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Bringing Trust to Smart Cities

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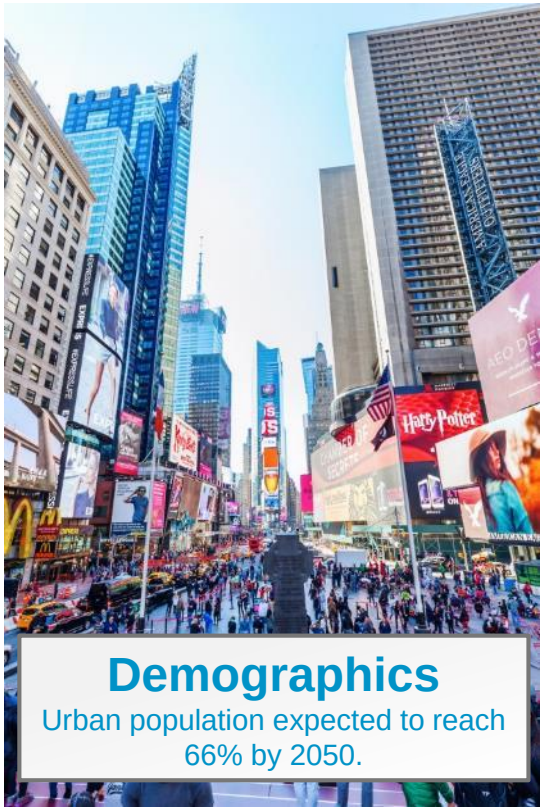
Key Imperatives for Cities



Demographics

Urban population expected to reach 66% by 2050.

Sustainability

Pledged by 193 countries in 2015, based on 17 goals.

Trust

Only 40% citizens in OECD countries trust their governments.

Public vs. Private Sector – a reason for trust deficit?

	Past		Present
Private Sector	**$100** What you would pay for a rented car on a Saturday, even if you needed it for an hour		What car sharing companies like Zipcar would charge for an hour, insurance & gas included **$7**
Private Sector	**US $ 159,000** Price of Univac I mainframe computer in 1951; size of a garage, weighed 29,000 lbs		What you can buy a smartphone for, with 1000 times more compute power **$200**
Public Sector	**US $ 3,800** Annual cost for a public university in 1981		What it would cost today, though with superior facilities (labs, stadiums etc.) **US $ 12,800**
Public Sector	**7.4%** That's the growth in healthcare spending from 1999 to 2009 in Canada; outpacing GDP		This is how much some of Canadian provincial budgets consume in healthcare **40%**

Source: Deloitte

Smart Cities – the savior and the catalyst for trust?

an *urbanized* area where multiple sectors *cooperate* to achieve *sustainable* outcomes through the analysis of contextual real-time information, which is shared among sector-specific *information and operational technology* (OT) systems

