyber cafe. The homes are so established that it covers the entire population of the state.

**(v) Facility for online/offline download and online submission of forms,**

All the information is available online with a facility of downloading and submission of forms. Registration Forms are available to fill in all necessary details and through separate access areas for PAPs and adoption agencies. There are strict validators to cross check the information on browser side and alerts user to feed in information correctly.

**(vi) Status Tracking**

Status tracking is available for both agency and PAP's. Along with this there is constant monitoring by Admin.

# 11. Innovation (Give details on how the usage of technology is exemplary, any use of new and emerging technology, impact on number of steps required, Identification and removal of bottlenecks/ Irrelevant steps etc. #)

**(i) Technology Use**

Fundamental changes have occurred in the structure of most developing countries, with services becoming the major sector of economic activity. Meeting the challenges of an unstable and unsettled environment is not easy. Governments all over the globe have been involved in the objective of getting as many public services electronically enabled as possible. It is believed that greater efficiency can be achieved in public service delivery through the use of new ICTs to which increasing proportions of the population now have access. Anmol has been a part of the major public services structure renovation a step in nurturing the future of our country i.e Children.

E-Governance to Employee partnership (G2E) has been one of major primary interactions in the delivery model of Anmol. We developed the relationship with online tools, sources, training and articles to help employees maintain communication with the government. E-Governance relationship with Employees allows new learning technology in one simple place as the computer. Documents can now be stored and shared with other colleagues online. Anmol makes it possible for employees to become paperless and makes it easy for sharing important documents in electronic format.

The adopted methodology and technology that has been developed is to keep in pace with the current and future needs. Developed solution is robust, adaptive and completely secured.

## (ii) Use of new and emerging technology

The technology used for Anmol provides an opportunity to the government to make the scheme client oriented and demand driven. It is a unique portal which is responsive for both i.e. for the government and for the end user. The application has facilitated the government to incorporate mobile applications and IVRS for extending the outreach and making it convenient for the user. The user now can access the information about the scheme through using mobile phones thereby reducing the

cost incurred by the user on travel and lodging, boarding. It also has saved time invested by the user for availing the scheme benefits. ASP.NET technology used for Anmol is adaptable to every condition and can be linked with other e-Portals of organizations and institutions functioning for similar cause.

Anmol is uniquely designed on Google base with lots of panels on board. It also provides a complete helpline desk for the user for any queries/information at times.

The designed system is easy to handle and can be operated by any citizen/user with ease. The system is available in Hindi for better interface with the end user. The form once fully filled is fed in the data base by the trained operators in the project office to avoid discrepancies. The MIS has a band width of 3500 GB enabling enormous space for the user. The disabled people also get the information at his/her doorsteps through SMS and with use of mobile applications.

### (iii) Impact on number of steps required

Prior to Anmol, the entire procedure for adoption was a complex one. Most of the families willing to adopt a child were not showing any interest due to rigorous procedures they had to follow for adoption. Even for simple corrections in their application, they had to travel to the home where the application was filed by them. Also frequent travelling was required to know the status on applications.

Anmol inclusion in SARA functioning has reduces series of steps as follows:-

| Steps | Prior to Anmol | After Anmol |
|---|---|---|
| Step 1:- Filing of application | Manually done by visiting home | Online |
| Step 2:- Submission of documents | Manually | Submitted manually and tracked/corrected online |
| Step 3:- Home study | Manually | Errors corrected online |
| Step 4:- Status tracking | Rigorous travelling | Online |
| Step 5:- Turnaround time | Frequent visits to homes and CWC Office | Information available online. Visit only for receiving legally free letter |
| Step 6:- Parent Child Match Making | Manual | Online |
| Step 7:- Adoption through Court | Information through regular communication channels | Online |

**(iv) Identification and removal of bottlenecks/ Irrelevant steps**

Prior to Anmol, one of the critical bottlenecks that had badly affected the adoption process was rigorous travelling of PAPs to homes for registration and knowing the status. The entire communication was based on traditional communication methods and caused delays in adoption process. The willing parents also did not have any information on the process of adoption and the channels through which the adoption would take place. These bottlenecks were removed as follows:-

| Bottlenecks | Process of removal |
|---|---|
| Lack of information and process | • The information is now placed online.<br>• The details of adoption process is also available online |
| Excessive travelling for registration and status tracking | • The status tracking is available online. |
| Delineation between homes | • Integration of all homes through Anmol |
| No linkages with the stakeholders | • All the stakeholders involved in adoption process are interlinked online. |

