



Intelligent Operations Centre for Smarter Cities

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Agenda



- Progress Report on CityForward
- IOC Solution Genesis
- Case Studies:
 - City of Rio de Janeiro, Brazil
 - Sonoma County Water Authority, USA
- IOC Business Value
- IOC Demonstration



The screenshot shows the CityForward web application interface. At the top, there is a navigation bar with the CityForward logo and user options like 'Welcome, JtsIva', 'Sign Out', 'Edit Profile', 'Display Settings', and 'Help'. Below the navigation bar, there are tabs for 'Home', 'Explorations', 'Analyses', 'Data', 'Discussions', and 'My City Forward'. The main content area is divided into several sections:

- Analyses:** A section titled 'Exploring Analyses' featuring a 3D area chart titled 'Crime rates from 1990-2006 in cities with populations'. The chart shows crime rates for four cities: San Francisco (green), London (blue), Sydney (light blue), and New York (yellow). The Y-axis represents crime rates from 0 to 30,000, and the X-axis represents years from 1990 to 2008. A legend at the bottom of the chart identifies the cities by color.
- Discussions:** A section titled 'Discussions' with a 'New Topics' button and a 'View All >' link. It lists several discussion topics with author names and posting times.
- Analyses List:** A section titled 'Analyses' with tabs for 'All Analyses' and 'My Analyses'. It displays a list of analyses with columns for 'Title', 'Author', 'Views', and 'Rating'. Two analyses are visible: one by Sheila McCarthy with 3 views and a 5-star rating, and another by Cynthia Dale with 16 views and a 5-star rating.

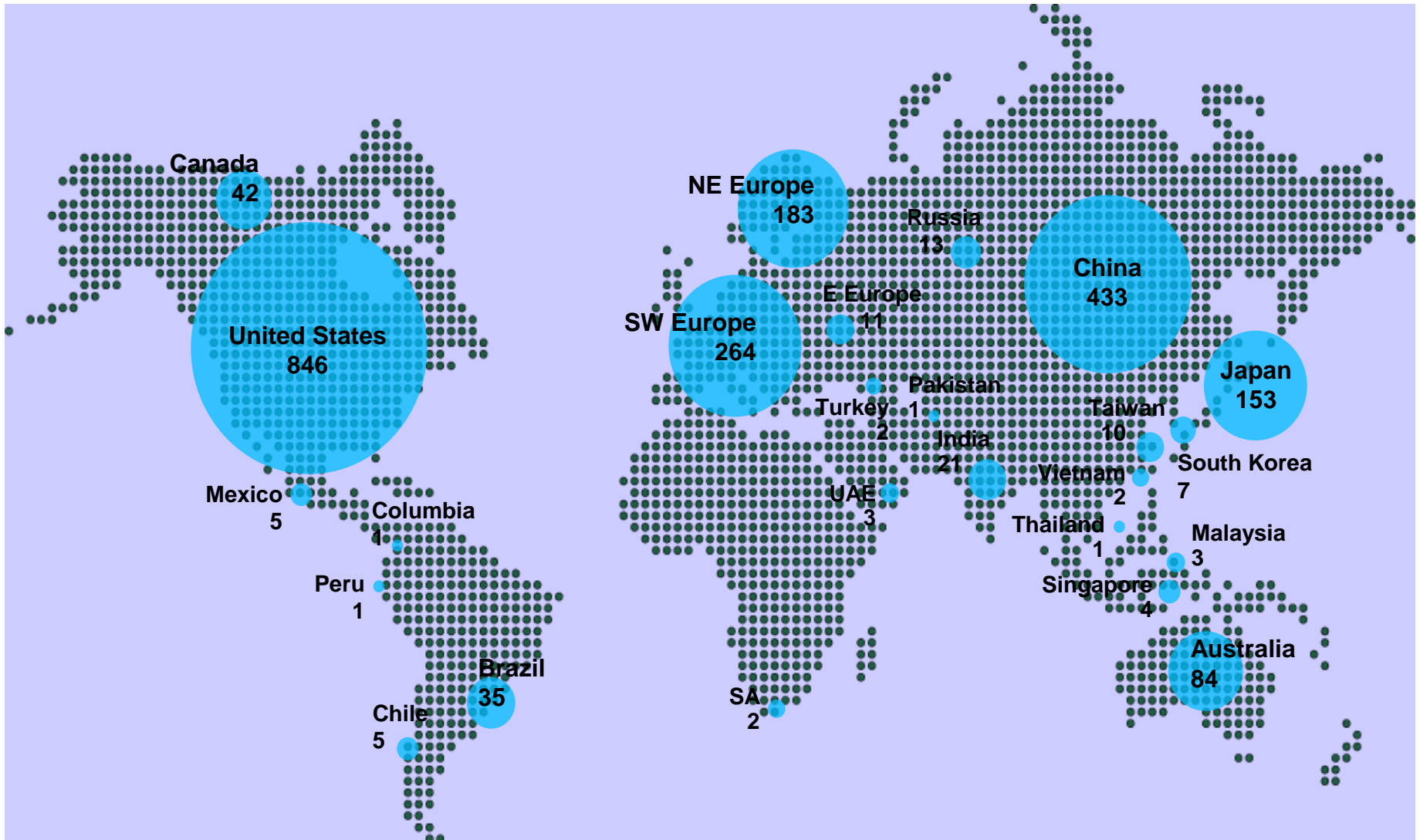
Making Cities Smarter and More Resilient to Disasters

