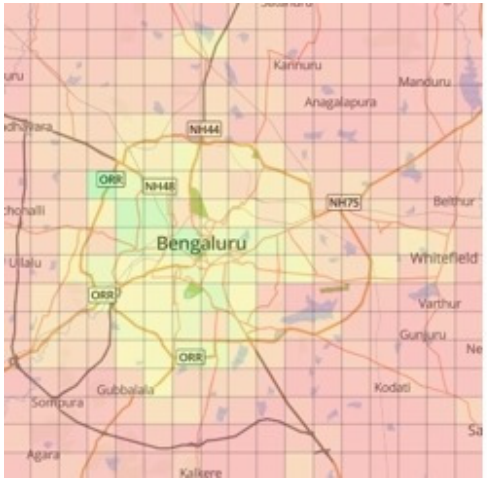
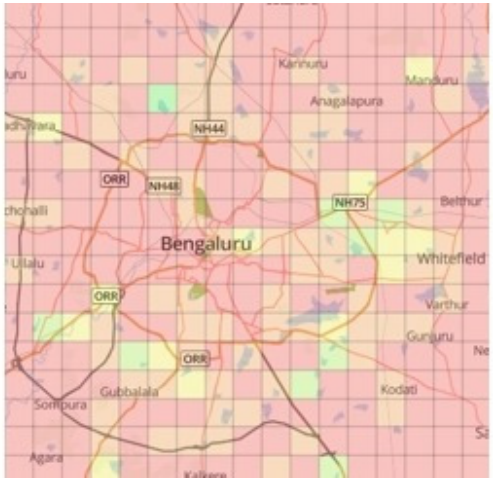
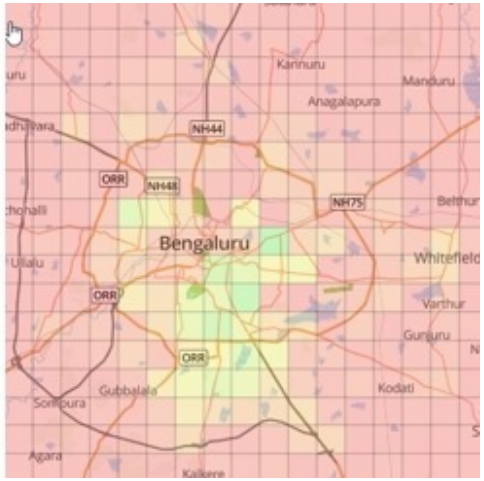
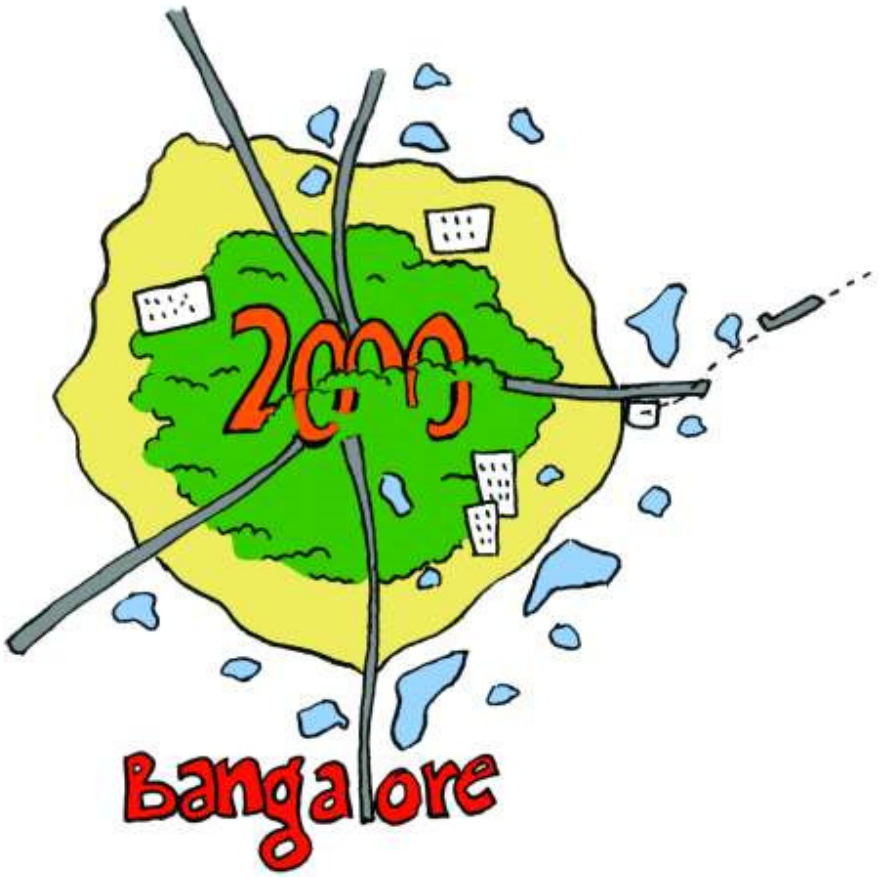
The publicly managed city







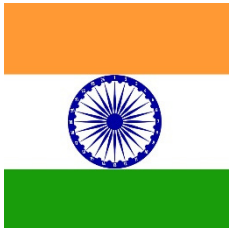
Ashwin Mahesh

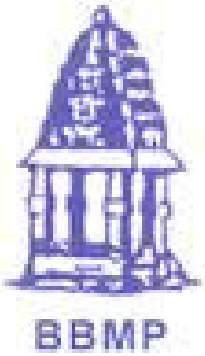


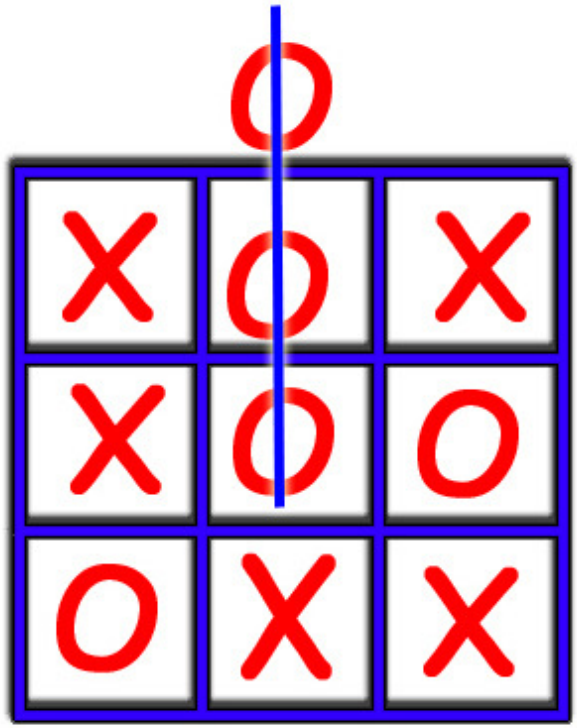
Rapid urbanisation

12.5 million already live in the city. An additional 300,000 people move into the municipal area each year, plus 30-50,000 more outside it.

Diffusion of powers, plus gaps







How do we think different?

Deficits in governance

- Silos in public administration
- Talent and training deficits in departments
- Weak planning and implementation
- Lack of funds
- Expecting ‘government alone’ to solve problems

What's the solution?

- Integrate the department silos
- Build internal capacity through technology
- Build collaborative approaches to solutions
- **Problem-solving in every domain**

Think like it's 1947.

If we had the opportunity to create government in our imagination all over again, would we do it the same way, or would we do it differently?

Almost certainly, we would put **much greater emphasis on the local, even hyper-local.**

Government BY the people.

The complexity and diversity of urban problems is such that we can never find the ‘right’ solutions and scale them everywhere. Instead what we need to do is **increase the number of problem-solving people.**

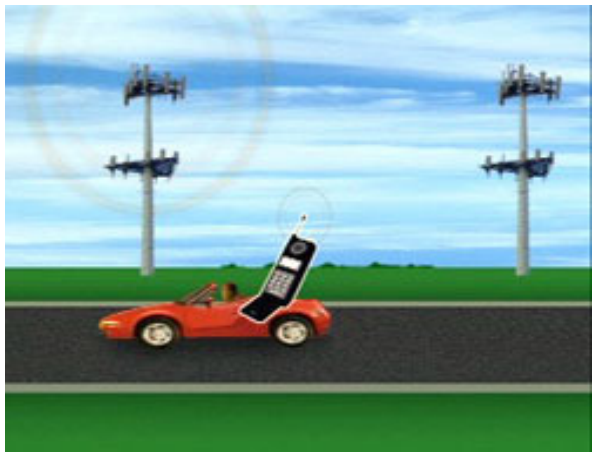
Don’t guess. KNOW.

Too many of the problems that we are trying to solve are not actually visible to us. As a result, we’re guessing, more often than not. A new **emphasis on data and measurement** is needed to switch from guessing to knowing the problems.

Who does what? And what can ‘we’ do?

mapunity
social technology at work

Tele-density from mobile tower network



mapunity
social technology at work

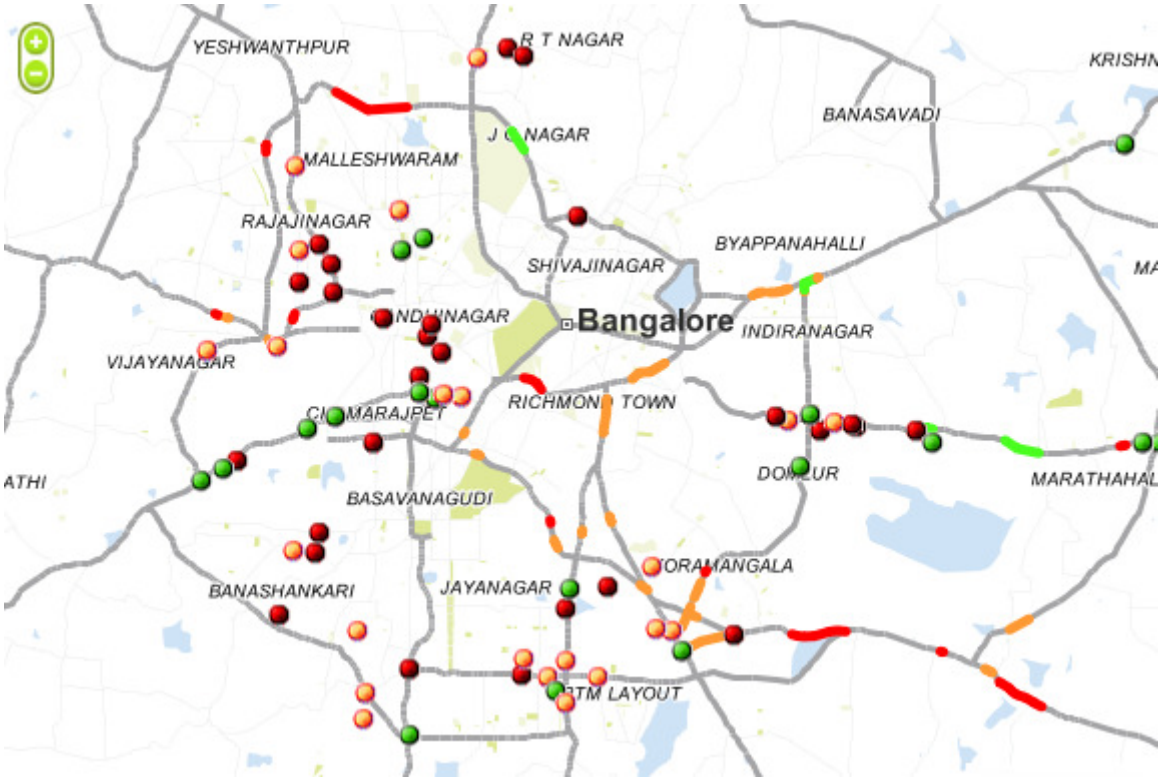
GPS units on city buses, other vehicles

mapunity
social technology at work

Police traffic cameras at junctions

mapunity
social technology at work

Integrated view of live traffic conditions



mapunity
social technology at work

Violation reports through SMS

mapunity
social technology at work

Blackberry-powered enforcement

TRAFFIC POLICE BANGALORE CITY

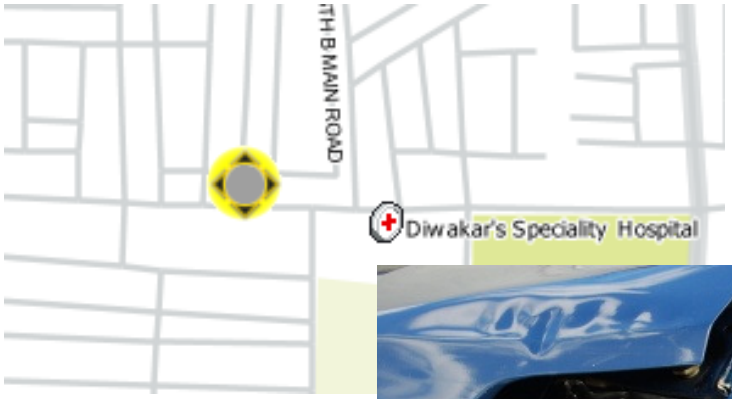
mapunity
social technology at work

Asset management

- Cameras, signals, modems monitored 24x7
- Downtime leads to automatic SMS alert to crews
- Resolution time monitored for performance
- Escalation matrix for unresolved issues

