The background

MCD has been entrusted with the responsibility of collection of approximately 9000 MT of garbage every day. Garbage collection had been out sourced to contractors who are expected to deliver on specific KRAs, notably, segregation of non-recyclable garbage and recyclable garbage.

With the implementation of the Bhagidari scheme, the Govt of Delhi has empowered RWAs (resident welfare associations) that are elected bodies, much like the panchayats of rural India. MCD wanted the RWA to act as independent auditor for the garbage contracting service and to verify the claims/reports of the contractor on his deliverable (segregation of non-recyclable garbage and recyclable garbage)

GramVaani as the technology provider

GramVaani was asked to develop a pilot for the MCD garbage collection system such that it was a self reporting automated system running on mobile phones with capability of web interface and a dashboard to enable key stakeholders (RWA and the MCD) to receive reports and generate reports in real time.
Solution description - Self reporting and independent audit system for waste process management in MCD

1. SELF REPORTING about garbage segregation through SMS

2. Garbage contractor’s REPORT available on web interface for RWA use and access
   - Validation/rebuttal of garbage contractor’s REPORT
   - Validation report pushed as data to Government authority

3. INBOUND SMS/VOICE
   - SELF REPORT by garbage contractor, pushed as data to Process Head
   - PROCESS HEAD validates/repudiates the report
   - PROCESS HEAD pushed data to Government

Garbage contractor

RWA representative

MCD Officer

WEB INTERFACE

WEB INTERFACE + DATA ANALYTICS
Other organization processes that can be addressed using the v-Automate FULL CIRCLE platform

- SALES
- MARKETING
- PRODUCTION
- OPERATIONS
- SUPPLY CHAIN
- HUMAN RESOURCES

<table>
<thead>
<tr>
<th>Components of the solution</th>
<th>Associated costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>User training</td>
<td>80,000 INR per training of a total of 40 USERS.</td>
</tr>
<tr>
<td>Technology solution deployment</td>
<td>2, 50,000 INR (one time only)</td>
</tr>
<tr>
<td>Technology support</td>
<td>85,000 INR per month</td>
</tr>
<tr>
<td>Customization</td>
<td>12,500 INR per man day</td>
</tr>
<tr>
<td>SMS call in charges</td>
<td>15,000 for a maximum of 30,000 SMS per month, 50 Paise per additional SMS, for a standard SMS of 160 characters</td>
</tr>
</tbody>
</table>