Dr. Mweene Monze
Executive IT Architect
IBM South Africa

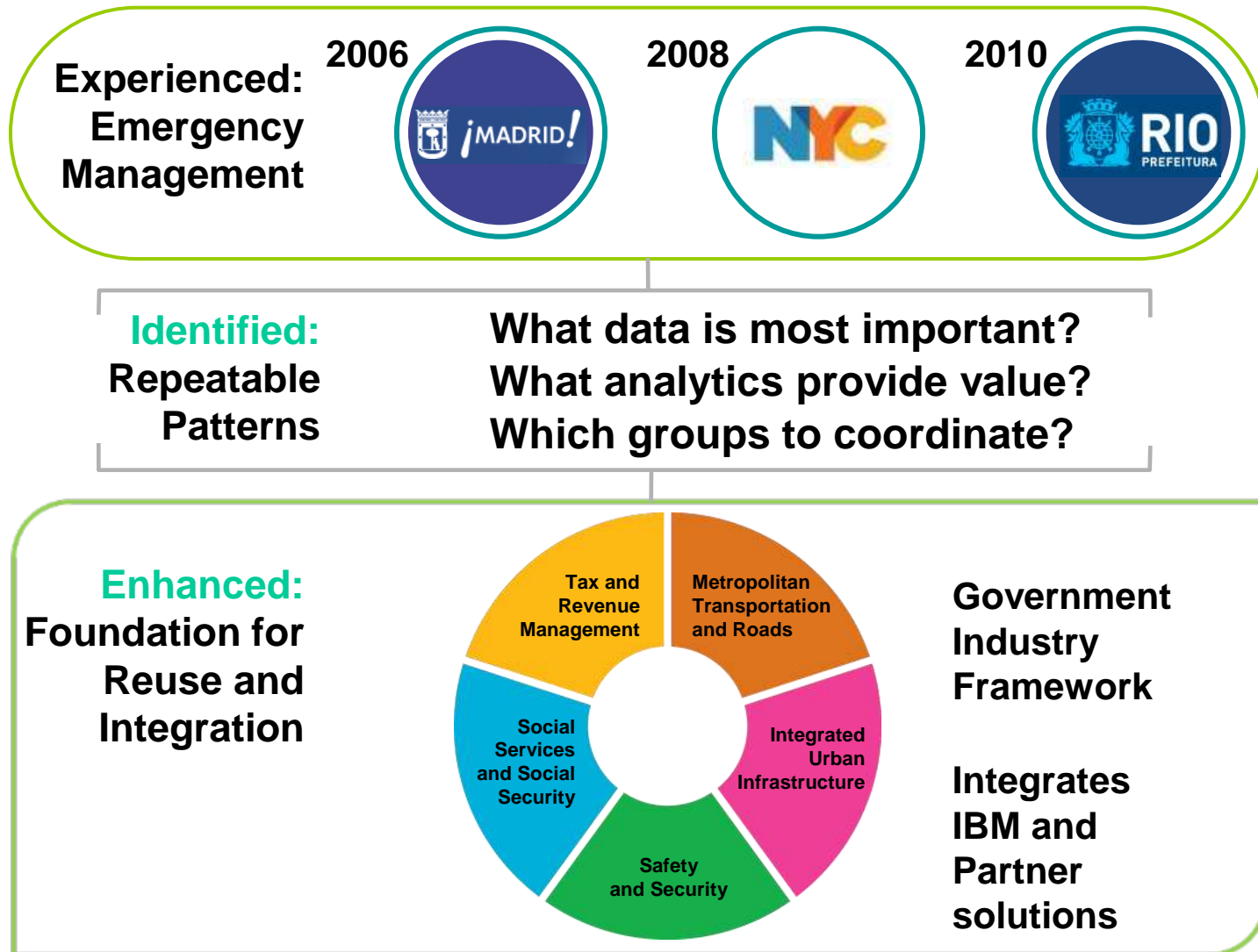