mapunity
social technology at work

Mapping accident hot-spots



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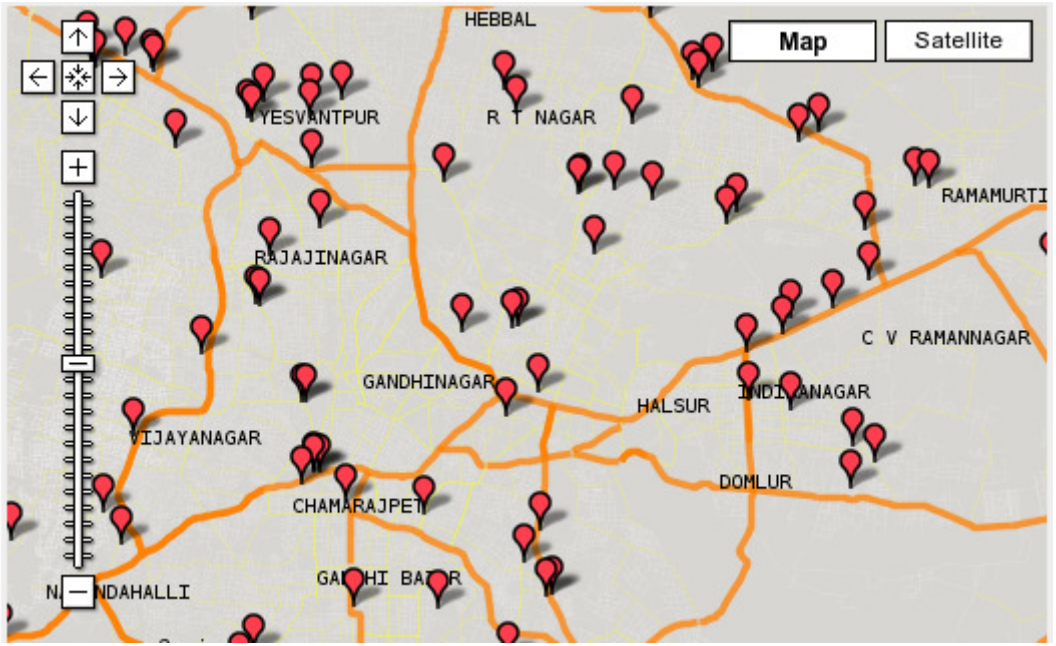
social technology at work

Mapping accident hot-spots



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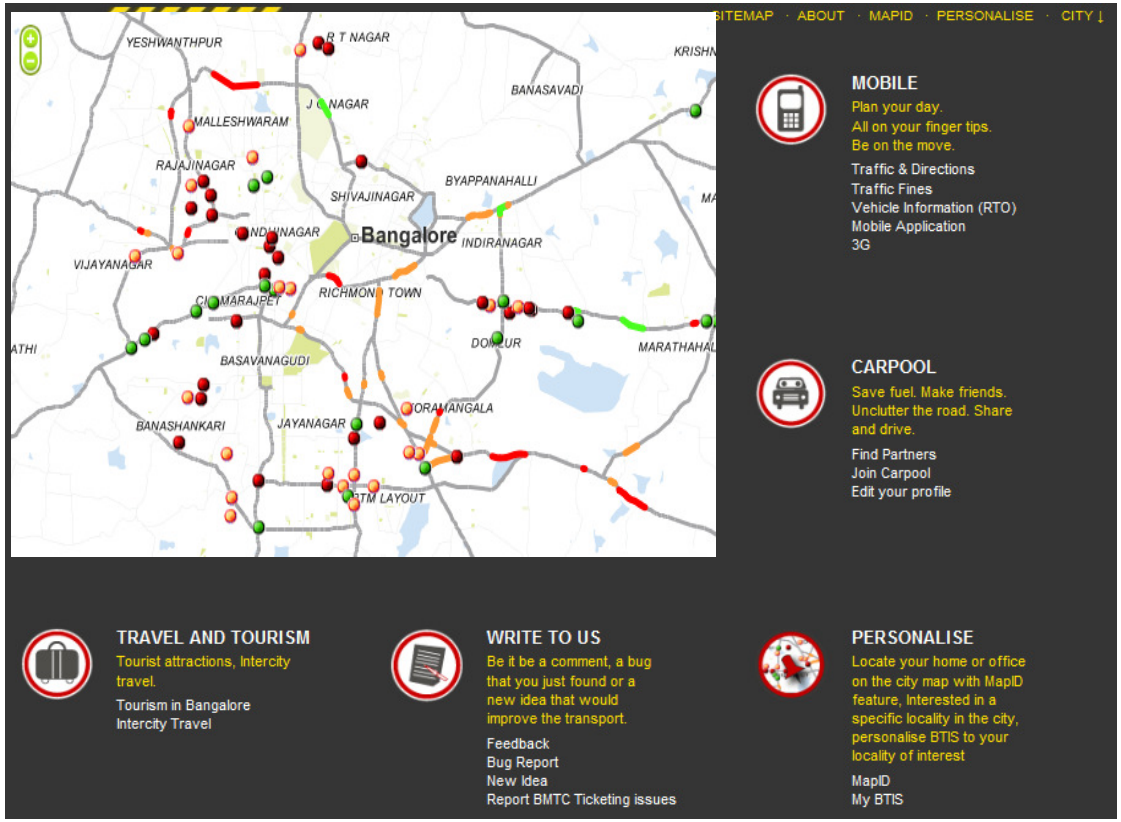
social technology at work

