Chennai – Initiatives towards SmartCity

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Deputy Commissioner (Revenue & Finance)

Urbanfutures 2014 – SmartCities in the Context of Developing Nations
AGENDA

• About Chennai
• Journey of Chennai’s eGov initiatives
• How it has helped
• Experiences and Learnings
• Next Steps
CHENNAI

- More than 400 years old and is the 36th metropolitan city across the world
- 31st largest urban area in the world Detroit of India because of its automobile industry
- 2nd largest IT Exporter in India
- Only city in South Asia to figure in the 52 places to go around the world by The New York Times
- Leading tourism guide Lonely Planet named Chennai as one of the top ten cities in the world to visit in 2015
CORPORATION OF CHENNAI

• Corporation of Chennai is the Oldest Municipal Institution in India established on the 29th September 1688

• Sir Josiah Child, one of the directors of the East India Company was responsible for the formation of the Corporation of Chennai, on the model of Dutch Government in the East Indies

• Area of CoC is 426 Sq.Km.; and is headed by the Mayor, who presides over 200 councilors each of whom represent a ward in the city
FACTS ABOUT CHENNAI

- Annual Budget of more than ₹2,000 Crores
- Maintain 40,000+ roads; Storm water drain length of 962 Km.
- Street lights 2,13,045 and using 19 megawatts per day
- Collection of Property Tax from 1.2 Million properties
- Maintaining 260 parks & 113 community halls
- Leased out 153 shopping complexes with 5500 shops
- Handling 5,200 MT of solid waste per day
- Fleet with 1,000+ conservancy vehicles
- Strength of 23,000+ staff
ORGANISATION

- Commissioner
  - Joint Commr (Works)
  - Dy. Commr (Revenue, Finance, Land & Estate)
  - Dy. Commr (Education)
  - Dy. Commr (Health)

- Dy. Commissioner (North)
  - Asst. Commr (Zone 1)
  - Asst. Commr (Zone 5)

- Dy. Commissioner (Central)
  - Asst. Commr (Zone 6)
  - Asst. Commr (Zone 10)

- Joint Commissioner (South)
  - Asst. Commr (Zone 11)
  - Asst. Commr (Zone 15)
## FUNCTIONS

### Major functional scope of CoC

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<th>CoC Functions</th>
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<td>Public Grievance Redressal</td>
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<td>Storm Water Drainage</td>
<td>Vector Borne Disease Control</td>
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<td>Parks and Playfields</td>
<td>Birth and Death Registration</td>
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<td>Street Lighting</td>
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CHENNAI AS A SMART CITY
- Smart commuting
- Eco-offices
- Lively communities
- More parks
- Greenery
- 24/7 health care facilities
- Waste recycling
SMARTCITY MATURITY MODEL

Source: IDC Insights
CHENNAI’S EGOV INITIATIVES
ACHIEVEMENTS

1992 - Offline Financial Vouchers with Chart of Account Coding

2007 - Detailed System Study for Integrated ERP

2008 - Work Order Issued to eGov for Integrated ERP
        13 Modules at a cost of Rs.1.82 Crores

2009 - Property Tax Assessments

2010 - Public Grievance Redressal Module

2011 - Financial Accounting & Budgeting
        Online real-time NMAM complaint accounting

2012 - Legal Cases Management

2013 - Building Plan Approval

2014 - Mobile-powered Engineer’s Diary

2015 - Pension Management
        Payroll Processing
        Automation of Street Lights Bill Payment

2004 - Payroll Processing

2004 - Online Birth & Death Registration
## SOLUTIONS FOR CHENNAI

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<th>Admin Efficiency</th>
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<th>Citizen Convenience</th>
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<td>Engineer’s Diary</td>
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<td>Property Tax</td>
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<td>Management</td>
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<td>Fleet Management</td>
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<td>Management</td>
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<td>Trade License</td>
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<td>Pension</td>
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<td>Legal Case</td>
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<td>Public Grievance</td>
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<td>Land &amp; Estate</td>
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<td>Payroll</td>
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<td>Management</td>
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<td>Citizen Portal</td>
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<td>Professional Tax</td>
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<td>Assets</td>
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<td>Building Plan</td>
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<td>Company Tax</td>
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<td>Approval</td>
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### Municipal Accounting

- Financials

###  Revenue

- Collections
- Property Tax
- Trade License
- Land & Estate
- Professional Tax
- Company Tax

### Expenditure

- Works
- Management
- Pension
- Payroll
- Assets

### Admin Efficiency

- Engineer’s Diary
- Fleet Management
- Legal Case Management

### Citizen Convenience

- Road Cut Management
- Public Grievance
- Citizen Portal
- Building Plan Approval
LEVERAGING TECHNOLOGY