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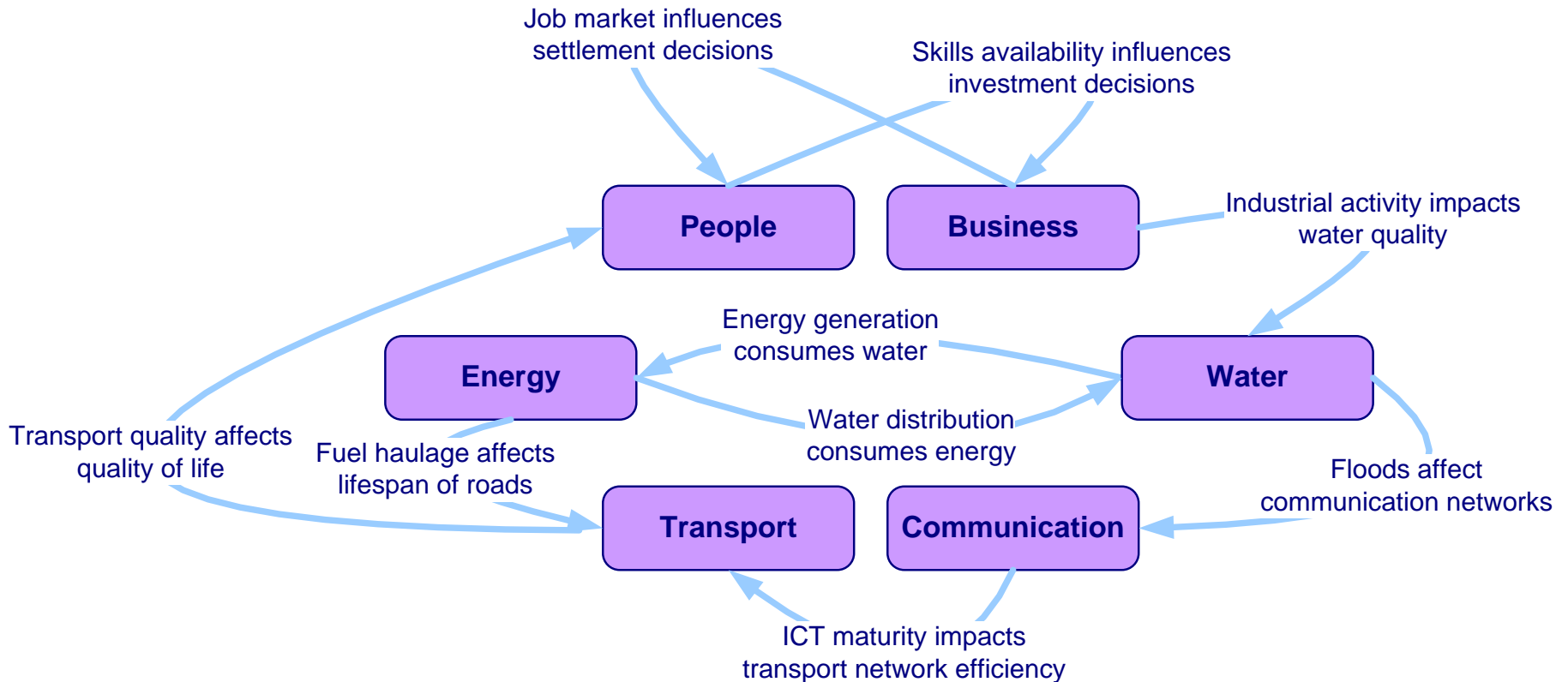
We have learned from over 2,000 engagements