Bangalore Transport Information System

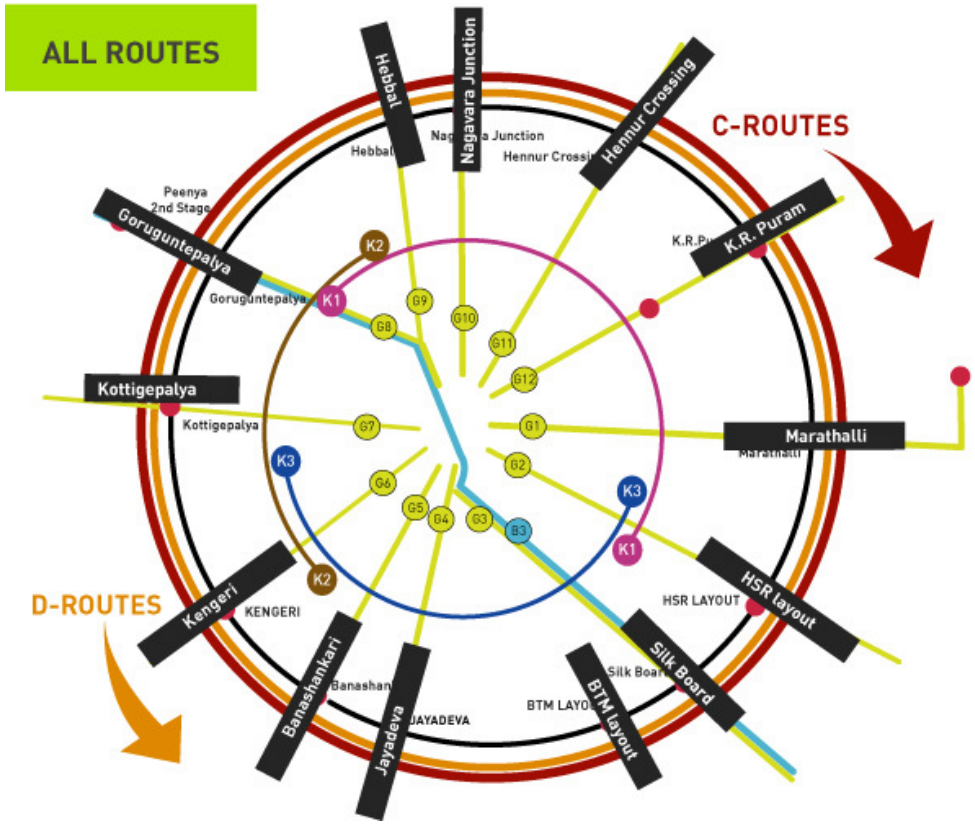


mapunity
social technology at work

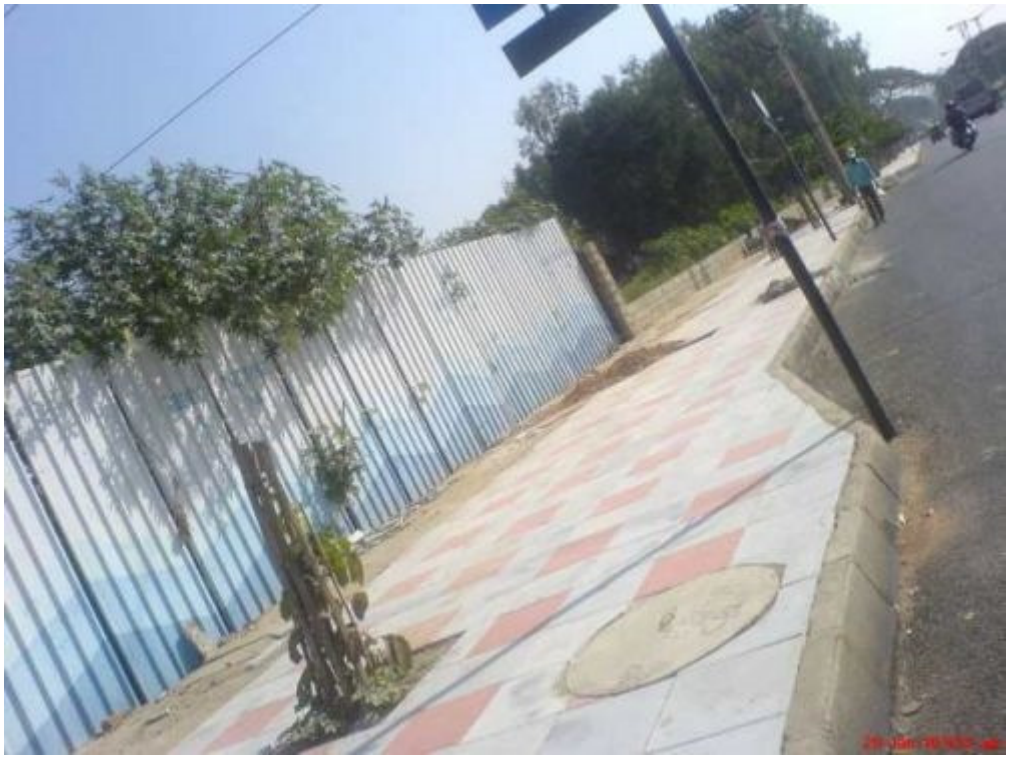
Traffic Management Centre

Direction-based bus services

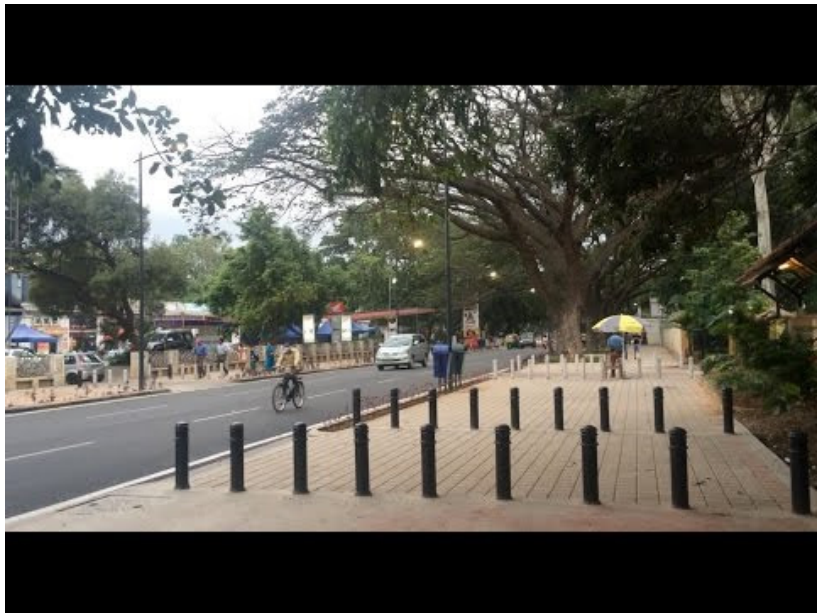
along with significant fleet expansion



Ducting utilities on 14 arterial roads



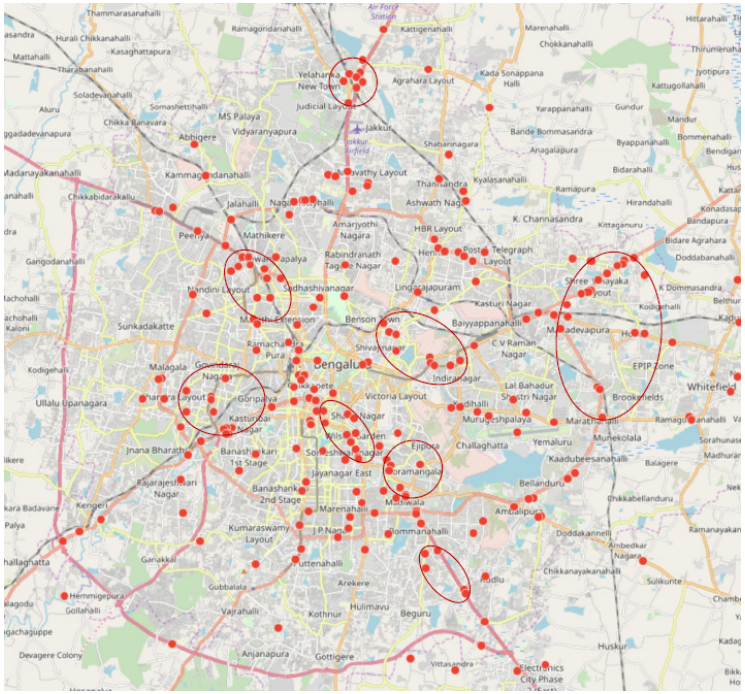
A dedicated budget for footpaths

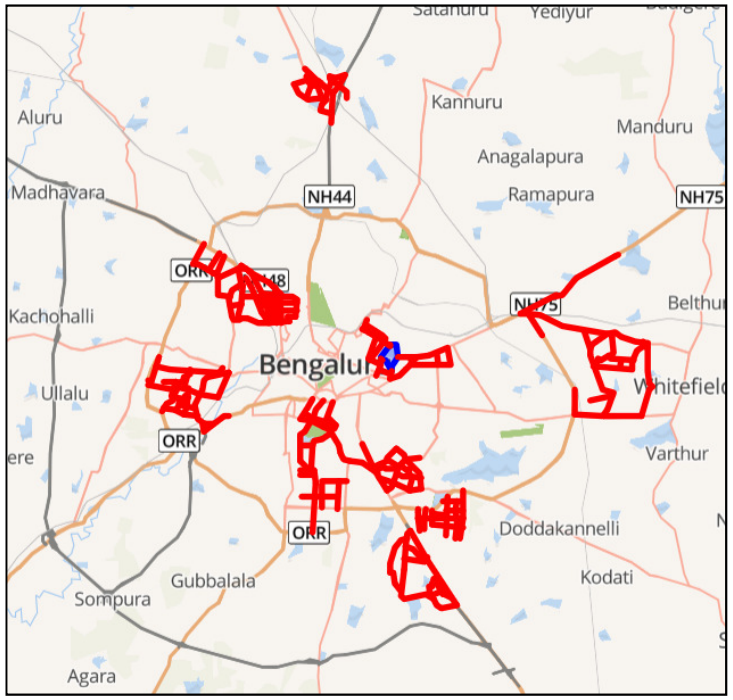


55 roads of
footpath-widening

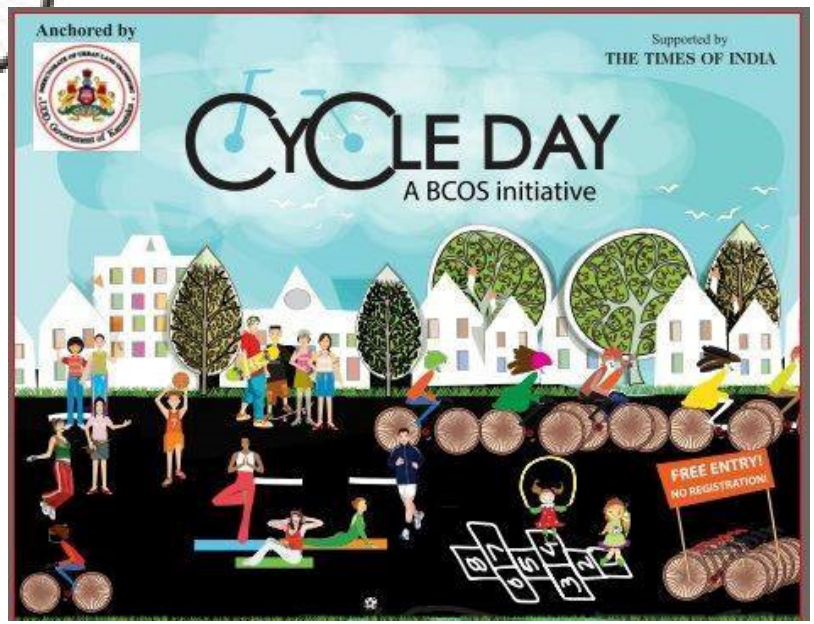
ಕಾಲುದಾರಿ ಬೆಂಗಳೂರು

Kaaludaari Bengaluru - A walkable city

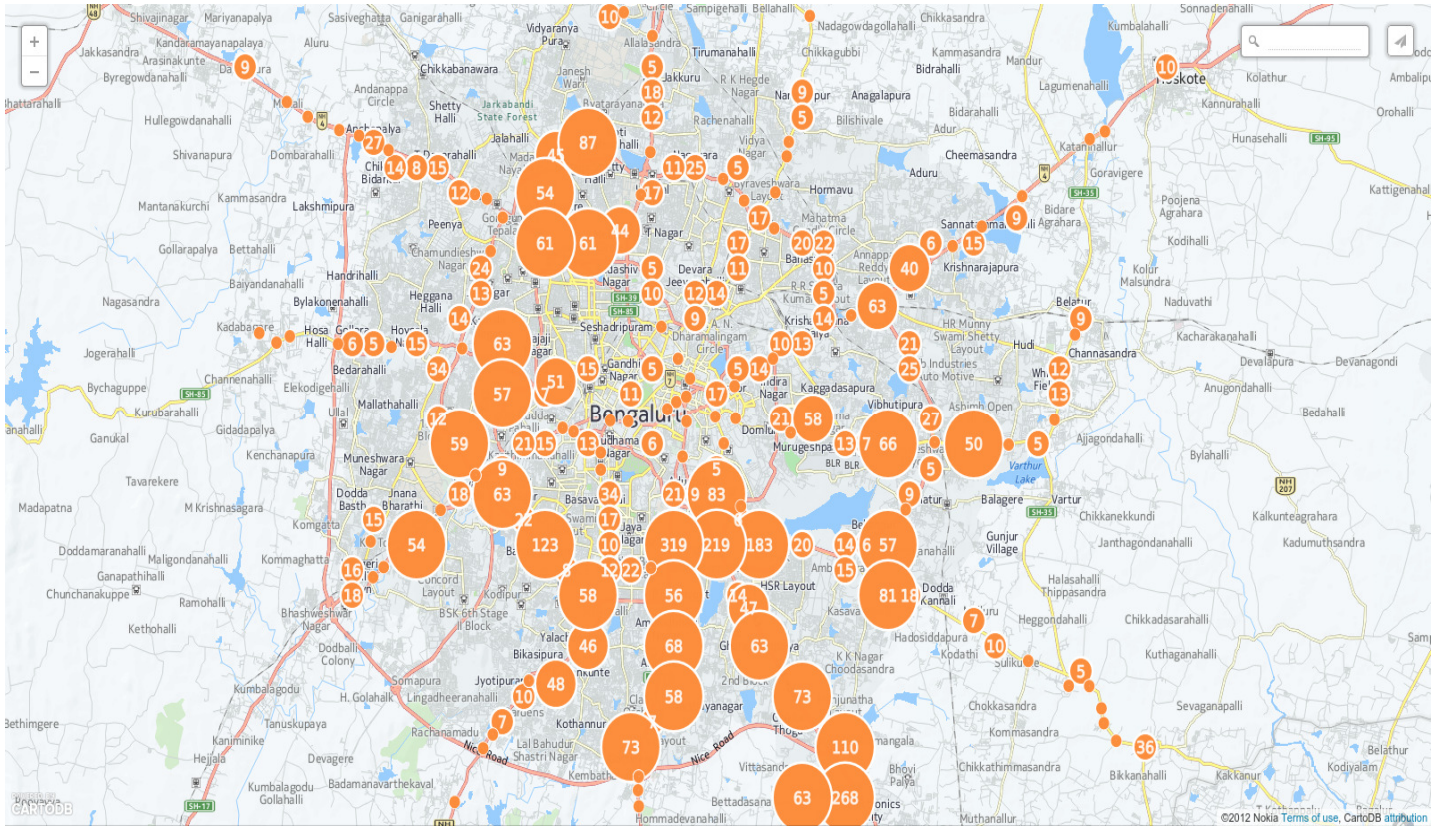


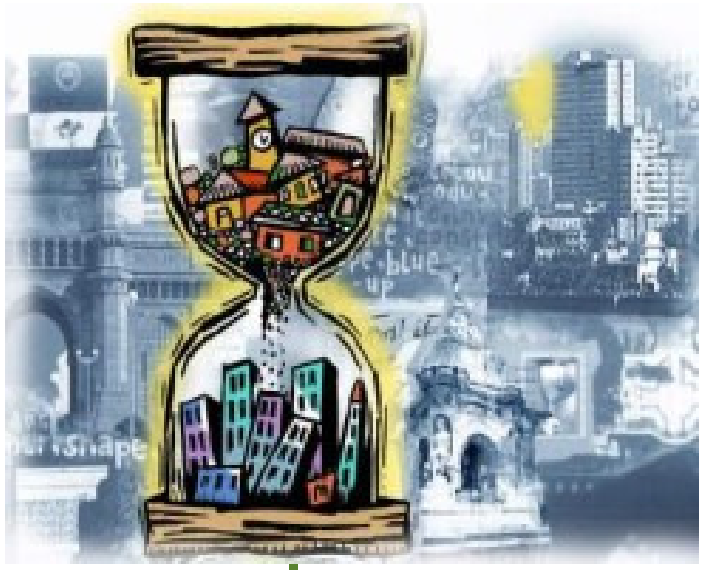


namma


Anchored by
Supported by
THE TIMES OF INDIA
CYCLE DAY
A BCOS initiative
FREE ENTRY!
NO REGISTRATION

Optimizing employee transportation

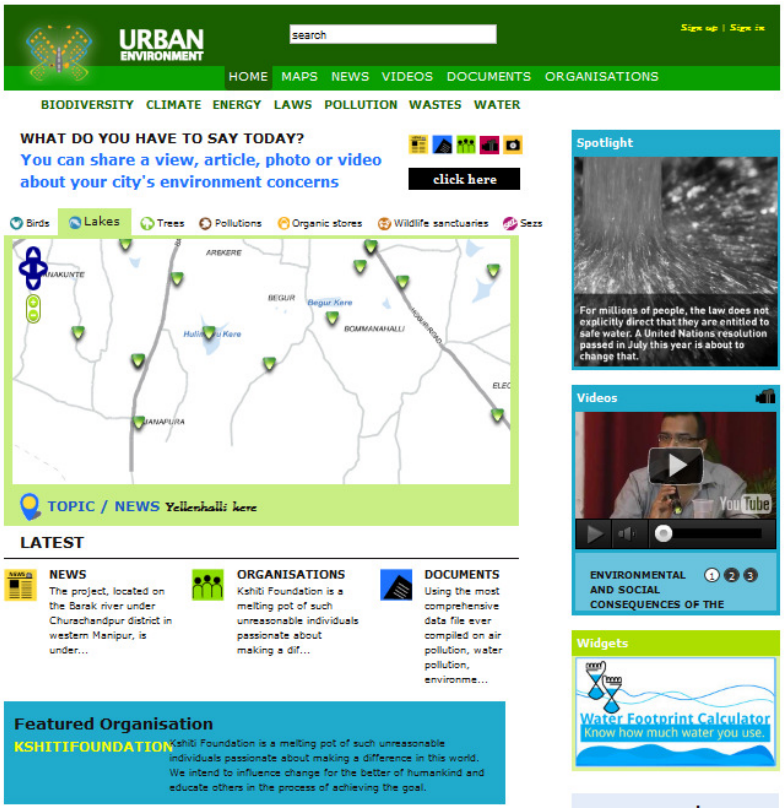




Lessons for the smart city

- Wide ownership of problems
- Technology as integrator
- Knowledge as social capital
- Government BY the people

