State-wide rollout of e-District MMP in Kerala

Project Overview
January 2017

Muraleedharan Manningal
Head - State e-Governance Mission

Kerala State IT Mission,
Information Technology Department
Government of Kerala
Agenda

- Project Overview
- Opportunities for Improvement
- Scope for Replication
- Sustainability
- Key Learning
Project Overview
e-District Kerala - Project overview

**e-District** aims at **electronic delivery of identified high volume** citizen centric services, at District and sub-district levels, which are **not part of any other MMP**

- A step towards making the **NeGP’s Vision** a Reality
  - Ensure easy, anywhere and anytime access to Govt. services (both information & transactional) in a **reliable, efficient and transparent** manner

- Leverages and utilizes the **4 pillars of e-infrastructure** under NeGP to deliver services:

<table>
<thead>
<tr>
<th>Kerala State Data Centre (KSDC)</th>
<th>Operational</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerala State Wide Area Network (KSWAN)</td>
<td>Operational</td>
<td>✓</td>
</tr>
<tr>
<td>State Service Delivery Gateway (SSDG)</td>
<td>Operational</td>
<td>✓</td>
</tr>
<tr>
<td>Akshaya Kendras (CSC)</td>
<td>Operational</td>
<td>✓</td>
</tr>
</tbody>
</table>
e-District Kerala - Major Milestones

As on Dec 2016
2.49 Crore+ certificates processed through e-District across 14 districts in Kerala.

Pilot Launch in Kannur
Dec – 2010
The e-district pilot project went live in Kannur with 23 certificate services.

Pilot Launch in Palakkad
Mar -2011
The e-District pilot project went live in Palakkad with 23 certificate services.

Launch of State-wide rollout
Dec-2012
The e-District State-wide rollout was launched in Pathanamthitta
New Brand Identity

State-wide rollout Go-Live
Mar-2013
Completed the roll out of certificate services in the remaining 12 districts

Launch of e-District Public Portal
Oct-2013
e-District Public Portal launched with facilities to apply for e-services from home

1 Crore transactions crossed
Nov-2014
1 Crore Certificates processed through e-District across Kerala.
## Project benefits realized

- **Backend computerization** of District, Taluk and Village level offices to ensure electronic delivery of services
  - 14 Districts, 75 TOs, 1,500+ VOs, 1 Crore unique reg, 2 Cr+ transactions
  - 4,500+ Laptops/Desktops, 1,600+ BB/KSWAN connections, 3,000+ DSCs
  - Hosted at SDC, STQC certified, Free/Open Source

- **Government Process Reengineering** of identified services for efficient delivery of services with improved Service Levels
  - > 85% SLA, >90% issuance, FIFO, Online verification, e-Gov standards
  - Checks on corruption, Right to Service, EDS Rules issued, Audit trails

- **Extensive Capacity Building and training** of field staff
  - 3,000+ Govt officials, 2,550+ Akshaya CSC operators, 14 DeGS
  - Master Trainers / Handhold Support / Training Centers

- Reducing **number of visits** to a Govt office for availing services
  - 2,600+ CSCs (at least 2 in each panchayat), 24x7 Online public portal
  - Saving in Time/ Distance/ Costs, SMS Alerts, Mobile App

- Reducing **administrative burden, service fulfilment time & costs**
  - DB integration with SSLC, PDS, DL, EPIC; Ent-to-end Digital workflow; MIS Reports
  - Productivity improvement, Work flexibility
Project benefits realized

- **Backend computerization** of District, Taluk and Village level offices to ensure electronic delivery of services
  - 14 Districts, 102 Taluks, 4,900+ unique reg, 2 Cr+ transactions
  - 4,500+ L2 L3, L1 & L2, 440+ WAN connections, 3,000+ DSCs
  - Hosted and maintained by Qc certificate, Source

- **Government Process Reengineering** of identified services for efficient delivery of services and improved Service Levels
  - > 85% SLA, >90% issuance in time, eGov standards
  - Checks on corruption, Rules issued, Audit trails

- **Extensive Capacity Building and training** of field staff
  - 3,000+ Govt offices, 150+ Akshaya Vidya Kendras, 14 DeGS
  - Master Trainer programmed & Support Centers

- Reducing **number of visits** to a Government office for availing services
  - 2,600+ CSCs (at least 1 per panchayat), 24x7 online public portal
  - Saving in Time/ Distance, costs, SMS Alert, mobile App

- Reducing **service fulfilment time & costs**
  - DB integration with SSLC, PGC, salary, EWS and Digital workflow; MIS Reports
  - Productivity improvement, Work flexibility
e-District Infrastructure

Software Application stack:
- Java2 Enterprise Edition (J2EE)
- JBoss Application Server
- PostGreSQL RDBMS
- Linux Operating System

Infrastructure deployed:

- **At SDC**
  - 11 State-of-the-Art Web, Application and Database servers
  - Team of Fulltime Sys/DB Admins.