## 12. Defined and Achieved outcomes (Give details about extent of improvement in terms of organizational objectives, output targeted in the beginning of the project and output achieved, extent to which the project is able to reach/ fulfil the requirements of planned beneficiaries etc. #)

**(i) Improvements in Organisational Objectives**

Anmol Portal is designed to improve the efficiency of the stakeholders in attaining the objective of fast tracking the adoption process and reducing the long waiting list of PAPs. It has developed a complete synchronisation in SARA functioning and bridging gaps between parents and the centre from where the adoption is intended. Anmol has established a strong interface among all the stakeholders' viz.:- Child Welfare Committess (CWC), homes, Police who are involved in adoption process. Monitoring of special cases and tracking the status of children by gender and age has become easy. The Prospective Adoption Parents (PAPs) are now updated on the status of their applications and also with all the procedures and amendment related to adoption.

**(ii) Outputs**

Anmol was developed with an objective of fast tracking the adoption process in the state. Prior to Anmol, it was difficult to assess the number of parents applied for adoption. There were instances of duplication as one single parent has applied in two different homes. There were no checks and measures to avoid such duplication. The integration of all homes under Anmol has enabled the SARA management to calculate actual number of PAPs applied for adoption. It also has developed a strong data base on all parents and children registered/staying in different homes. The list of PAPs and children are now available online. Anmol has ease the process of adoption and resulting in large number of adoption. The increase in outputs are as follows :

| Particulars | 2011-12 | | | 2012-13 | | | 2013-14 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **Adoption** | 11 | 23 | 34 | 13 | 16 | 29 | 33 | 45 | 78 |
| **Special Need Adopted Child** | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 4 |
| **Restored to family** | 19 | 28 | 47 | 21 | 37 | 58 | 22 | 41 | 63 |
| **Total** | 30 | 52 | 82 | 35 | 54 | 89 | 56 | 89 | 145 |

Some of key results are:

- An increase of over 229% in adoption rate over 2011-12

- The special need child are also been adopted.

- It was observed that the PAP's are adopting more girl child as compare to male child.

- Anmol is the 1st state level initiative that makes adoption process easier. Anmol has crossed the borders and attracted international parents. In 2013-14 a Girl child with special needs was adopted by International parents.

**(iii) Extent to which the project is able to reach/ fulfil the requirements of planned beneficiaries etc.**

The beneficiaries for Anmol are the children staying in different homes and the families willing to adopt a child. Improvement in delivery of services has increased the number of PAPs. The PAPs who were unwilling to adopt a child due to complexity in the adoption process, are now, in large numbers applying for adoption. The online availability of all the information has also made the citizen aware of the importance of adoption resulting in large number of children are now enrolled to homes by various social institutions, agencies etc.

## 13. Sustainability (Give details about sustainability w.r.t. technology (technology used, user privacy, security of information shared- Digital Signature/ Encryption etc. #), Organization (hiring trained staff, training etc#), financial (Scope for revenue generation etc. #)

**(i) Technology Used, User Privacy, Security of information**

Because of the vulnerable internet environment and sensitivity of data prior security measures were intact with the Developed solution. The system is protected with passwords at every level. Anmol is monitored by a team of dedicated professionals to ensure its security. It is protected from viruses, spyware, and other malicious code by installing antivirus, anti-spyware on every system. Regular and automatic backup of records is synced with the server and other panels to ensure safety of information.

The web application follows an extremely cautious approach when it comes to collecting personal details / information about the beneficiary. The information fed in the system is strictly confidential. Cookies are disabled on visitor's site. The database is maintained in SQL Server 2008 R2 to ensure timely execution of data feed-in and retrieval request. Other security hardware and firewalls used. The information is placed in public domain for checking and verification, however, change in data base is exclusively done through the access centres by field functionaries.

**We are using McAfee Enterprise 8.7 which has the following features.**

**Support for Microsoft Windows Server 2008**

Better rootkit detection and cleaning without system restart Safe memory patching, better IRP repair support at the system core, and the ability to read locked files at the kernel level provide better rootkit detection and the ability to clean detections without restarting the system.

**On-access scan performance** improvements during system startup A new boot cache process improves on-access scan performance during system startup.

**Greater self-protection** The self-protection feature has been enhanced to protect against a wider range of mal-processes that can terminate McAfee processes. This provides greater VirusScan Enterprise self-protection and product stability.