With increasing experience **best practice patterns** become visible



With increasing experience domain interrelationships become visible



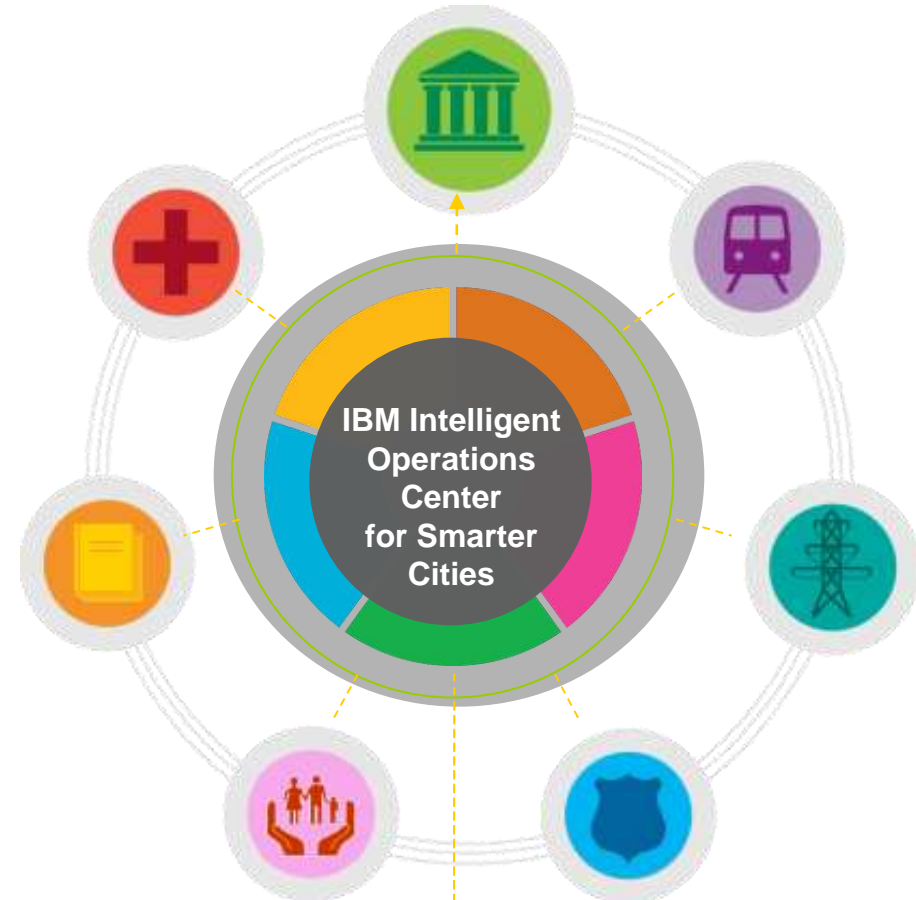
Apply global best practices in your city



IBM Intelligent Operations Center for Smarter Cities

Integrating the **most repeatable best practice patterns** to allow leaders to:

- **Leverage information** across all city agencies and departments
- **Anticipate problems** and minimize the impact of disruptions
- **Coordinate resources** to respond to issues rapidly and effectively



Integrates with IBM partners

Sample Partner Ecosystem



Coordinate resources to respond to issues rapidly and effectively

Inspired by:

- Facilitate cross agency decision making and collaboration in order to enhance citizen service delivery
- Optimize intra agency resource and task scheduling to maximize efficiency and improve service levels
- Automatically flag event conflicts between city agencies
- Efficient control and utilization of cross agency resources to reduce the time to resolution of emergency and crisis situations

Rio de Janeiro

The Need:

To **improve city safety and responsiveness** to various types of incidents, such as flash floods and landslides.