Bangalore Environment Portal



Air Quality

Biodiversity

Solid Waste

Ground Water

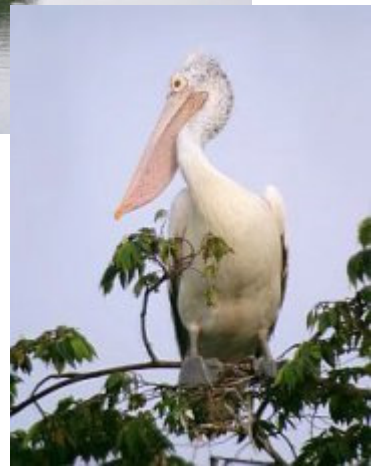
Green Cover

Energy

Water Supply

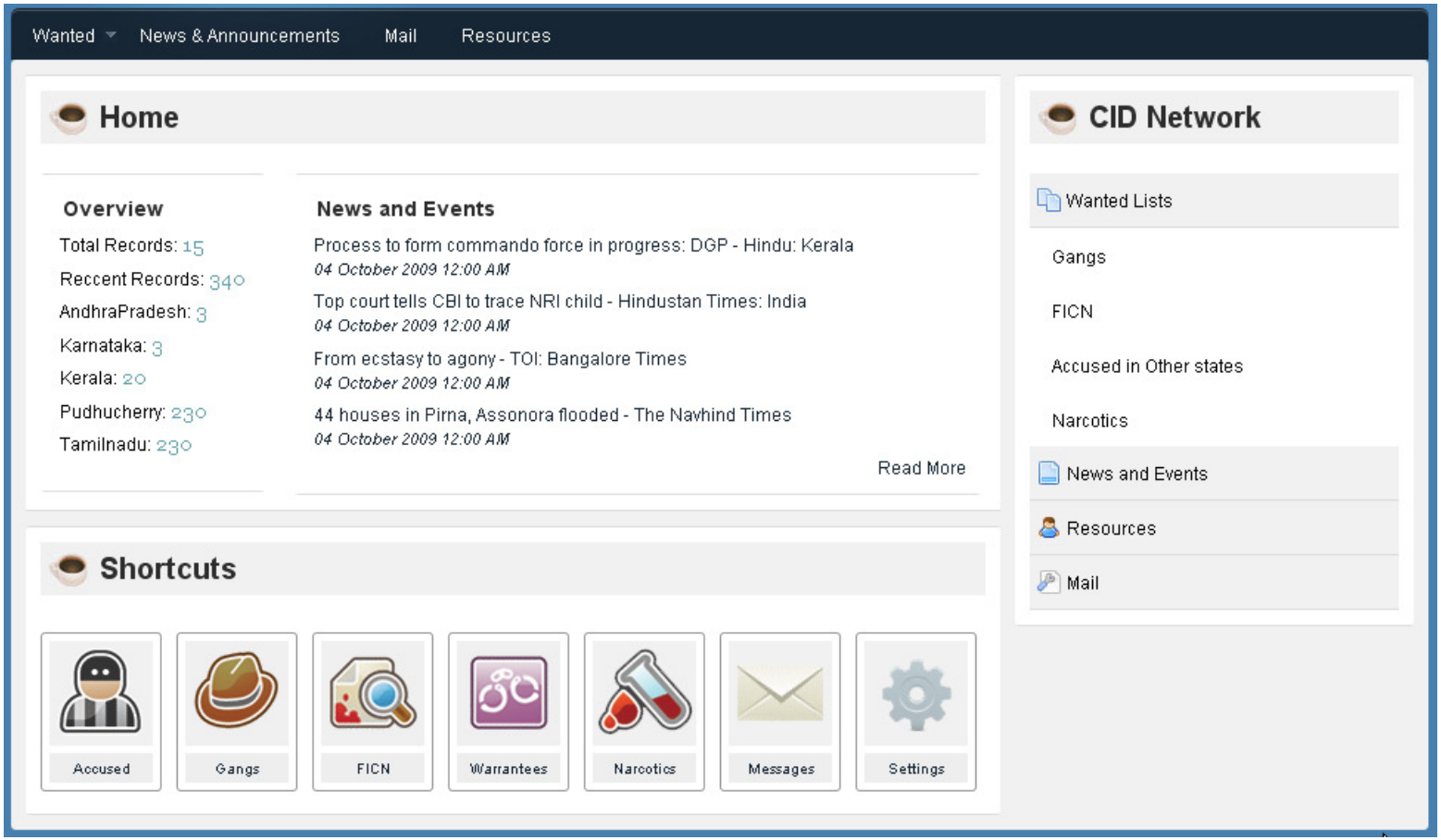
Water Quality

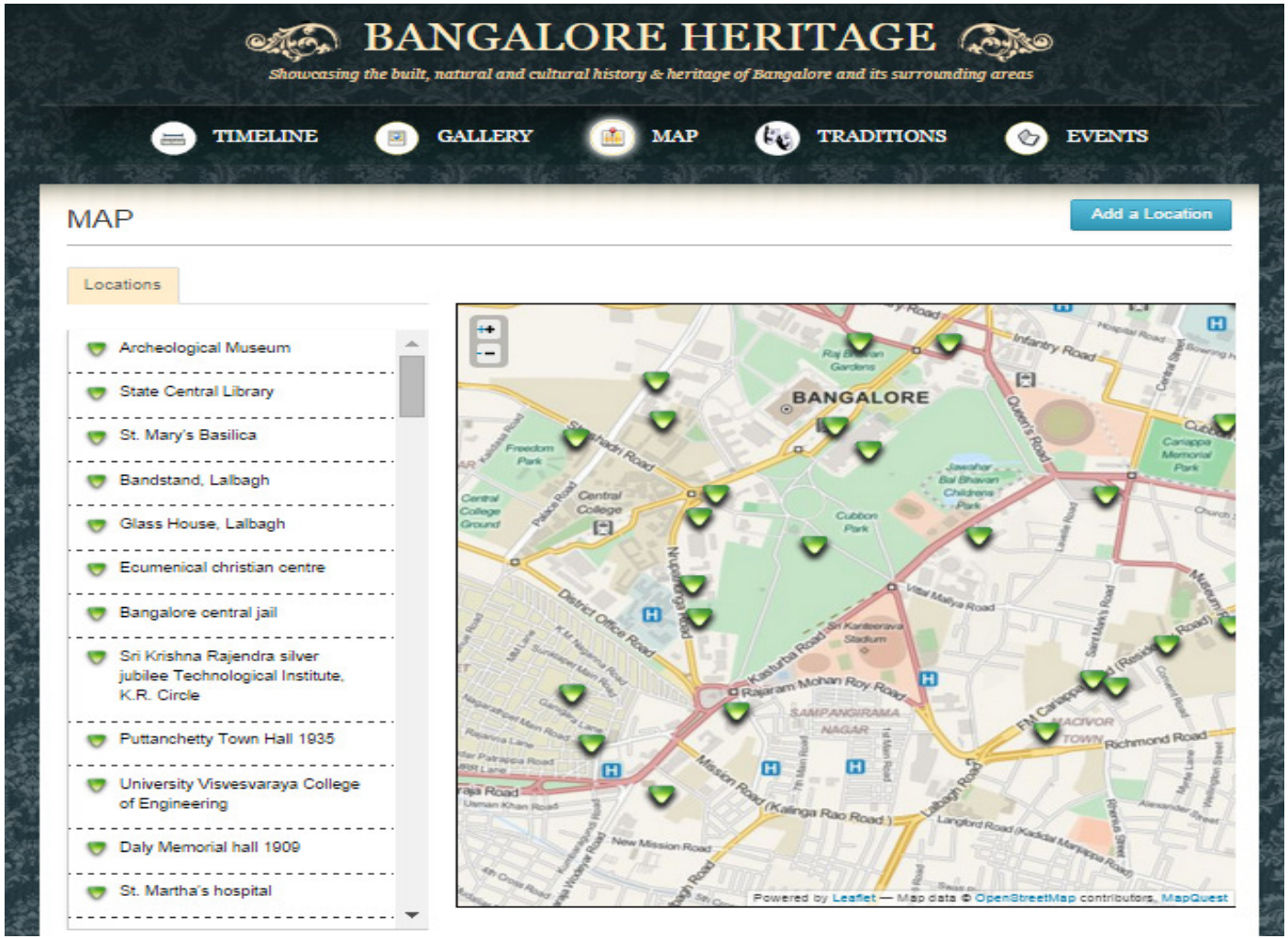
Community-managed lakes



28 lakes in the city now have ‘local’ communities engaged in conservation efforts.

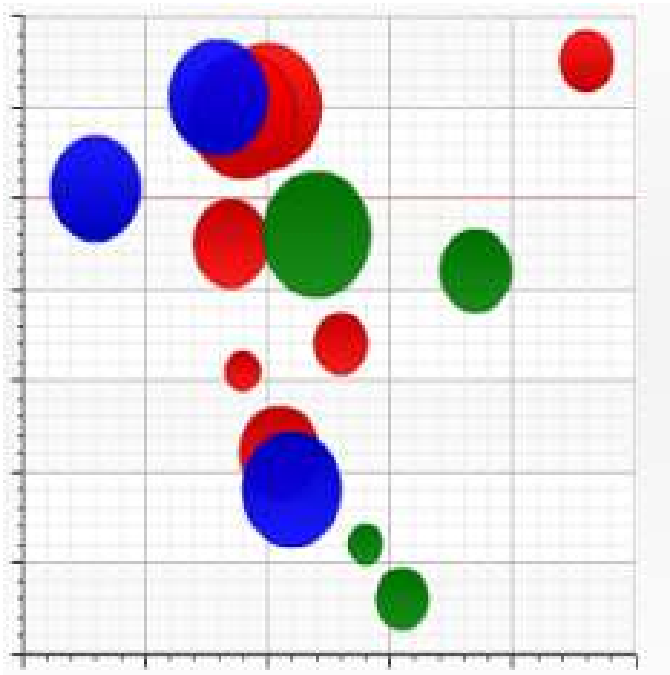
Safe Bangalore




BANGALORE HERITAGE
Showcasing the built, natural and cultural history & heritage of Bangalore and its surrounding areas
TIMELINE
GALLERY
MAP
TRADITIONS
EVENTS
MAP
Add a Location
Locations
Archeological Museum
State Central Library
St. Mary's Basilica
Bandstand, Lalbagh
Glass House, Lalbagh
Ecumenical christian centre
Bangalore central jail
Sri Krishna Rajendra silver jubilee Technological Institute, K.R. Circle
Puttanchetty Town Hall 1935
University Visvesvaraya College of Engineering
Daly Memorial hall 1909
St. Martha's hospital
BANGALORE
Infantry Road
Queen's Road
Cubbon Park
Central College
Kasturba Road
Rajaram Mohan Roy Road
Mission Road (Kalinga Rao Road)
Richmond Road
Lalbagh Road
Langford Road
Powered by Leaflet — Map data © OpenStreetMap contributors, MapQuest

Industry cluster analysis

What is our city/region good at?