• Centralized **Open Source** Web based Application
• Unified **Citizen Web Portal** for Services
• Enabling all modes for **Collections** - ATM, real-time Interface with Banks, Online, Handhelds, Manual Counters, IVRS and Credit/Debit
• Online **Service Request** with SMS/Email alerts on every status update
• **Mobile** based applications with **GIS Integration** – Bin Tracking, Complaints Registration
• Mobile based **Engineer’s Diary** with MBook facility
• **GPRS/GPS Tracking**
IMPACT & ACHIEVEMENTS
IMPLEMENTATION SUCCESS STORIES

• Customization of ERP for the **Greater Chennai Merger of 42 local bodies with CoC** has been completed in a **record time of 45 days**

• Contractor **Payment Process through RTGS**

• **Budget Control** and **Validation** for all the Expenditure

• Weekly Review of **1500 Crore Capital Work** through online reports

• End-to-End Online **Building Plan Approval**

• Centralized **Financial Concurrence** - consolidation of payments against each Bank

• Instant **Trial Balance** and Real-time **Journalization**
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<tr>
<th>Module</th>
<th>Usage</th>
<th>Impact</th>
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<tr>
<td>Public Works Management</td>
<td>● 31,700 work orders amounting to ₹ 800 crore&lt;br&gt;● Over 16,000 payments amounting to ₹ 600 crore</td>
<td>● Efficiency gains of 800 man years&lt;br&gt;● Improved decision making as the entire data is available for analysis&lt;br&gt;● Improved utilization of Municipal expenses</td>
</tr>
<tr>
<td>Financial Accounting</td>
<td>● Over ₹ 27 lakh financial vouchers passed in the system&lt;br&gt;● More than ₹ 25 lakh payments amounting to ₹ 341 crore</td>
<td>● Real time accounting&lt;br&gt;● Centralized Financial Concurrence for 100% of the payments with auto consolidation First of its kind in the country.&lt;br&gt;● Accounts of FY 2010-11 &amp; 2011-12 closed in 6 months</td>
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<td>Grievance Redressal</td>
<td>● Over 1.5 lakh complaints registered&lt;br&gt;● Over 80% of complaints redressed</td>
<td>● Over 25 man years saved for Public&lt;br&gt;● Over 500 man years saved for Govt.&lt;br&gt;● Improved analysis – Proactive action</td>
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<td>Property Tax</td>
<td>● Tracking over 11.5 lakh properties.&lt;br&gt;● Collected over ₹ 0.000 crores</td>
<td>● Payment through payment gateway, banks, handhelds and ATM’s&lt;br&gt;● Online assessment</td>
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<td>Building Plan Approval</td>
<td>● Over 11,000 building plans created&lt;br&gt;● Over 8000 plans approved</td>
<td>● Contactless service delivery with sms/alerts at each step of the process</td>
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THE EXPERIENCE - LESSONS LEARNT
# CHENNAI’S E-GOVERNANCE EXPERIENCE

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<th>Investments</th>
<th>Team</th>
<th>Change Management</th>
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<tr>
<td>Detailed Project</td>
<td>• Funding Source - JNNURM Project Fund</td>
<td>• Dedicated Internal IT Team</td>
<td>• Buy-In of Stakeholders for the Requirements</td>
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<tr>
<td>Report</td>
<td>• Using the State Data Center for DC Infrastructure</td>
<td>• ELCOT as the IT Project Consultant</td>
<td>• Participative Process Re-engineering</td>
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<tr>
<td>Structured</td>
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<td>• eGov as the Implementation Partner</td>
<td>• Training with In-house Dedicated</td>
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<td>Architecture</td>
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<td>Training Facility</td>
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<td>Financial</td>
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<td>Accounting as Core</td>
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<td>Coding of</td>
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<td>Phased Approach -</td>
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ROADMAP TO SMART CITY

• **GIS Mapping** of Assets
• Open **Data Portal**
• City Wide **Platform** (Integrating Fire/ Police/ Water/ Sewerage/ Transportation/ Emergency Response)
• Single-**Integrated Dashboard** to manage Natural Calamities
• **Participative** Governance
• Works Management to **Asset Management**
OTHER MAJOR INITIATIVES

- Well-designed & traffic friendly roads with architect & traffic engineer
- Ecologically Sustainable Garbage Management with citizen participation
- Proactive actions with integrated disease tracking
- Integrated urban transport
- Smart streetlights - internet-enabled with camera and in-built diagnostics
- Green City
  - Parks / Tree Management
  - Solar/LED Street Light
  - Waste to Energy
THANK YOU
QUESTIONS