IBM Solution:

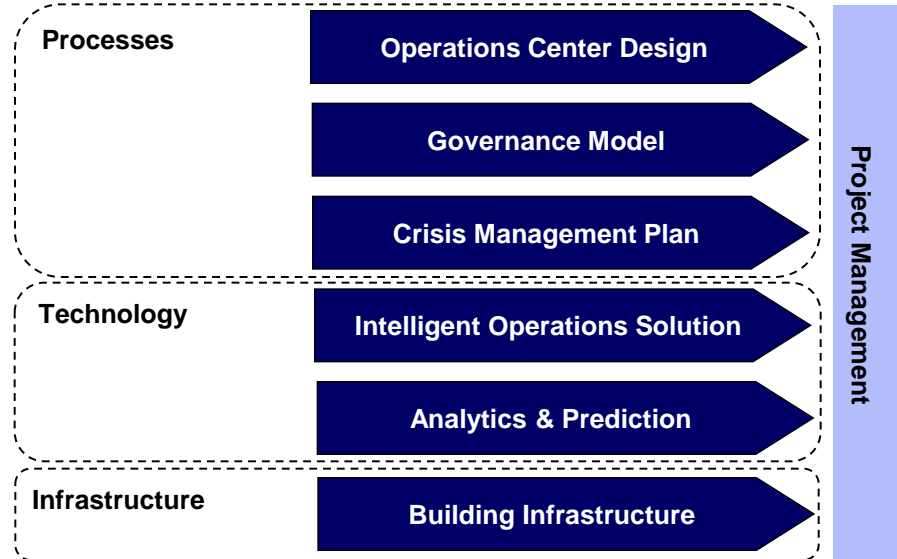
The emergency management solution **integrates information** from across agencies and systems. Provides a dashboard to **manage and visualize workflows while facilitating collaboration**

“With our emergency response system, we can react and respond to disasters faster and more efficiently. It’s helping us save lives.”

Eduardo Paes, Mayor, City of Rio de Janeiro

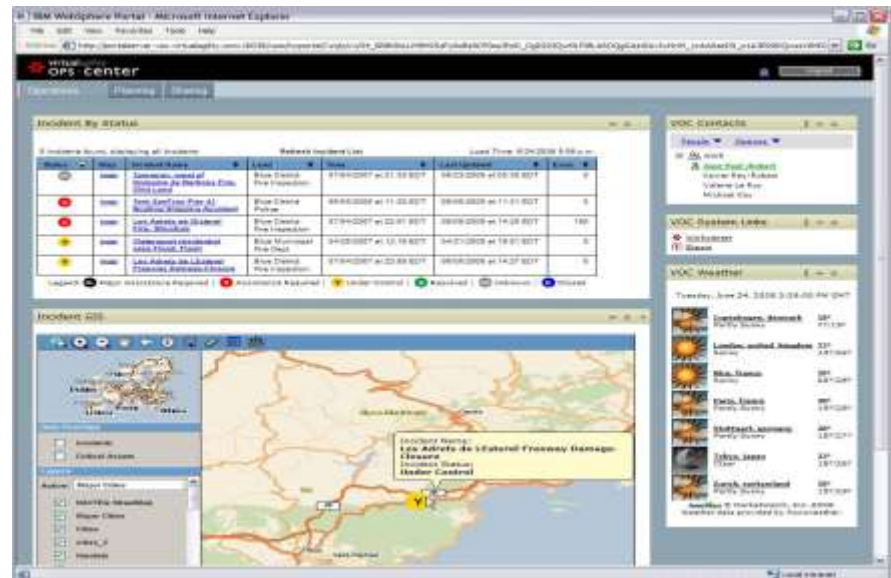


Example Engagement: IBM delivered a successful Operations Center for the City of Rio de Janeiro in record time



Rio Operations Center Technology Solution

- **Dashboard view** for information and action about incidents, accessible from multiple channels
- **Information integration** from different agencies and systems: AlertaRio, Traffic Monitoring System
- **Process management** panel to execute and monitor crisis management plans
- **Real-time communication** with teams through instant messaging, radio, mobile devices, etc.
- **Predictive Weather and Flood modelling** in high-resolution to provide alerts for preventive actions





Leverage information across all city agencies and departments

Inspired by:

Collect data from a multitude of sources

- Sensors
- Citizens
- Video
- Agency and utility databases
- Third parties feeds

Aggregate data and normalize for a common view and use of the information

Filter information to identify relevant and significant occurrences.

Sonoma County Water Authority

The Need:

To **bring together and analyze data** including water usage and quality, weather and climate, and environmental considerations.