Aerospace

Information Technology

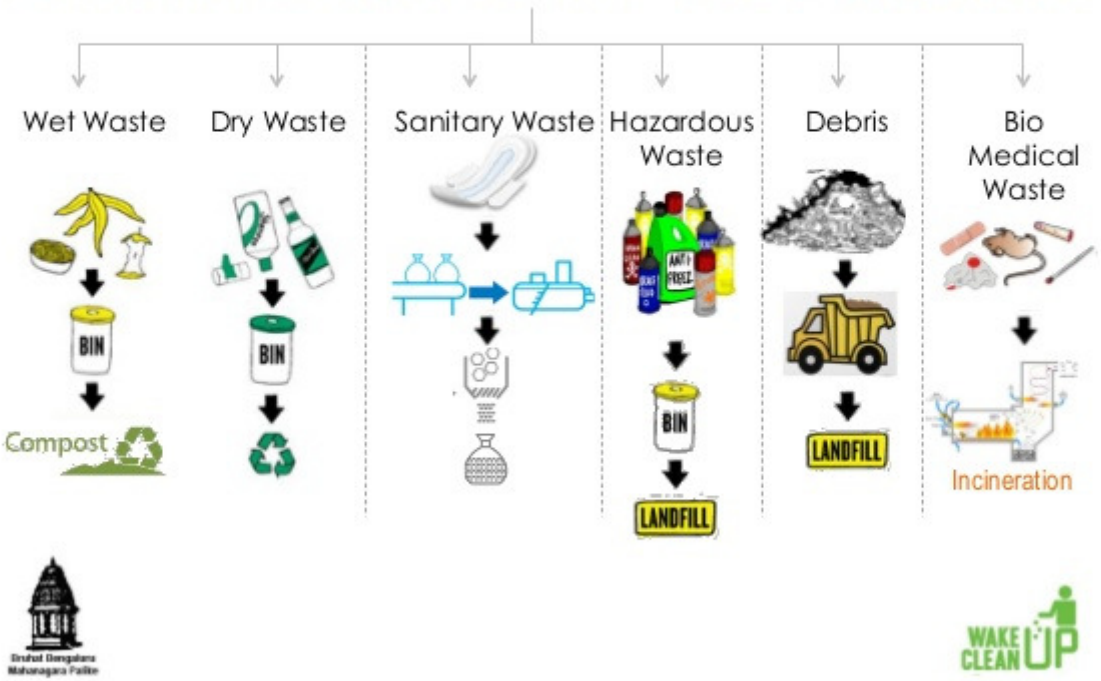
Health care

Garments

Education

Machine Tools

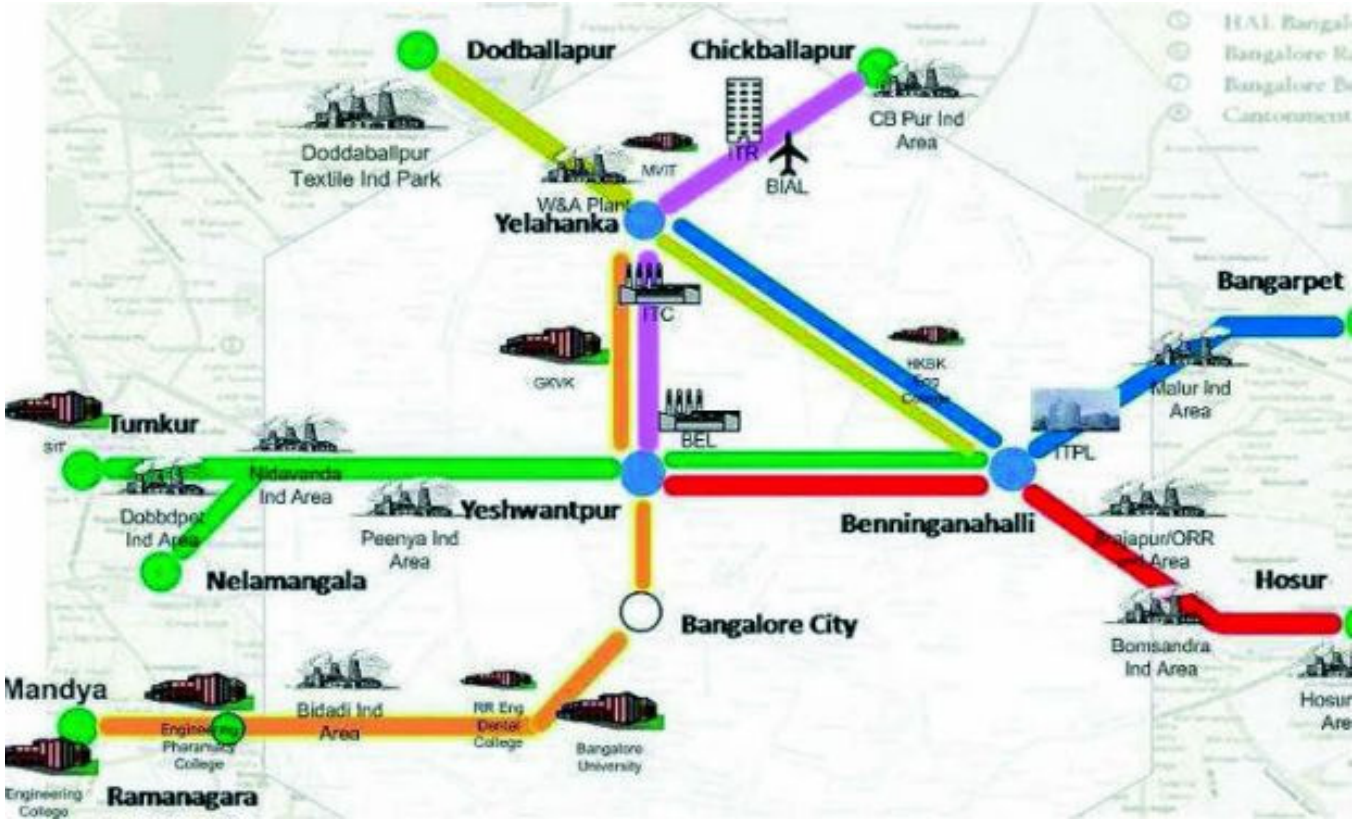
NOTHING IS GARBAGE IF WE SEGREGATE



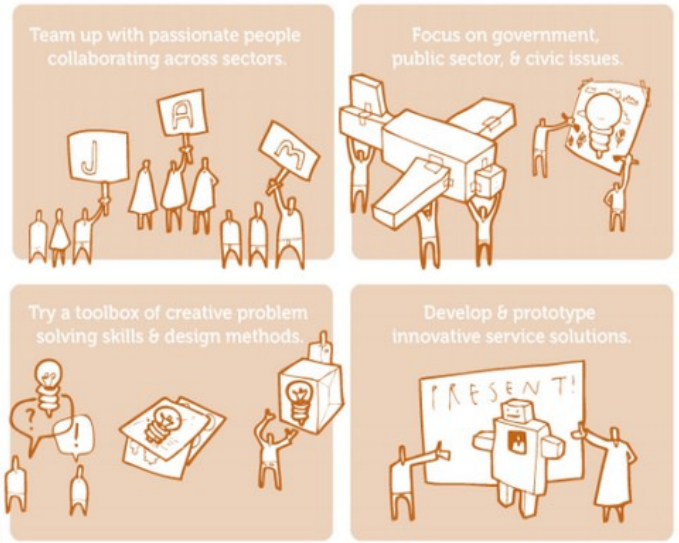
WAKE UP CLEAN

ಮತ್ತೊಂದು ಕಾವೇರಿ
Matthondu Cauvery

Commuter Rail System (Praja)



Center For
Public Problem Solving



Our first projects

- Re-imagining the Master Plan process for Bangalore
- Neighbourhood Improvement Partnerships
- A framework for implementing Swachh Bharat
- What exactly is a Smart City?

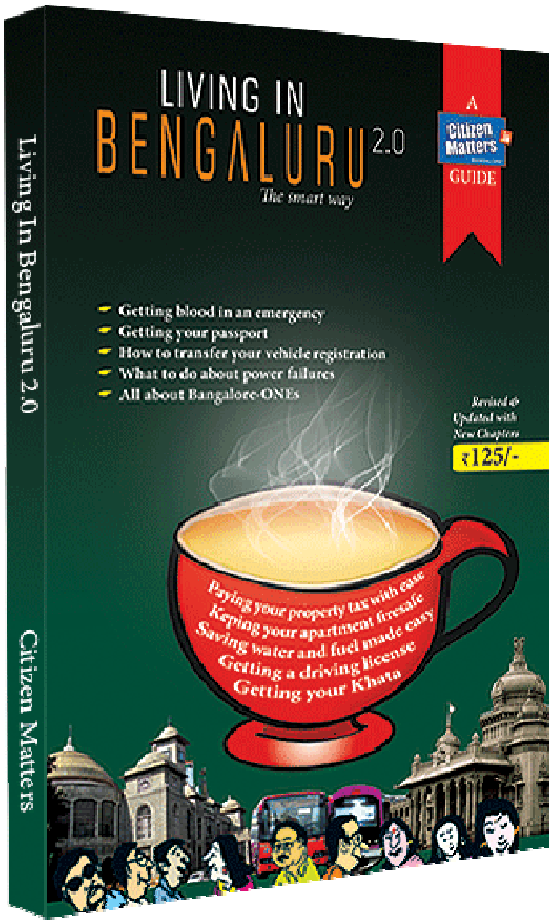
Our canvas for intervention

- Public information, data and metrics for knowledge-led choices in government.
- Citizens as active managers of the city, and key decision-makers, not merely consumers of public services.
- Comprehensive planning that feeds into public finances, spatial plans and governance.
- The city as a Social Network.

CITIZENS for the CITY
BENGALURU

neighbourhood improvement partnership challenge

Citizen Matters .in



namma
Bengaluru
AWARDS FOR 2012
Celebrating the people who make a difference to our city
ನಮ್ಮ
ಬೆಂಗಳೂರು
CISCO

B.PAC
Let's be Better

Public Financial Management:
An Introduction

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Bengaluru
AWARDS FOR 2012
Celebrating the people who make a difference to our city
ನಮ್ಮ
ಬೆಂಗಳೂರು
CISCO

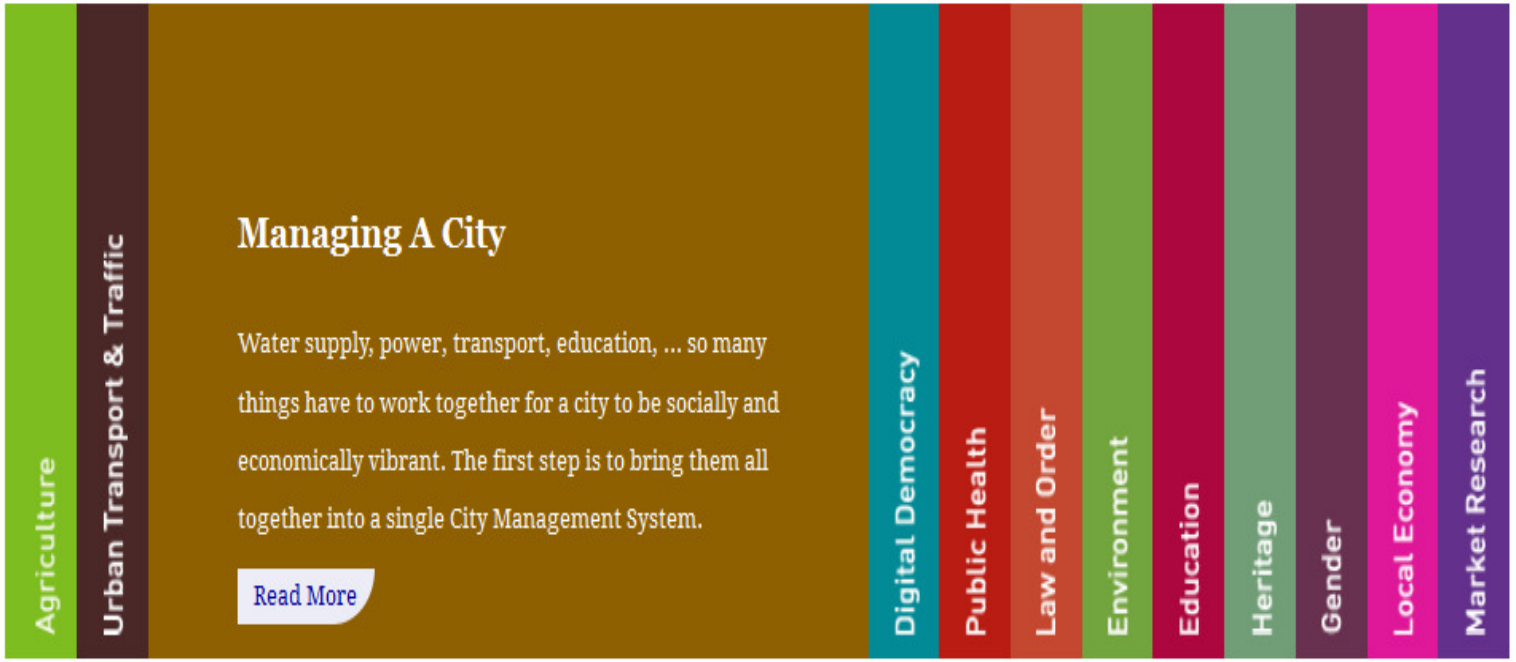
Technology

PROBLEMS WITH CURRENT APPROACH

1. Each department buys its own technology
2. Usually buys yesterday's technology
3. In-house knowledge capital is low
4. Government, citizen and businesses as silos
5. Led by thinking of large cities

mapunity
social technology at work

Mission: To solve social development problems that affect the lives of large numbers of people, using intervention strategies that leverage the power of information technology.

