Rapid Assessment System
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# Contents

Introduction ........................................................................................................................................... 3  
Need ....................................................................................................................................................... 3  
Objectives ............................................................................................................................................... 3  
Scope ...................................................................................................................................................... 3  
Stakeholder Analysis ............................................................................................................................... 3  
Design Principles for RAS ..................................................................................................................... 5  
Features .................................................................................................................................................. 6  
Feedback Collection Channels ............................................................................................................... 6  
BI / Analytics ......................................................................................................................................... 7  
Feedback Dashboard / MIS for integrated departments ........................................................................ 7  
Process Flow .......................................................................................................................................... 7  
Solution Architecture ............................................................................................................................ 8  
System Architecture .............................................................................................................................. 9  
Data Exchange ....................................................................................................................................... 9  
Process Flows ....................................................................................................................................... 10  
Mobile Based ...................................................................................................................................... 12  
IVRS ....................................................................................................................................................... 12
Introduction

NeGD/DeitY aims to develop a continuous feedback system for e-services delivered through various NeGP platforms and e-Gov applications. The proposed system will have multiple automatic feedback receiving channels and will be backed by analytics applications for generation of reports. All reports will be periodically shared with users and integrated departments for continuous system improvement. The database will also be used for increasing the social media connect of NeGP and to increase awareness about other NeGP services and programs.

Need

1. Current System of Assessment/Feedback lengthy and tedious
2. No mechanism for continuous measurement of Quality of Service (QoS)
3. No generic feedback system available to be used by govt depts
4. No electronic and integrated system for taking feedback from citizens

Objectives

1. Creating Feedback as Service
2. Creating an institutional mechanism for continuous measurement of QoS
3. Creating performance bench marks for future projects
4. Evaluate and make mid course corrections for projects
5. Realign goals to achieve targeted benefits
6. learn key determinants - economic, organizational, social and geographical of successful and failed projects

Scope

The proposed RAS would provide a mechanism for generation and management of feedbacks related to e-Gov services offered to and availed by users/citizens across the country. Also, it should facilitate analysing the feedbacks and generating knowledge out of them which in turn, would help in improving the user's/citizen's experience in availing public services.

Stakeholder Analysis

DeitY/NeGD, Government departments and Citizens are the key stakeholders in the RAS. The aim of the proposed system is to benefit all stakeholders by ensuring continuous and improved delivery of e services through an institutional mechanism to assess the quality of services on real time basis by taking feedback from actual service users. A detailed stakeholder analysis will help in understanding the need of such a system.
### Stakeholders and Benefits

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizens</td>
<td>1. Will be able to provide feedback.</td>
</tr>
<tr>
<td></td>
<td>2. Service Improvement.</td>
</tr>
<tr>
<td></td>
<td>3. Communication with government.</td>
</tr>
<tr>
<td></td>
<td>5. Share thoughts for improvement of service delivery</td>
</tr>
<tr>
<td>Government Departments</td>
<td>1. Direct feedback from citizens availing e services</td>
</tr>
<tr>
<td></td>
<td>2. Identify areas of improvement</td>
</tr>
<tr>
<td></td>
<td>3. Impact assessment of existing process of service delivery</td>
</tr>
<tr>
<td></td>
<td>4. Identify problem areas for service delivery</td>
</tr>
<tr>
<td>DeitY</td>
<td>1. Impact assessment of various e-Gov projects</td>
</tr>
<tr>
<td></td>
<td>2. Identify common problem areas</td>
</tr>
<tr>
<td></td>
<td>3. Rectify course of action of existing and new e-Gov initiatives</td>
</tr>
</tbody>
</table>

The proposed system will deliver a number of services. These services will fall in G2C, G2G and G2B categories and will offer scope of improvement in service delivery.