- **At Project locations**
  - 4,500+ Laptops/Desktops across 1,600+ locations
  - High Speed Broadband at 1,500+ Village Offices
  - KSWAN connectivity at 75 Taluk Offices
  - 3,000+ active Digital Signature e-tokens
  - Team of DPMs & Handhold Support Engineers.
Implementation strategy

- Decentralized Project Implementation
  - District e-Governance Societies (DeGS) under DC
    - IT Cell/Cadre, NIC, Akshaya District Office

- Site visits / **Customer surveys** for feedback
- **Awards / Recognition** to top performers.
Scope for Improvement
Way Forward

- **Rollout of more services**
  - **Public Grievance** across 14 District Collectorates
  - **Revenue Court Cases** across 21 RDOs.

- **e-District Kerala 2.0**
  - Application **feature changes** based on user suggestions
  - Integration with more **public databases** – Civil registrations
  - Bringing about **simplification** in existing processes
    - Concept of Unified certificates, Validity, etc.
  - Better alignment to **e-Gov standards** and **Integrated Framework**
    - Integration with Aadhaar based infrastructure – Digital Locker.
    - State portal & SSDG integration for existing services
    - Fully featured Mobile App
Scope for Replication
Platform for new services

- **e-District** being implemented as per Central scheme
  - Compliant to **e-Gov standards** and **STQC certified**
  - Rollout after **successful pilots** in 2 districts
  - **Kerala Model is flexible** to be adopted by other States/UTs
  - **Knowledge sharing** sessions – CIPS, Karnataka Govt.

- Already being promoted as a **universal platform for rapidly launching** new e-services in the State
  - Citizen-centric services from **ST & Forest depts.**
Sustainability
# e-District Sustenance model

| People | • Dedicated **PMU** at KSITM  
|        | • State **Technical team**  
|        | • **DPM / Master Trainers / Handhold Support**  |
| Process | • **Govt Orders** issued  
|         | • Feature changes based on **feedback**  
|         | • Monthly **Performance Reviews**  
|         | • **Awards / Recognition** for motivation  |
| Technology | • Scalable **server infrastructure** at SDC  
|           | • **Laptops/Desktops/Printers** deployed  
|           | • High speed **Broadband / KSWAN** connectivity  
|           | • Empanelment of CAs for **DSC**  |
| Funding | • **Sustenance fee** charged per transaction  
|         | • **State funds** allocated annually  
|         | • Covers **Infrastructure and manpower** costs. |
Key Learning
e-District Project performance

Transactions trend in the State for FY16-17

<table>
<thead>
<tr>
<th></th>
<th>FY15-16</th>
<th>FY16-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>3,09,673</td>
<td>3,61,596</td>
</tr>
<tr>
<td>May</td>
<td>4,73,579</td>
<td>4,70,899</td>
</tr>
<tr>
<td>June</td>
<td>5,24,244</td>
<td>5,12,971</td>
</tr>
<tr>
<td>July</td>
<td>5,02,354</td>
<td>4,72,304</td>
</tr>
<tr>
<td>August</td>
<td>5,09,568</td>
<td>5,09,568</td>
</tr>
<tr>
<td>September</td>
<td>4,33,955</td>
<td>3,82,134</td>
</tr>
<tr>
<td>October</td>
<td>5,52,106</td>
<td>5,52,106</td>
</tr>
<tr>
<td>November</td>
<td>6,05,575</td>
<td>5,52,106</td>
</tr>
<tr>
<td>December</td>
<td>7,15,305</td>
<td>7,15,305</td>
</tr>
<tr>
<td>January</td>
<td>6,69,208</td>
<td>4,97,421</td>
</tr>
<tr>
<td>February</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Transactions trend in KERALA

Transactions for FY16-17:
- 45 Lakhs certificate services (Rs. 190 Cr)
- 23 Lakhs payment services

Transactions for FY15-16:
- 69 Lakhs certificate services (Rs. 323 Cr)
- 39 Lakhs payment services

Transactions for FY14-15:
- 58 Lakhs certificate services (Rs. 267 Cr)
- 41 Lakhs payment services

Transactions for FY13-14:
- 49 Lakhs certificate services (Rs. 237 Cr)
- 47 Lakhs payment services

State Average of:
- 21,000 certificate transactions per day
- 6 lacs certificate transactions per month

More than:
- 90% Approval rate
- 85% SLA compliance
- 1 Crore+ unique user registrations
Key Success Factors

- **Provisioning of adequate manpower**
  - DPM & 5 Handhold Support Engineers in each district

- **Improvement through feedback - Users & public**
  - Project evolution through suggestions
  - Citizen Surveys & Impact Assessment

- **Robust and cost-effective technology**
  - Free/Open Source technology leveraged
  - Server sizing based on future demand
  - Adequate infrastructure at project locations

- **Close Monitoring for project success**
  - Monthly Performance Reports, Dashboards, Daily SMS, VCs

Next level Challenges to the project

- Akshaya/CSC issues to be managed
- Ever-growing traffic to be handled.
Three years on, e-District crosses major milestone

In the News...