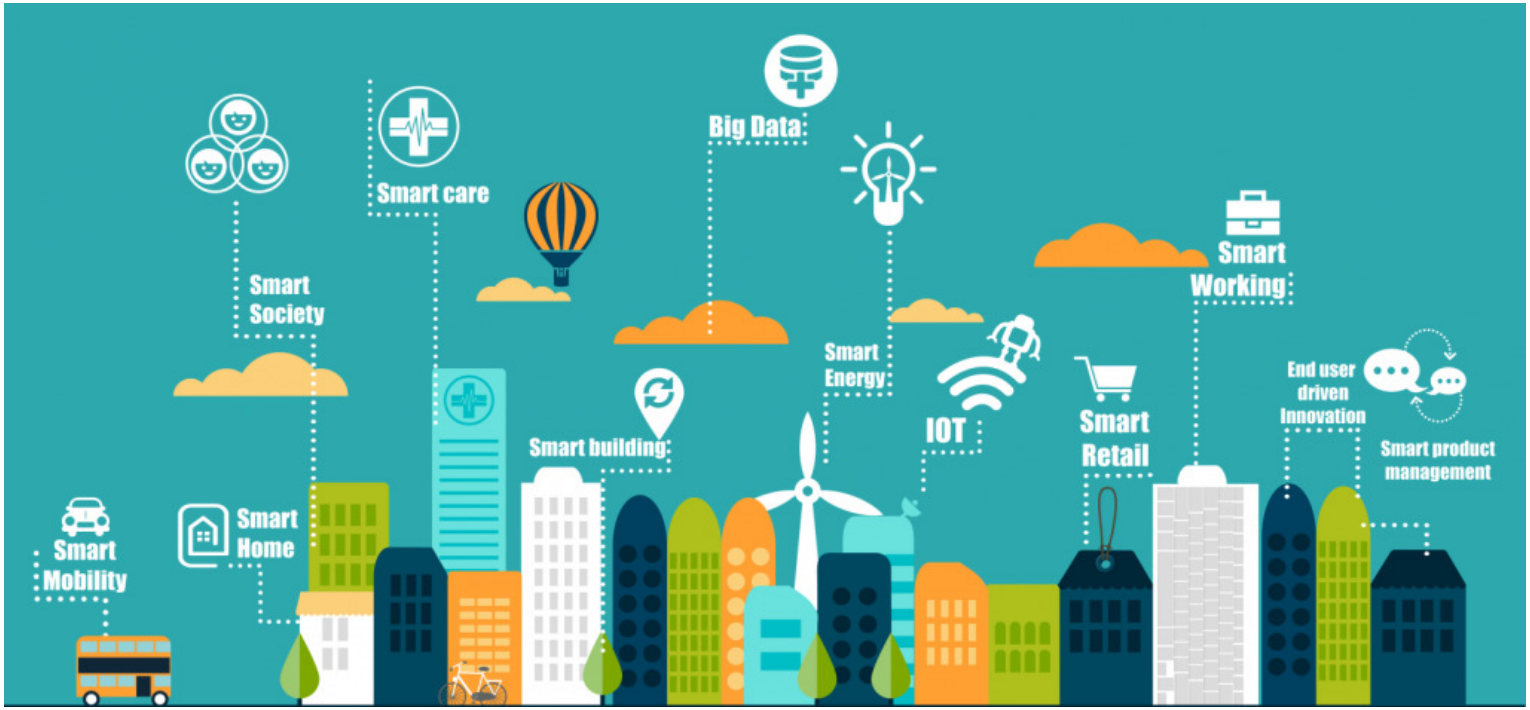


Cities will be transformed by technology in 30 years.
Internet of things and services will become reality.
What are the steps that will lead us there, quickly?

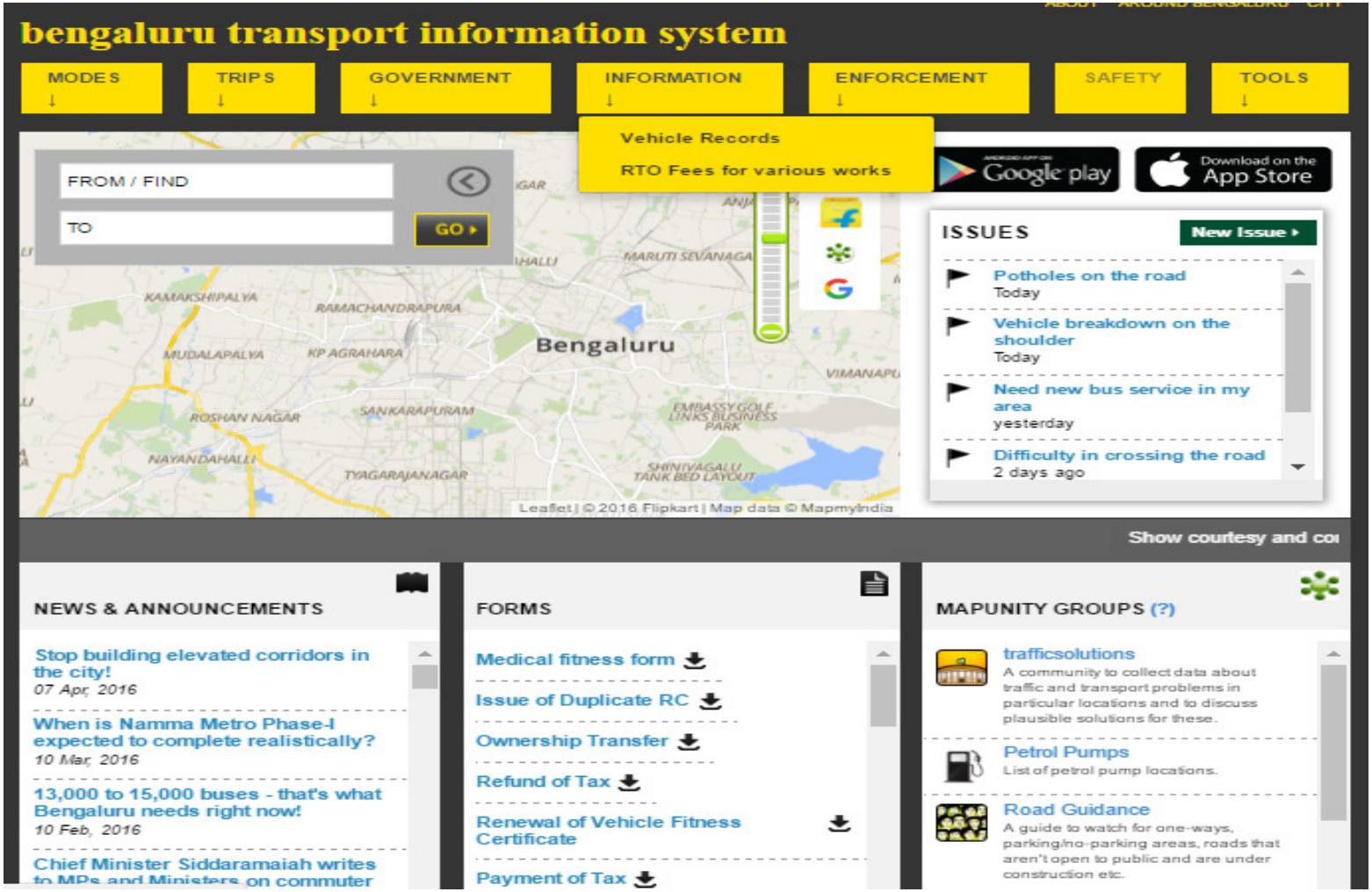
Technagara

One hosted platform for

- All cities
- All domains
- All scales
- All stakeholders

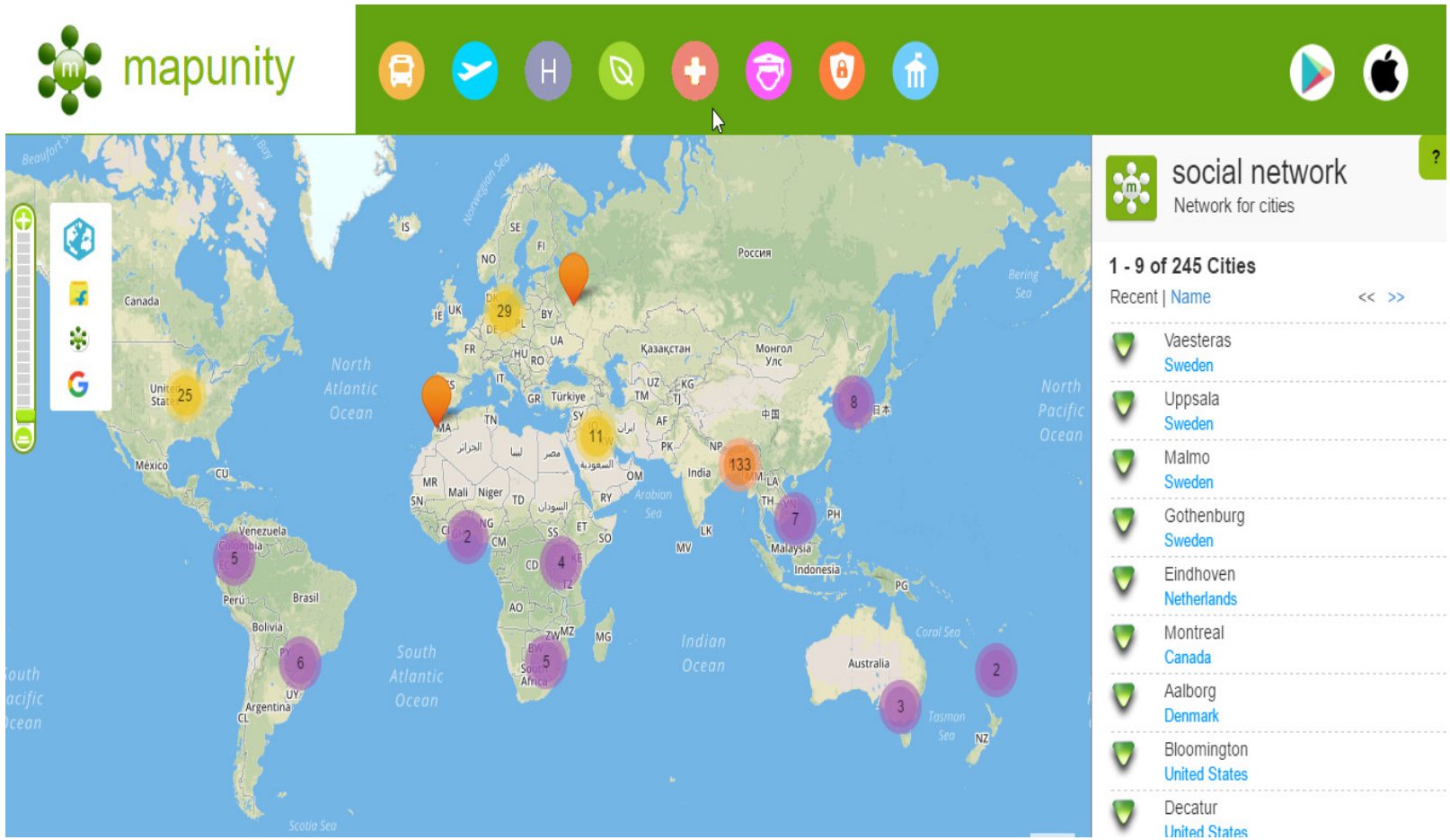


Build it once (e.g. Bangalore Transport Information System)

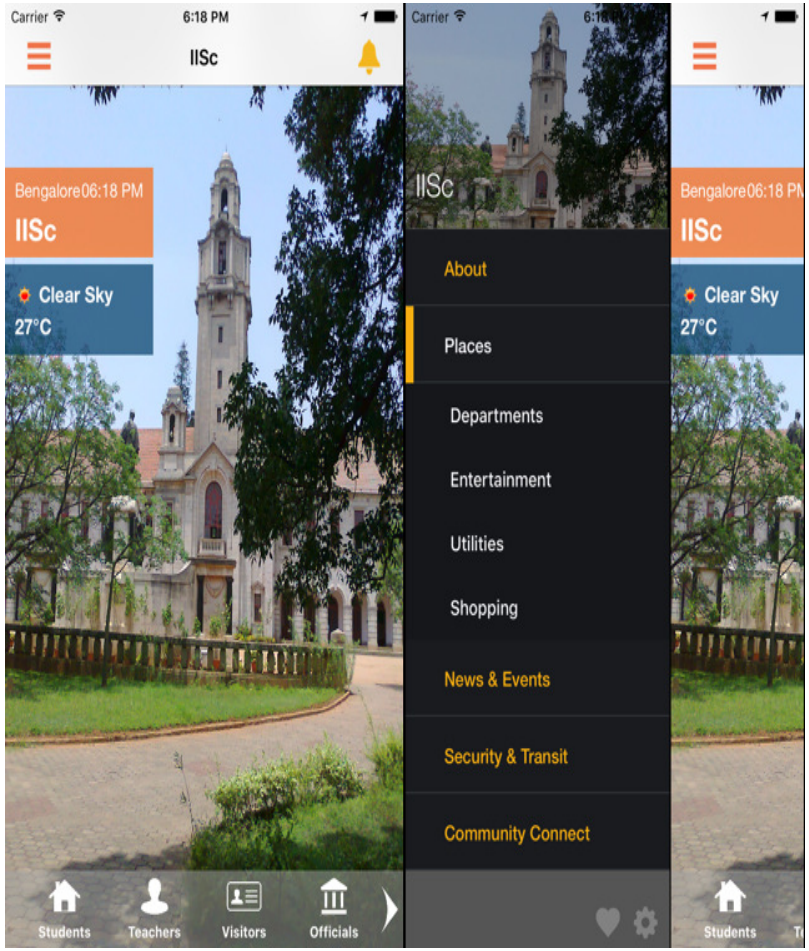


For all sectors (transport, heritage, tourism, environment, etc.)