**Real-time malware protection**

A new feature, Heuristic network check for suspicious files, provides customers with real-time detections for malware

**Performance improvements**

Enhanced system throttling now includes registry and memory scanning in addition to file scanning.

**Improved email scanner**

The email scanner now supports double-byte and multi-byte languages. This improves detection reliability.

**Buffer overflow protection exclusions by API**

The ability to specify buffer overflow exclusions by API was removed from VirusScan Enterprise 8.5i, but has been reinstated for the VirusScan Enterprise 8.7i release. The API exclusion name is case-sensitive.

**On-access scanner Scan processes on enable**

A new feature, Scan processes on enable, scans processes that are already running when the McShield service becomes enabled. When the McShield service starts, the scanner examines any process that is already running and any process as it is launched.

**The Relational Database Management System**

**MS SQL Server 2008 R2** is used for effective configuration management, strong authentication and access control, powerful encryption and key management capabilities, and enhanced auditing. The proposed solution has been successfully tested for HIPAA and PCI Data Security Standard Compliance, and SQL Server 2008 Enterprise completed Common Criteria IT security evaluations at the Basic Assurance Level EAL1+ and at Evaluation Assurance Level EAL4+ with compliance.

The technical team, taking care of the development and maintenance process of Anmol are well qualified and trained. The administration keeps an eye on their updated skills (highly required in ICT) and provides resources and environment to

polish their skills. We do provide them with latest gadgets and training as and when required. For more information on skill set, please follow brief profile of team behind successful deployment of this web application.

## Organisation

The training and sensitisation of functionaries has helped make the project sustainable. The staffs recruited for the data feeding were trained on each of the information of the application format. They were also sensitised to handle the case with sensitivity. The functionaries were exposed to technological environment and use of ICT. Onsite trainings for institutions running various homes were also organised for sensible and transparent data feeding with accuracy.

## Financial

Anmol is a web portal which is unique in the sense that it helps the children in need. It has the potential for agencies and institutions which functions for the cause of child rehabilitation. Anmol is capturing the information on children who were due to some or other reasons separated from their parents. To provide these children homes and family would be critical for their overall growth. The agencies/organizations/ institutions/ departments which have similar objectives can use this as a platform for showcasing their schemes or projects. The details of visitors of the portal are as under:-

## 14. Adaptability Analysis

**(i) Measures to ensure adaptability and scalability**

Anmol is a flexible technology and adaptable to every condition. It has the capacity to store data in huge volumes. It has the ability to analyse the data and generate reports for the management for suitable actions. Anmol tracks the information on families, children, homes and has the capacity to scale up by adding other panels on board.    Anmol has an inbuilt system for providing support services to its clients and management. It keeps records duly updated at all levels. It gathers information on different stages of child. If the child is not adopted in his/her early stages and shifted to other homes, there is an alert for the same automatically. The system has the provision of help desk for handling queries and providing feedback to management on each query.  It also has the provision of IVRS and is prone to mobile applications. Anmol is capable of generating auto alerts to end users for accessing support from the project. Every information related to the project is placed in public domain for easy access.

The Project has the potential of integration with Agencies and Departments working for the cause of social justice and empowerment. It also has the possibility of converging with institutions functioning with an objective of ensuring human rights and those working for creating equal opportunities.

**(ii) Measures to ensure replicability**

Anmol is an innovative portal that provides every possible information on children staying in homes and status on applications filed by PAPs. This system can be replicated in all schemes where long term tracking is required. Various agencies/departments/institutions implementing child welfare schemes can easily use this initiative with ease.

**(iii) Restrictions, if any, in replication and or scalability**

Anmol portal is developed with an objective of providing homes and families to children staying in adoption homes. It captures the data of the children and PAPs applied for adoption. The technology used in designing Anmol is adaptable to any condition and is scalable on quantitative and qualitative indicators.

**(iv) Risk analysis**

ASP.NET technology used for hosting Anmol is based on SQL Server 2008. It increases the efficiency of the system in generating large number of reports and data analysis in huge volumes. The efficiency of this technology can be enhanced further by using large cache to capture voluminous data.