IBM Solution:

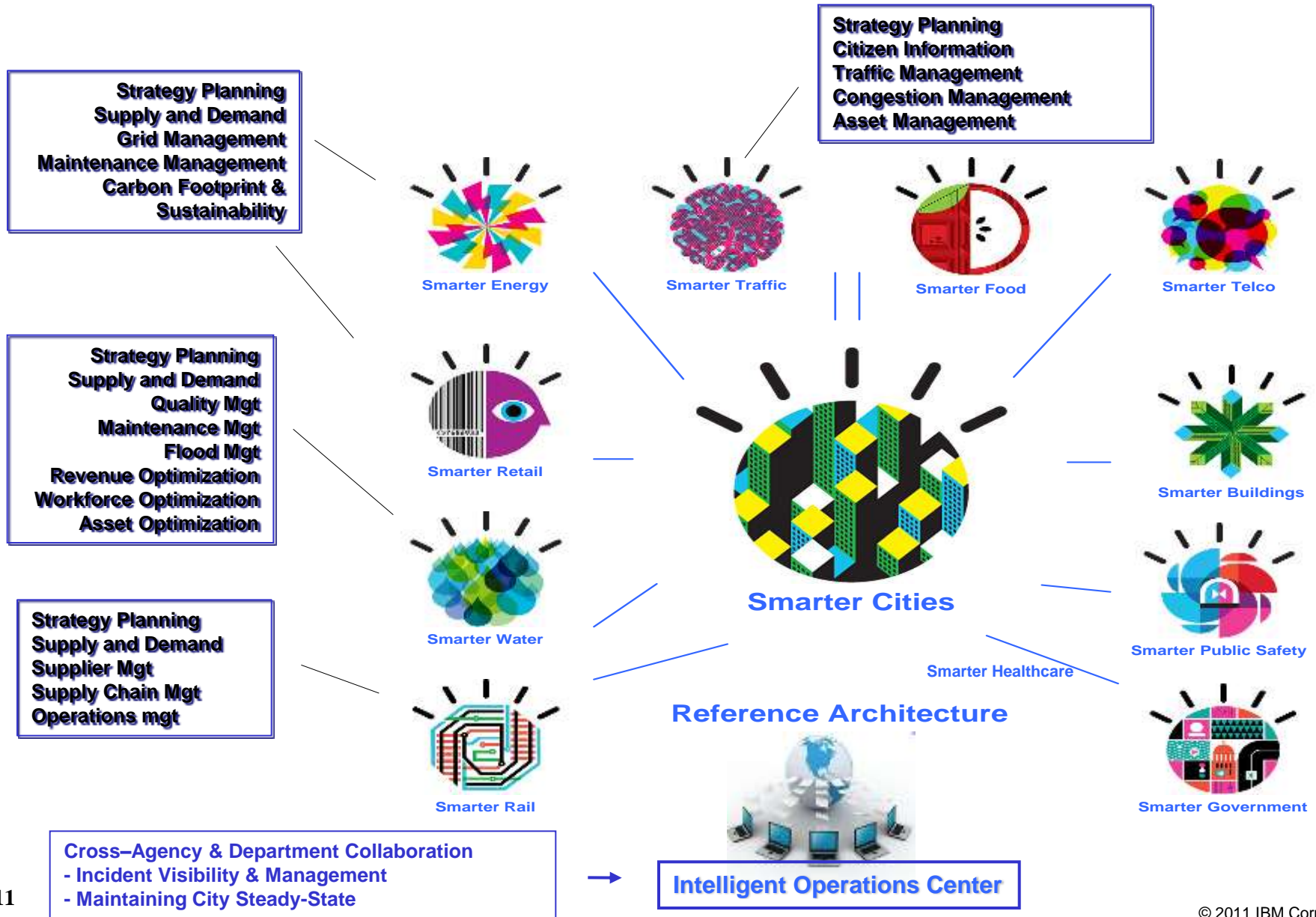
A water management system is helping SCWA **make better decisions about resource allocation** dynamically based on near real-time information.