<table>
<thead>
<tr>
<th>Types of Services</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Citizen (G2C) to Government Citizen (G2G)</td>
<td>1. Feedback Collection</td>
</tr>
<tr>
<td></td>
<td>2. Suggestion for improvement of service delivery</td>
</tr>
<tr>
<td>Government Citizen (G2G) to Government Business (G2B)</td>
<td>1. Feedback of service consumer</td>
</tr>
<tr>
<td></td>
<td>2. Identification of areas of improvement in service delivery</td>
</tr>
<tr>
<td></td>
<td>3. Identification problem areas for service delivery</td>
</tr>
<tr>
<td></td>
<td>4. Various predictive analysis reports</td>
</tr>
<tr>
<td>Government Citizen (G2C) to Government Business (G2B)</td>
<td>1. For various types of public domain related analysis, surveys are conducted by different agencies. Feedback data can be a great source of such survey data. So, it can be shared with such organizations.</td>
</tr>
</tbody>
</table>

Also, in the proposed system, all stakeholders have a definite role to play. All stakeholders have a set of roles and responsibilities to ensure that maximum output is achieved from the proposed system.
<table>
<thead>
<tr>
<th><strong>Stakeholders</strong></th>
<th><strong>Roles &amp; Responsibilities</strong></th>
</tr>
</thead>
</table>
| Citizens        | 1. Should participate and provide honest feedback  
|                 | 2. Provide suggestions for service improvement  
|                 | 3. Communicate gaps in service delivery by providing right feedback  |
| Government      | 1. Provide data of citizen for enabling feedback system to take feedback  
| Departments     | 2. Consume the analysis of feedback data provided by RAS  
|                 | 3. Act on analysis by identifying areas of improvement  
|                 | 4. Incorporate the suggestions made by citizen for service delivery  
|                 | 5. Generate reports for department’s consumption  |
| DeitY           | 1. Generate awareness for RAS and sensitize citizen its benefits  
|                 | 2. Collect feedback  
|                 | 3. Analyze feedback  
|                 | 4. Impact assessment of e-Gov initiatives  
|                 | 5. Training and capacity building for RAS  
|                 | 6. Provide and maintain departmental access to the RAS system  
|                 | 7. Collect data from departments of citizens for enabling feedback system to take feedback  
|                 | 8. Provide reports to departments  |

**Design Principles for RAS**

1. The proposed system is designed keeping in mind that information flows across applications owned by different departments.
2. The proposed system should be able to trap and generate triggers in the system to proactively activate sending a feedback invitation to the user.
3. The proposed system should be able to generate information/knowledge out of the feedbacks generated and share them.
4. The proposed system should have value-proposition/incentives for departments that onboard it or any such partner in the system.
5. The system should be built with open standards and open APIs with plug-n-play capabilities.
6. The components should be loosely coupled to allow changes in applications that are integrated with it and in any sub-system level without affecting other parts. It should be architected to work in a heterogeneous technical environment.
7. The proposed system should be self-propelling, sustainable and scalable.
Features

The Rapid Assessment System will be an integrated platform, with independent and loosely coupled modules for performing specific functions. Each module will perform a specific function of the feedback mechanism lifecycle, ranging from feedback invitation to MIS & Dashboards. Each module will be user neutral and thereby can be modified for any service department which needs to collect feedback for its e services. A pictorial view of the modules is as below –

Feedback Collection Channels

The feedback from the service user will be collected from all possible channels of communications. For users in rural or semi urban areas, using feature phones, the feedback on quality of services availed will be taken on SMS service. Further, depending on the nature of device available at the user end and the nature of connectivity available, the user can participate in the feedback process on using more sophisticated channels like mobile browsers, social media etc.

Web Browser  Mobile Browser  Social Media
BI/Analytics

The entire system will be backed by robust BI and Analytics tools, which will help the user departments to generate real time reports on feedback collected. Some of the report formats may be:

1. Feedback ratings and their distribution as per:
   - Location
   - Age
   - Gender
   - Channel of service delivery
2. Study of service around times for various e-Services
3. Service delivery assessment on various parameters

Feedback Dashboard/MIS for integrated departments

The system will generate a customisable and user specific dashboard for various service oriented departments. The dashboard will be accessible to departments through a login id and password. Concerned department may generate their own reports by choosing the report parameters available in the Dashboard. DeitY may share the reports with departments on the following –

1. Reports generated through analytics module
2. Feedback Reports
3. Action Required and Action taken reports for User/Integrated departments

