Cisco Smart Cities & IoT

Robert Hubbard
Ecosystem Channels - Smart Connected Communities
& IoT – Americas
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Global trends changing the urban landscape

- Shifting economics
- Changing social demographics
- Rapid urbanization
- Environmental challenges and resource constraint
The Internet of Everything Is All About Connection

- **People**: Connecting people in more relevant, valuable ways
- **Process**: Delivering the right information to the right person (or machine) at the right time
- **Data**: Using data to provide more useful information for decision making
- **Things**: Physical devices and objects connected to the Internet and each other for intelligent decision making

Networked Connection of People, Process, Data, and Things
New technology opportunities
Industrial Revolutions

Internet of Everything
Challenges in smart cities

- Old or disconnected
- No standardization across sensors
- Lack of cross-domain data and information sharing
- Fragmented application ecosystem
Data is the New Oil
The Cisco approach
By harnessing the power of data...
By harnessing the power of data...
Cities can create a...
Cisco Kinetic for Cities Market Leadership

Success around the world... with more each day!

Cisco Kinetic for Cities Ranks #1 among Smart Cities Suppliers!
Cisco solution architecture for smart cities

PARTNER APPLICATIONS AND URBAN SERVICES

Cisco Kinetic for Cities

Digital Network Architecture for Cities

PARTNER SENSORS AND DEVICES

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A platform approach addresses these challenges and drives value for cities, citizens and business

**Cisco Kinetic for Cities**

**Data from any device**
- Aggregate and normalize data across multiple sensors
- Digital Model for the City

**Cross-domain information**
- Enable cross-domain contextual control (ie. With outdoor lighting & crime)
- Process automation through policies

**Open ecosystem**
- Expose APIs for local and global ISVs Applications
- Secure Key Management and Role based access control
## Cisco Kinetic for Cities key differentiation

<table>
<thead>
<tr>
<th>Platform Approach</th>
<th>Multiple Domains</th>
<th>Security</th>
<th>Ecosystem</th>
<th>Network</th>
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<tbody>
<tr>
<td>• Vendor agnostic</td>
<td>• Use cases across</td>
<td>• Secure, end-to-end architecture</td>
<td>• Enabling application developers to provide differentiated Urban Services experiences for Cities and Citizens</td>
<td>• End-to-end solution validation with “Cisco Validated Designs” (CVD)</td>
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<td>• API’s and information data models</td>
<td>• Lighting</td>
<td>• Data encryption</td>
<td>• Integrated, certified sensor vendors with global reach</td>
<td>• IoT fog intelligence</td>
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<td>• Event response paradigm</td>
<td>• Parking</td>
<td>• Cloud security</td>
<td>• Multimodal</td>
<td>• Best-in-class Security</td>
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<td>• Pay as-you-grow</td>
<td>• Environment</td>
<td>• API management</td>
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<td>• Multimodal</td>
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<td></td>
<td>• Waste</td>
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Simple Solutions – Validated Designs (CVD)

Cisco Kinetic

Smart Cities

- Lighting, Parking, Public Safety, Environment, Waste & Urban Mobility

Transportation

- Connected Intersection, Corridor & Roadway Conditions
City Infrastructure Financing Acceleration Program
Why is this needed?

1. Lack of financing restricts cities and urban service providers ability to start and scale smart city deployments
2. New RFPs in the industry call for PPP vehicles to build, own and operate smart city infrastructure
3. Customers are looking for flexible consumption models with urban services (e.g. Ferrovial asked us to provide Kinetic for Cities as managed service – they want to focus on urban operations and want us to take care of the IT side)
What is the CIFAP program?

1. Groundbreaking City Infrastructure Financing Acceleration Program (CIFAP) to fast-track smart city initiatives and stimulate city investments
2. $1B of debt and equity finance available through Cisco and its partners
3. Offers financing solutions to municipal customers, systems integrators, telco services providers and urban operators
4. Includes traditional financing solutions like loans & leases, “As a service” financing, consumption based financing
5. New options include rev share financing and equity financing into PPP vehicles
The Cisco Ecosystem

Powerof3
Americas Ecosystem Partners

**A&E Consultants (OT/LoB Partner)**
Role: Design/Engineer physical infrastructure
Care About: Expand consulting services for delivering end-to-end solutions for Public Sector

**Independent Software Vendors (ISV)**
Role: Deliver analytics, IoT Platform and LoB applications validated on Cisco network
Care About: Access to Cisco partner/sellers and sell more SW licenses

**Independent Hardware Vendors (IHV)**
Role: Embed sensors, devices, SW into solution
Care About: Sell their products/services in our reference architecture

**Value Added Resellers (VARs)**
Role: Sell Cisco infrastructure & professional services aligned to government contracts
Care About: Expand into Smart and Connected market and build an IoT practice

**Service Providers (Urban Services)**
Role: Provide critical transportation operations and managed services
Care About: Grow vertical solutions in connected transportation

**Systems Integrators (SI)**
Role: Deliver large-scale strategy and business transformation services
Care About: Consulting services engagement in IoT use cases

**Customer: Smart & Connected Communities**

**Americas Ecosystem Partners**
The Data Economy
Data is the New Oil