For all cities



For all scales

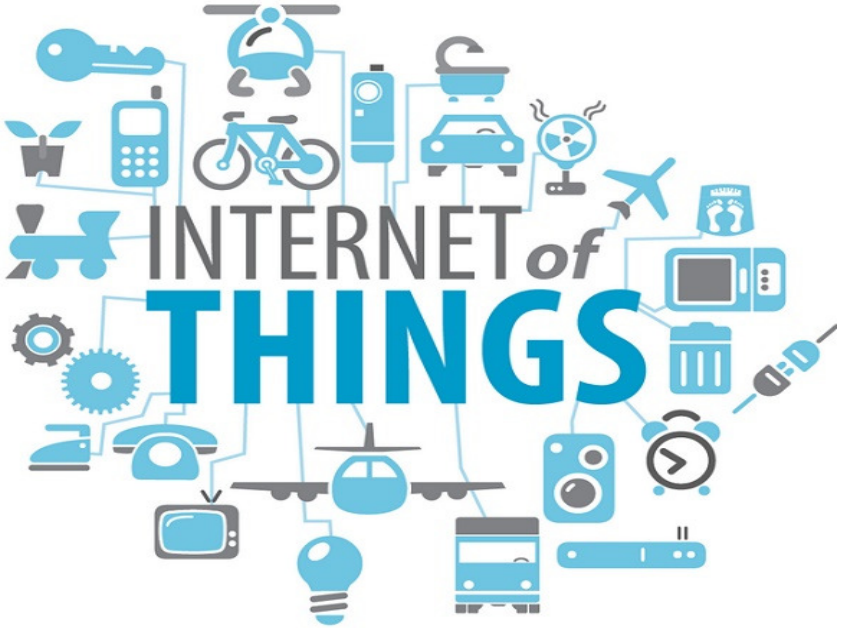


- Wards
- Localities
- Campuses
- Schools
- Universities
- Hospitals
- Hotels
- Public Offices

- Residents
- Employees
- Visitors
- Administrators

For all stakeholders (government, businesses, residents)

mapunity
social technology at work

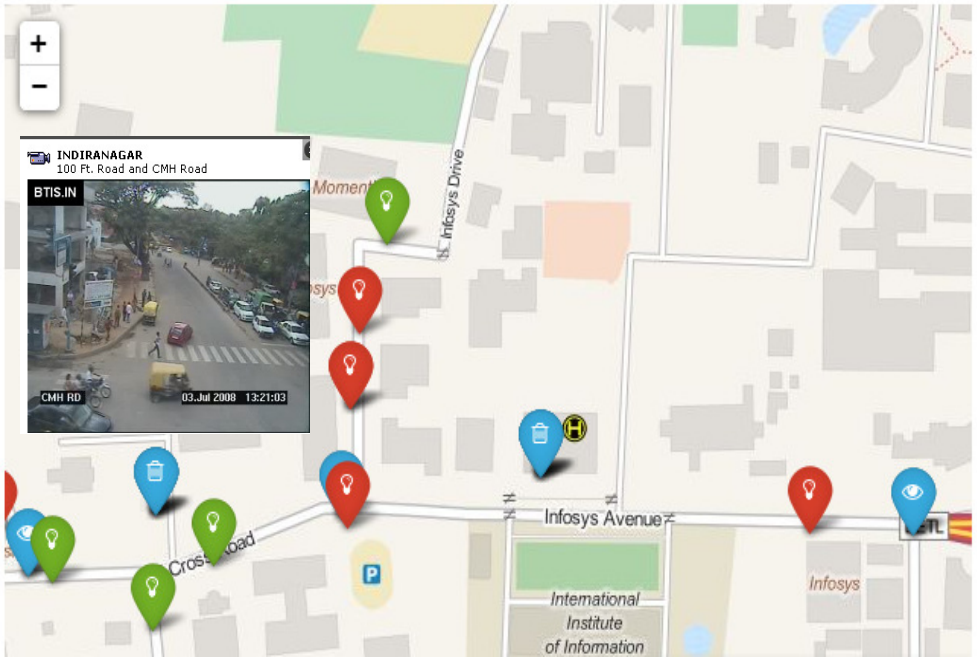


Mapunity has already built a significant part of this stack, and is well placed to leverage the multiple possibilities that an urban technology ecosystem provides.

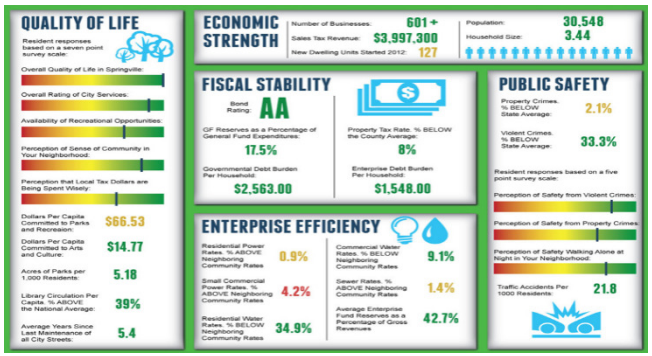
ELCITA

ABOUT | MOBILITY | ENVIRONMENT | SAFETY | BUSINESSES | SERVICES | DATA

- [x] Pollution
- [x] Traffic
- [x] Energy
- [x] Water
- [x] Safety
- [x] Waste
- [x] Smart Citizen