Process Flow

4. Once a service is delivered by the service provider, the server of the service department will send a trigger (through API) to the back end at NeGD with the following information:
   a. Name of service user
   b. Phone no of service user
   c. Email of service user
   d. Location of service user
   e. Service ID
   f. Other information (optional) – gender, education, income standard etc.
5. The backend server at DeitY will send an SMS/eMail to the service user requesting him/her to participate in providing feedback through SMS or browser.
6. Service user may be provided with a URL on the department’s portal where he/she can go to provide feedback regarding service quality.
7. The backend needs to assess and deliver the local language requirement of various users through url.
8. The analytics tools embedded in the backend of the system will conduct analysis as and when required by service users and other stakeholders of the exercise.
9. Reports will be published digitally and shared with stakeholders.

Solution Architecture

The entire technical solution for RAS will be developed on open source technologies and applications. Moreover, existing ICT infrastructure created in DeitY for various e-governance projects like SMS channels under m-Seva, call centre etc will be leveraged for cost optimisation and quick start of the projects. A pictorial view of the solution architecture is as given below -
System Architecture

The system architecture of RAS will be configurable, scalable and modular. All modules will be loosely coupled for the ease of user experience and to ensure that new service departments may be on board with minimum adjustments in their respective systems. A pictorial view of the system architecture is given below -

![System Architecture of RAS](Fig. 3 System Architecture of RAS)

Data Exchange

<table>
<thead>
<tr>
<th>Department Details</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Department name</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Details</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Name</td>
<td></td>
</tr>
<tr>
<td>Service ID</td>
<td></td>
</tr>
<tr>
<td>Service Type</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User Details</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>User’s Name</td>
<td></td>
</tr>
<tr>
<td>User’s mobile number</td>
<td></td>
</tr>
<tr>
<td>User’s Location</td>
<td></td>
</tr>
<tr>
<td>User’s e-mail id</td>
<td></td>
</tr>
<tr>
<td>User’s Gender</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Data exchanged between department and feedback server (Through e-Taal)
1.1. Web Based

**Invitation – Web ; Feedback Channel - Web**

- User:
  - Receive Service & Accept Invitation
  - Fill feedback form and submit
  - Close and Exit

- Department:
  - Deliver Service
  - Display pre-filled feedback form

- RAS:
  - Store and Process feedback

![Fig. 4](image)

**Invitation – e-Mail/Social Media/SME ; Feedback Channel – Web Browser**

- User:
  - User sees feedback invite on social media with link to feedback portal
  - Visit feedback portal

- User (SME, RAS):
  - Clicks on link
  - Fill and submit feedback form

- Department:
  - Complete Service Delivery

![Fig. 5](image)
**Invitation: Self; Feedback Channel: Web Browser**

<table>
<thead>
<tr>
<th>User</th>
<th>Visit Feedback Portal</th>
<th>Fill and submit feedback form</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAS</td>
<td>Verify user’s mobile number using OTP</td>
<td>Display pre-filled feedback form</td>
</tr>
</tbody>
</table>

Fig. 6

**Invitation: Self; Feedback Channel: Web Browser**

<table>
<thead>
<tr>
<th>User</th>
<th>Visit Feedback Portal</th>
<th>Fill and submit feedback form</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAS</td>
<td>Verify user’s mobile number using OTP</td>
<td>Display pre-filled feedback form</td>
</tr>
<tr>
<td>CSC</td>
<td>Deliver service</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 7 On assisted service delivery (e.g. CSC)
Mobile Based

Fig. 8

Invitation – SMS: Feedback Channel – Mobile Browser

User – Mobile Browser

- Clicks on the web link
- Fill and submit feedback form
- SMS with web link of Feedback Portal
- Send SMS inviting for feedback
- Display profiled feedback form
- Store and process

Department

- Complete Service delivery

Fig. 9

Invitation – SMS: Feedback Channel – SMS

User – SMS

- User replies to the SMS in prescribed format
- Simple SMS asking for a response through SMS

RAS

- Send SMS inviting for feedback
- Store and process

Send service & user details

Department

- Complete Service delivery

Fig. 8

Mobile Based

IVRS

Will be explored later.