“By **effectively managing** every drop of water in our system we can ensure that we can meet the needs of people, the environment and the community,”

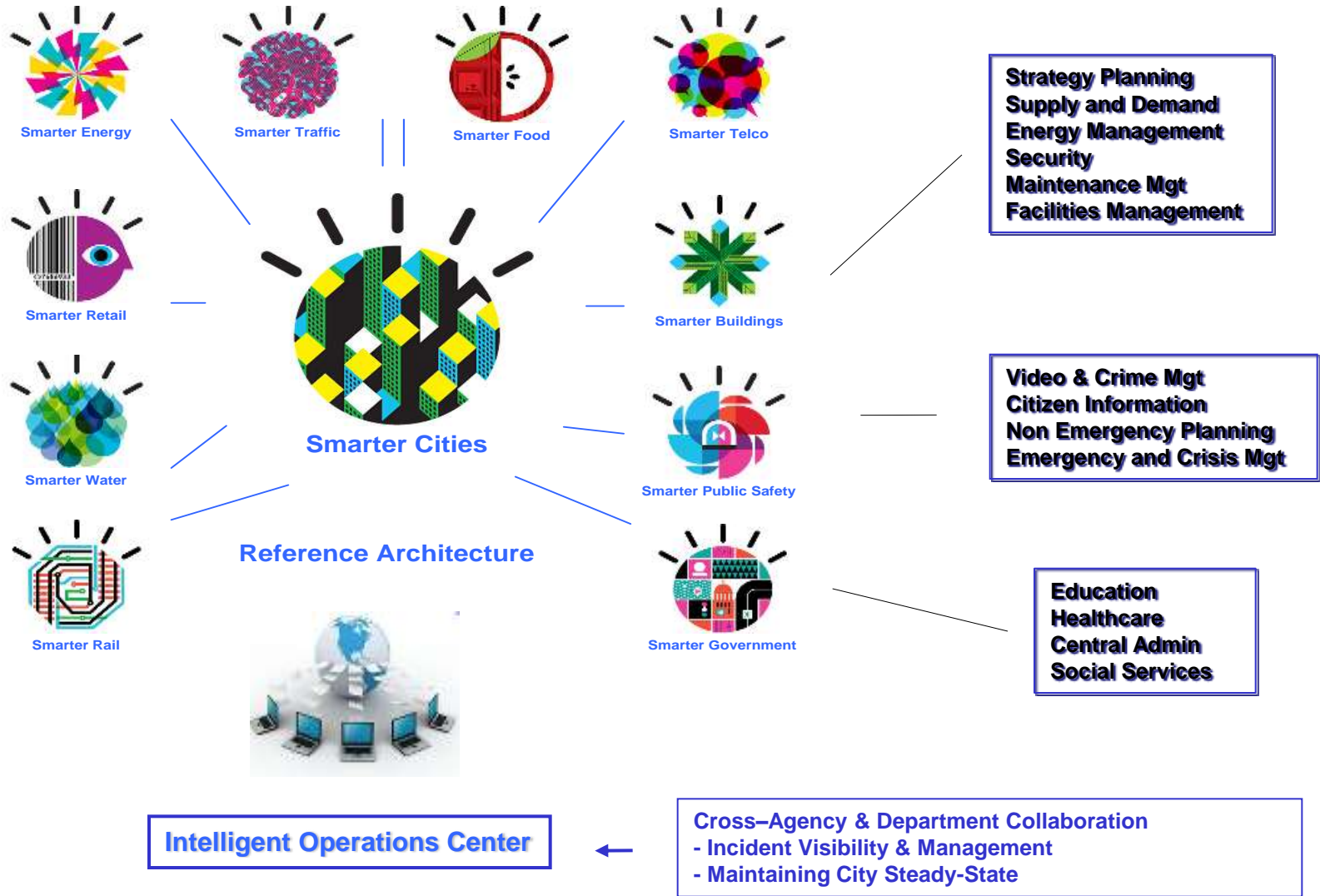
SCWA chief engineer Jay Jasperse



With which Business Issues can the IOC help?



With which Business Issues can the IOC help?



IOC Scenario Demonstration



Citizen Portal -
Event reporting, collaboration
mass notification



City Event Planner -
Event planning
and management



City Crisis Commander -
Incident management
and escalation

Chief Exec / Mayor - City at a glance



Incident Centre Operator -
Resource co-ordination



Workflow Management

Thank
You