- Gartner

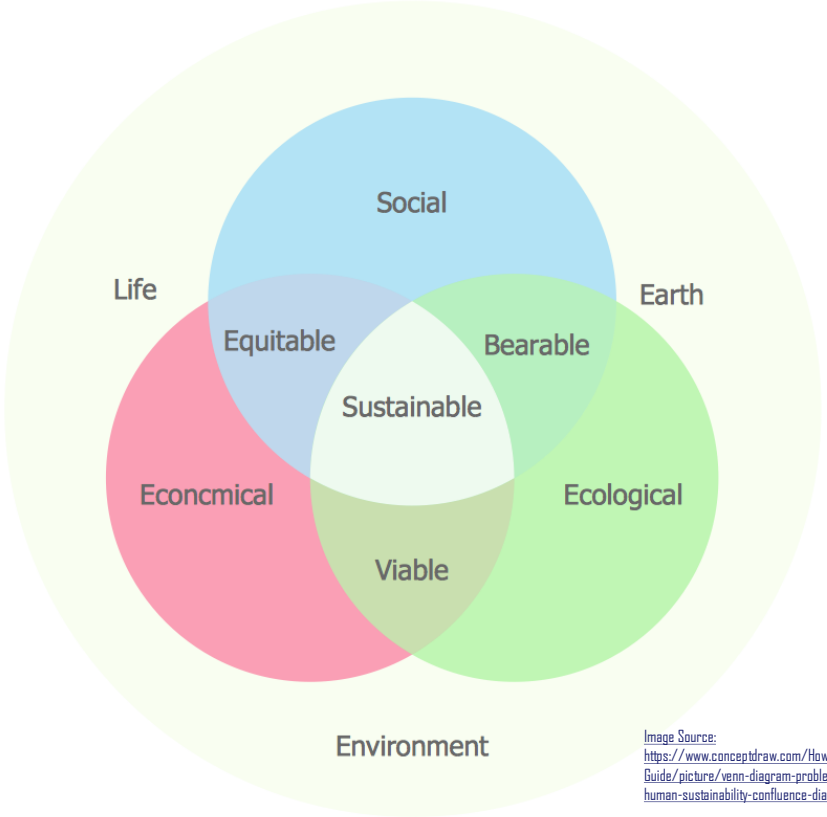


Image Source: https://www.conceptdraw.com/How-To-Guide/picture/venn-diagram-problem-solving-human-sustainability-confluence-diagram.png

ICT and data are instrumental for smart cities

Smartphones play a big role in citizen engagement

The **cloud** manages all the intelligence needed to make decisions

IoT devices bring new environment and infrastructure sensing

The biggest role will be that of Big Data (and **OpenData**), gathered from different sources.

Smart & connected things have great potential

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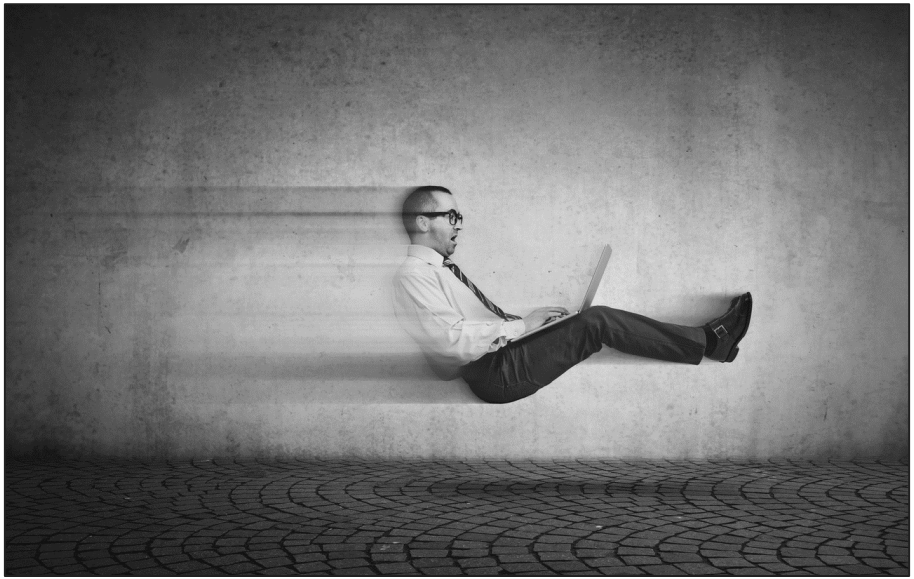
The Drone Economy

With drones, a whole site can be mapped daily, in high detail, for as little as $25 a day.



The Autonomous Vehicle

Autonomous vehicles could save up to 50 minutes a day for drivers

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But “things” can go wrong

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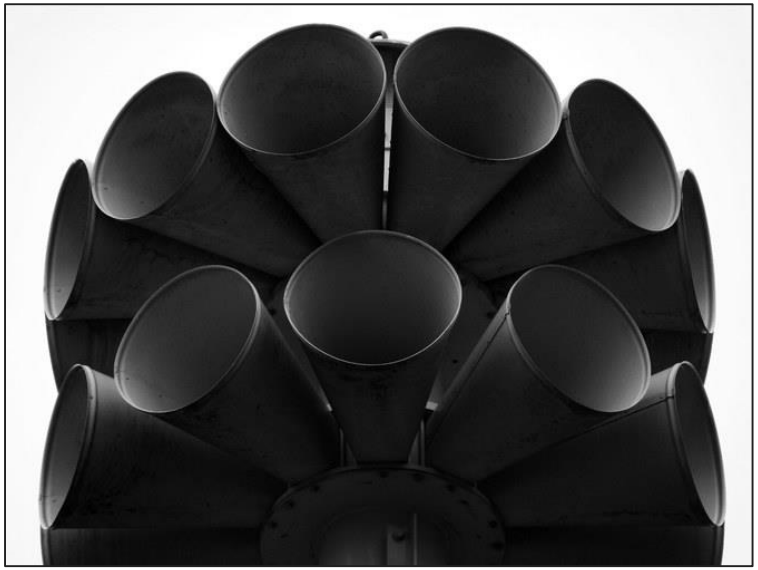

The Dallas Sirens Attack

156 Emergency sirens went off at around midnight, leading to panic

800,000 user account credentials leaked

The Teddy who was a Spy

Connected Teddy Bears leaked 2 million parent and kids message recordings

1.4 million vehicles recalled to patch the vulnerability

Hackers kill a jeep, remotely

Hackers took control of the vehicle at 70mph; the driver lost total control of the car

14,000 Internet domains stopped using this DNS after attack

The Cameras broke the Internet

A botnet attack disrupted services of Amazon, Twitter, Reddit, Netflix, to name a few

Digital security threats are a threat to Citizens' trust in smart cities.