## 15. Result Achieved/ Value Delivered to the beneficiary of the project-(share the results, matrices, key learning's, feedback and stakeholders statements that show a positive difference is being made etc):

### (i) To organisation

Anmol has improved the efficiency of the organisation in terms of tracking the status of PAPs and the children. All the homes are now completely aligned with Anmol and makes it easy for the Organisation to track waiting list and the stages of actions on each application at different level. It is an initiative which not only reduces the administrative cost but also ensures timely delivery of services. The records are filled online thereby reducing the chances of errors. The errors if any can be cross checked and rectified simultaneously. Some of the areas where the project is cost effective are:-

| Intangible | | |
|---|---|---|
| Accessibility | To Difficult access | Easy |
| **Resource Utilisation** | | |
| a. Manpower | High intake due to manual processing. Huge staff for data validation at all tiers. | Reduced manpower |
| b. Financial | Excessive indirect expenses due to involvement of manpower towards salaries and admin. cost | Administrative cost is negligible |
| c. Time | Manual processing cause delays | Reduce turnaround time |
| d. Transparency | Tracking was not possible | Tracking becomes easy |

### (ii) To Citizens

It not only makes the adoption easier to monitor but also helps in reducing huge travel time for parents who wish to adopt a child from SAA. Parents from any part can register themselves for adoption from any home across the state. They are not supposed to travel frequently to know their status. Anmol functions on client approach and has reduced the travel time and waiting period of parents and expedited the adoption process. The interlinking of every home has improved the delivery mechanism.

Parents says

*"Anmol has played a significant role in fulfilling our dreams. My wife and I are very happy that we adopted a boy from Dewas although we are natives of Bhopal. The registration process has become simple and transparent and we were intimated about our status on e-mail and SMSs from time to time. Help Desk too provides all the required information timely. We would like to thank the department behind the implementation of this initiative, and would definitely recommend to other parents waiting to adopt children. This is a boon for parents like us and orphans."*

### (iii) Other Stakeholders

Anmol has benefitted all the stakeholders like the institutions running homes, the Child Welfare Committees (CWC), the Police and the Court. Online method of communication has helped in reducing the time spent on taking decisions. The CWC and the Police are informed about the induction of new child in a home expeditiously. The process of making the child legally free within stipulated time now ensured. The benefits for the stakeholders are as follows:-

| Stakeholders | Benefits |
|---|---|
| Homes | Homes are interlinked and could access the status on PAPs and the children for fast tracking the adoption process. |
| Police | The Police are being informed for FIR for instant action |
| Child Welfare Committees | CWC now have the scope of making a child legally free for adoption with in the stipulated time. |

## 16. Extent to which the Objective of the Project is fulfilled- (benefit to the target Audience i.e.G2G, G2C, G2B, G2E or any other, size and category of Population/stakeholder benefited etc):

### G2G (Government to Government)

- Transparency and trustworthiness in SAA operations.
- Monitoring of special cases and target monitoring.
- Facilitating better interface with adoption agencies to fast track the adoption process.
- Integrated with every home across the state.
- Tracking children status by gender and age, their growth.
- Tracking the status of families registered for adoption.
- Developing progress reports for analysis for management.

### G2C (Government to Citizen)

- Ease of PAP's registration.
- Channelizing of information between parents interested for adoption and the centre from where the adoption is intended.
- Interlinking every home to ensure expeditious delivery mechanism.
- Keeping citizens/ PAPs updated with procedures and amendments.
- Providing easy access to information.
- Timely update on waiting list status.

### G2C (Government to Employees)

- Ease of help-desk queries status and mechanism.
- Time saving and efficient system.
- Cost Saving
- Migrating to technology
- More transparent feedback

### C2G (Citizen to Government)

- Public Approval -Positive Word of Mouth
- Easy and close feedback to further enhance and simplify system.
- Democratization

## 17. Comparative Analysis of earlier Vs new system with respect to the BPR, Change Management, Outcome/benefit, Change in legal system, rules and Regulations

| Comparison | Pre Deployment (BEFORE ANMOL) | Post Deployment (AFTER ANMOL ) |
|---|---|---|
| Parent Registration | Parents had to go to homes and register manually, the home sent the data to SARA and then monitoring activity started | Parents can register online from anywhere, they need to come to home for document submission and verification |
| | At the time of registration there is no information about other homes and registered child / PAPs | At the moment of registration the parent can choose the home, if the waiting list is more for any age group the parent can change its choice of home so child can be adopted easily and fast. |
| MONITORING | Only manual areas are there for monitoring | Monitoring is easier |
| | Not able to check the current status regularly | Checking Status Regularly |
| | Not able to provide the details in easier medium to the public for awareness of the program | Able to provide the details of scheme |
| | No Helpline | Helpline is available |
| Transparency | Parents / public is not able to view the details as to how many children are available in the homes | Details are available as to how many children are available in the home for adoption. |