Two crore revenue certificates, 1.2 crore transactions for more than 500 payment services

Centralised system

A centralised public grievance system is being launched by all Collectorate. The KSTMT is also in the process of rolling out an online system for administering revenue court cases across all the 21 revenue divisional offices in the State.

K. Muh Nuud X. Safrulla, Director, Kerala State IT Mission (KSTMT).

Mr. Muh Nuud said new services were continuously being added to the e-District service portfolio.

Two crore revenue certificates, 1.2 crore transactions for more than 500 payment services

Centralised system

A centralised public grievance system is being launched by all Collectorate. The KSTMT is also in the process of rolling out an online system for administering revenue court cases across all the 21 revenue divisional offices in the State.

K. Muh Nuud X. Safrulla, Director, Kerala State IT Mission (KSTMT).

Mr. Muh Nuud said new services were continuously being added to the e-District service portfolio.
About “Gods own country”

Area - 38,863 Sq KM
Districts - 14
Population - 3,34,06,061
Sex Ration - 1,084 females per 1000 males
Literacy rate - 94 %
Taluks - 75
Villages - 1535
GramPanchayats - 941
Municipalities - 86
Mun Corporation - 6
Aadhaar - 98%+
Akshaya Centres - 2600+

Elephant
Hornbil
Kanikkonna
Onam
Rice

Pearl spot (Karimeen)
Coconut Tree
Thank you

muraleedharan@semt.gov.in
Mob +91 8086335855

Kerala State IT Mission
Information Technology Department
Government of Kerala
<table>
<thead>
<tr>
<th>SL</th>
<th>Core Category</th>
<th>Srv No</th>
<th>Services</th>
<th>Srv No</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Certificates - Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Caste Certificate</td>
<td>13</td>
<td>Possession &amp; Non-Attachment Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Residence Certificate</td>
<td>14</td>
<td>Intercaste marriage Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Identity Certificate</td>
<td>15</td>
<td>Life Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Relationship Certificate</td>
<td>16</td>
<td>Valuation Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>Nativity Certificate</td>
<td>17</td>
<td>Widow/Widower Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>Legal Heir Certificate</td>
<td>18</td>
<td>One and the same Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>Solvency Certificate</td>
<td>19</td>
<td>Caste Conversion Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>Location Certificate</td>
<td>20</td>
<td>Destitute Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>Domicile Certificate</td>
<td>21</td>
<td>Family Membership Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>Income Certificate</td>
<td>22</td>
<td>Dependency Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>Possession Certificate</td>
<td>23</td>
<td>Non-remarriage Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>Community Certificate</td>
<td>24</td>
<td>Minority Certificate</td>
</tr>
<tr>
<td>SL</td>
<td>Core Category</td>
<td>Srv No</td>
<td>Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>--------------------------------</td>
<td>--------</td>
<td>--------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RTI</td>
<td>25</td>
<td>Application for Information under RTI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Grievance</td>
<td>26</td>
<td>Grievance and Complaints</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Public Distribution System</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>27</td>
<td>Issue of New Ration Card</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28</td>
<td>Issue of Duplicate Ration Card</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>29</td>
<td>Addition/Deletion/Change of Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Revenue Court Cases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>30</td>
<td>Issue of Notices</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
<td>Listing of cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>32</td>
<td>Adjournment of cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>33</td>
<td>Tracking status of execution of orders</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>34</td>
<td>Stay and final orders of cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SL</td>
<td>Optional Category</td>
<td>Srv No</td>
<td>Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>-----------------------------------</td>
<td>--------</td>
<td>-------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Utility Services</td>
<td>35</td>
<td>Payment of water charges</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>36</td>
<td>Payment of Electricity Bills</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>37</td>
<td>Payment of Land phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>38</td>
<td>Payment of mobile bills</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>39</td>
<td>Payment of wireless bills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Motor Vehicle Department services</td>
<td>40</td>
<td>Collection of various fees for non-transport vehicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>41</td>
<td>Collection of various fees for transport vehicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>42</td>
<td>Cess for all vehicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Electrical Inspectorate</td>
<td>43</td>
<td>Collection of miscellaneous fees for Electrical Inspectorate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>University services</td>
<td>44</td>
<td>Exam / General / Departmental remittances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>LSG payments</td>
<td>45</td>
<td>Payment of various fees/taxes for Corporation/ Municipalities/ Gram Panchayats</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>