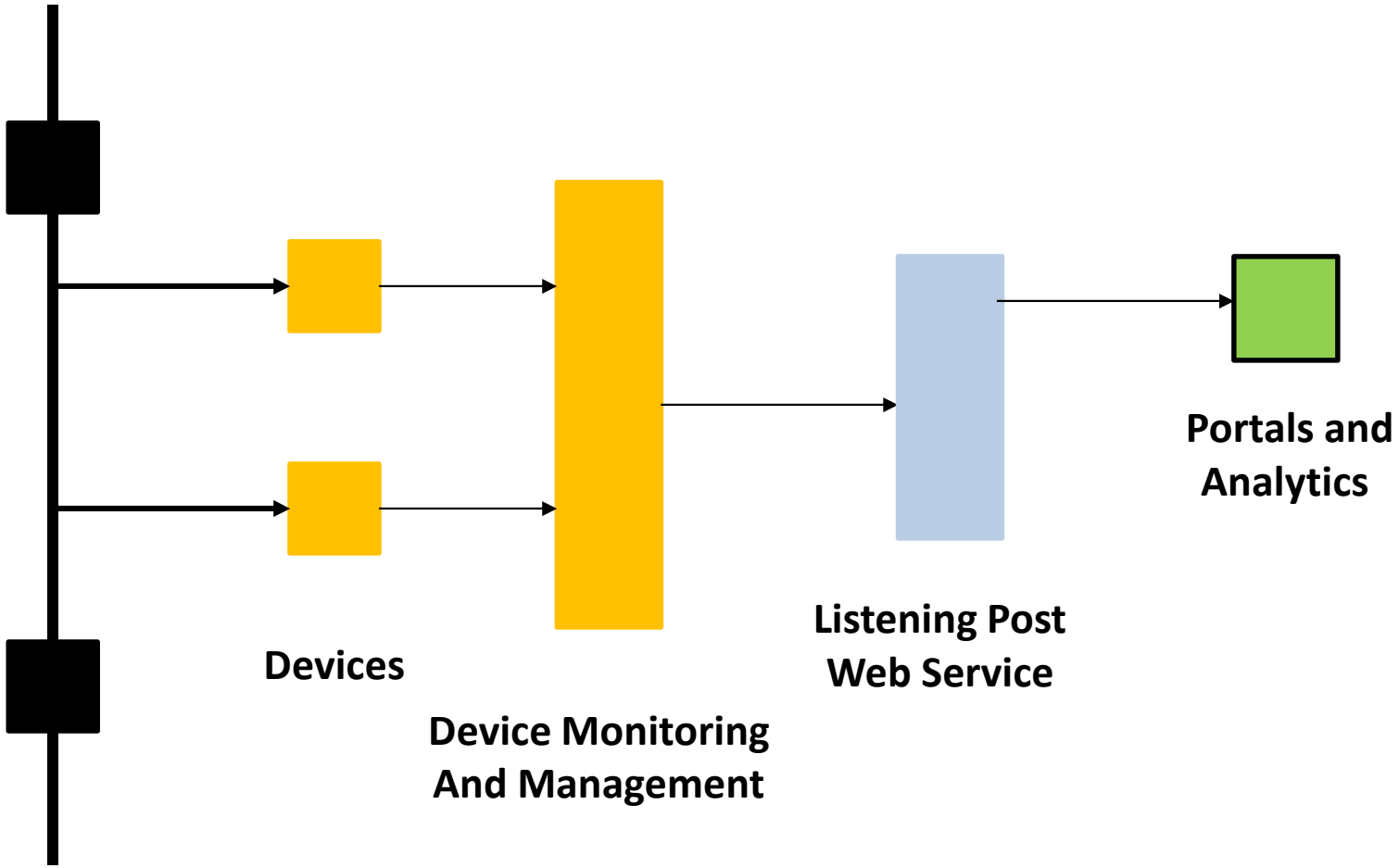


SMART CITY DASHBOARD

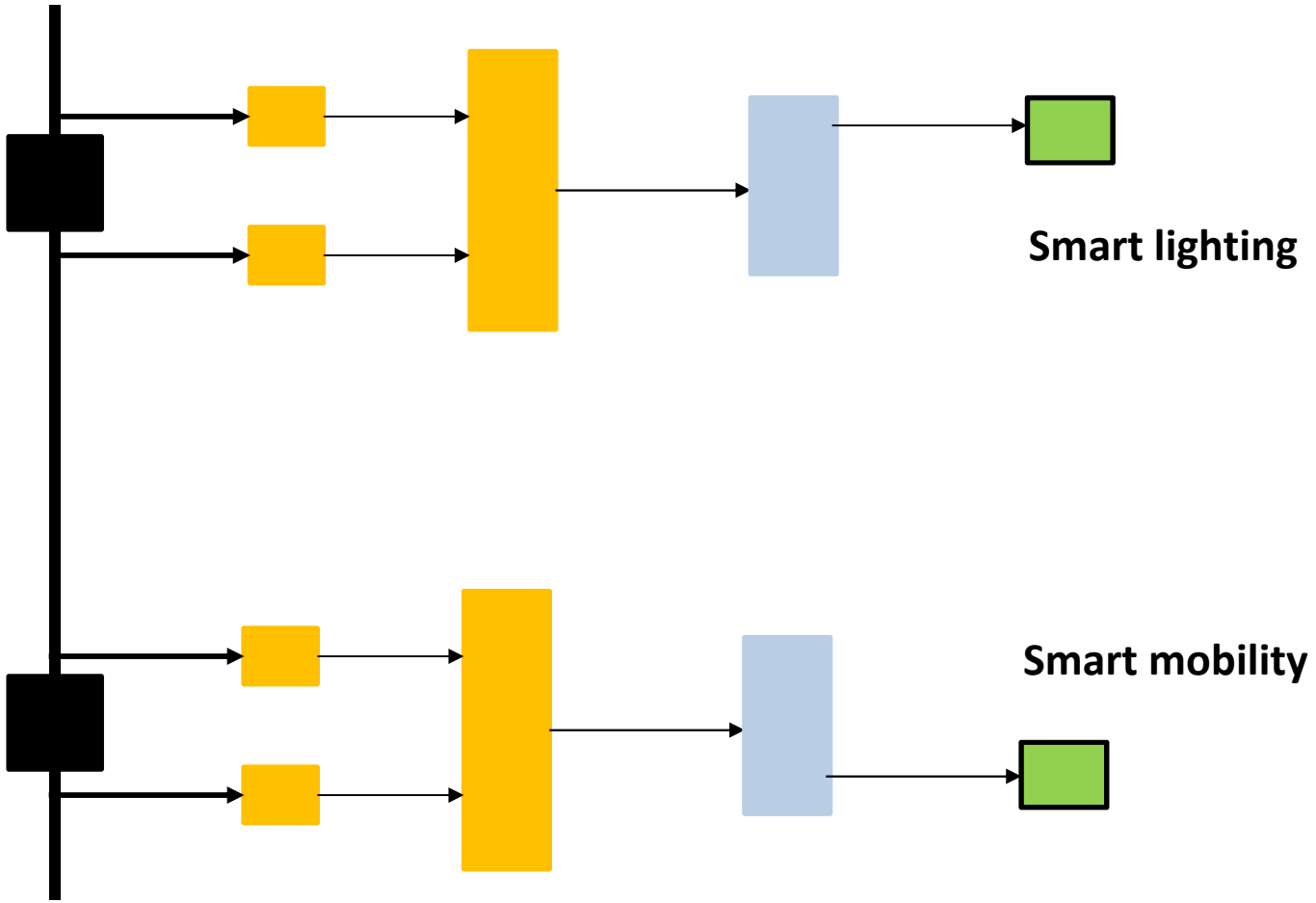


- [x] **Vendor Registration**
- [x] **News and Announcements**
- [x] **Forms used by ELCITA**
- [x] **Feedback and Suggestions**

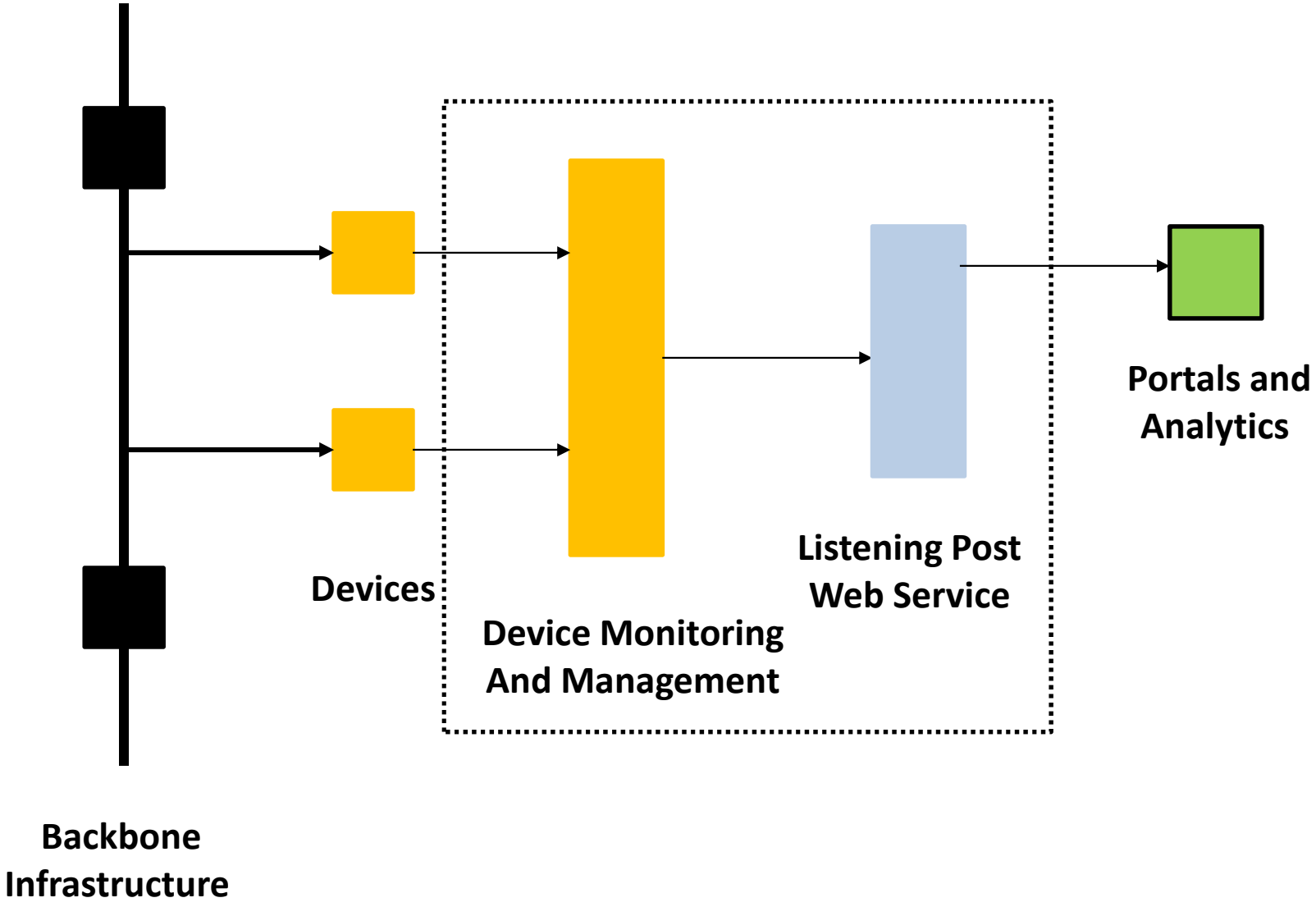
Typical ‘smart’ solutions



Parallel ‘device-to-cloud’ stacks

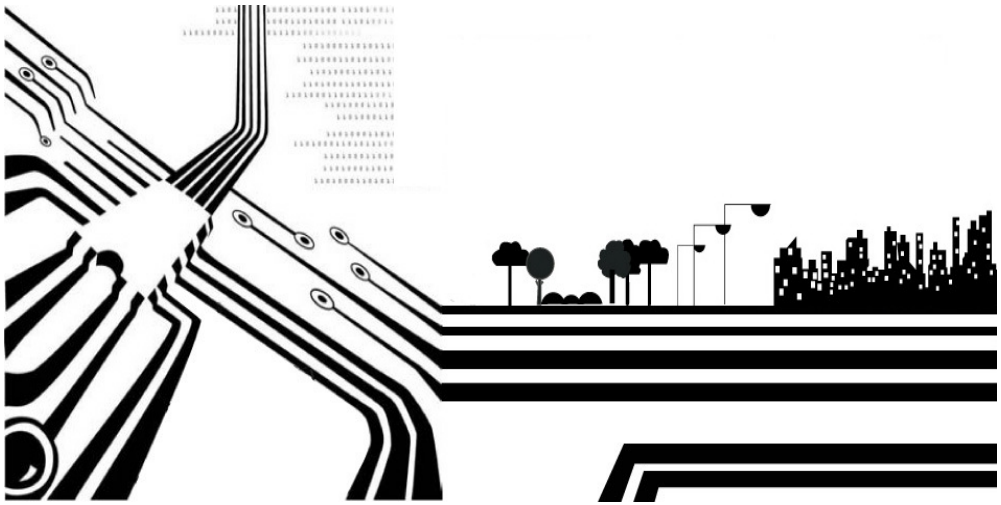


Cities must define and own the core



technagara

The India Smart Cities Platform



From the government side, with the public

Covering many domains

Open to multiple devices and applications

Social + Commercial + Administrative

Planning

PROBLEMS WITH CURRENT APPROACH

1. Limited to land use planning
2. Binary modes of governance – rural or urban?
3. No sectoral approach to guide spatial, temporal and financial implications
4. No tactical capacity
5. Jobs and livelihoods?
6. No distinguishing focus

Lithium

Tomorrow’s Transportation. Today.

Clean

Connected

Shared

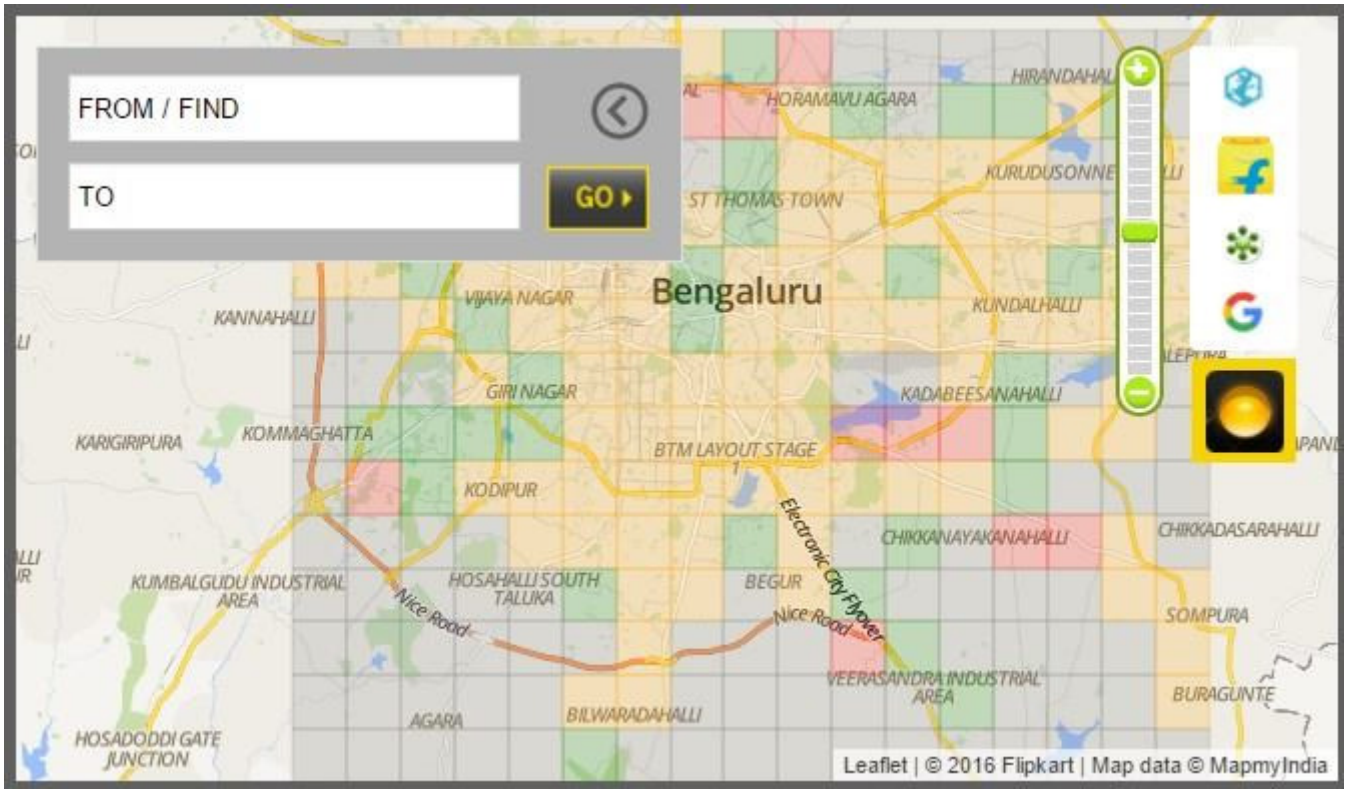
Smart

Mobility will be transformed in 30 years
Clean, shard, connected, competitive
Q: How much of this is doable today?

Lithium

350 cars in 18 months
More than 220 km / day / car
Likely to hit 1000 cars this year
Expansion into cargo, buses, and other segments
Viable

Public-Private Data Partnerships



CO₹₹UPTION
saaku
That's your money!
Bothered?

WHAT GOVERNMENTS NEED TO DO …

1. Focus on problem-solving
2. Think of citizens as co-managers along with officials
3. Encourage local solutions, tolerate diversity of choices
4. Foster a sense of place
5. Bring knowledge capital into the mix
6. Dream publicly

WHAT CITIZENS NEED TO DO …

1. Stop externalising the problem
2. Believe that every little bit helps – don't do nothing !!
3. Connect to the lives of others
4. Focus on problem-solving
5. Engage with politics - Campaign and vote in elections
6. Have fun ☺

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