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Governments are reacting

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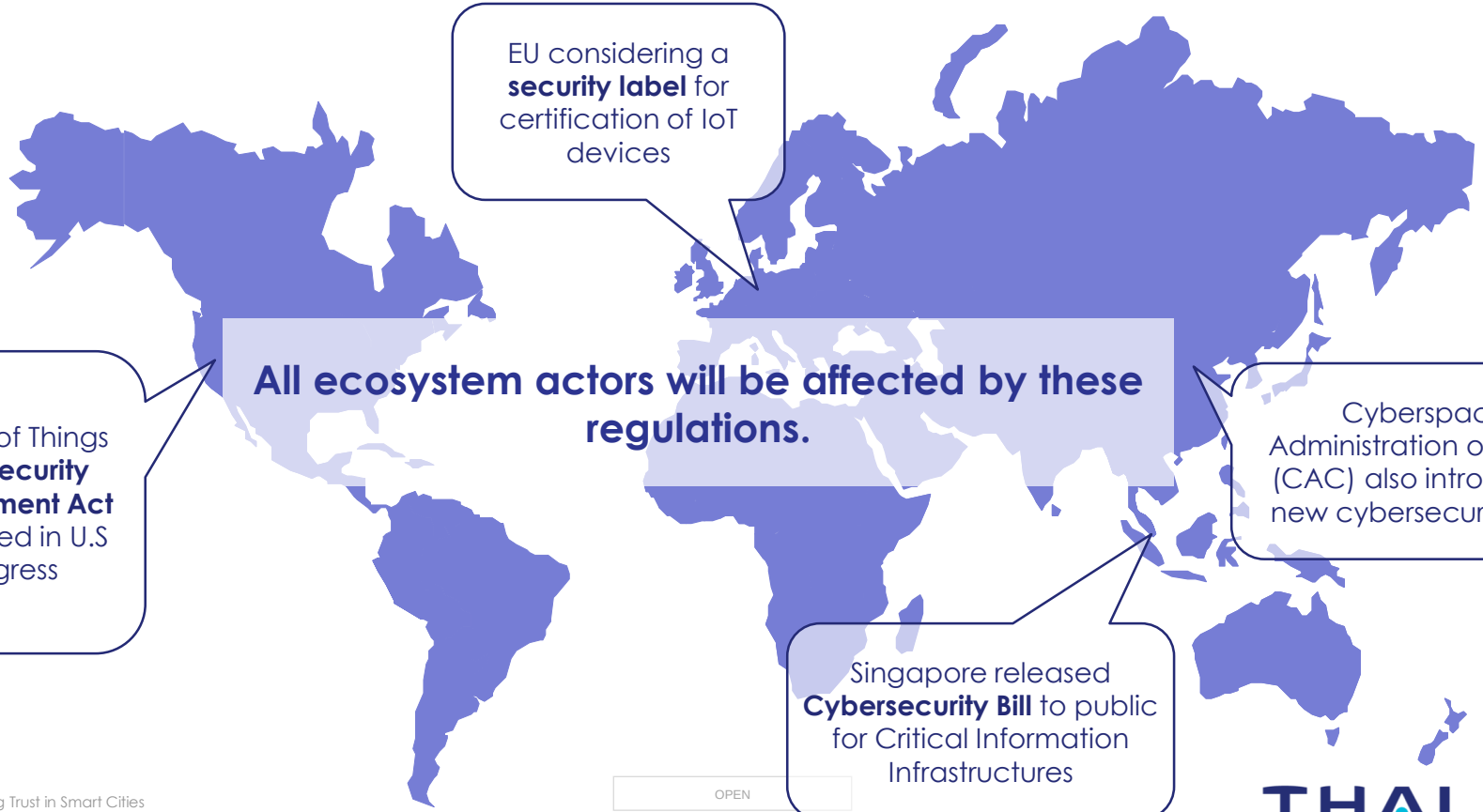
Regulations are emerging across the globe



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Cities should use *digital security* as an enabler of trust.

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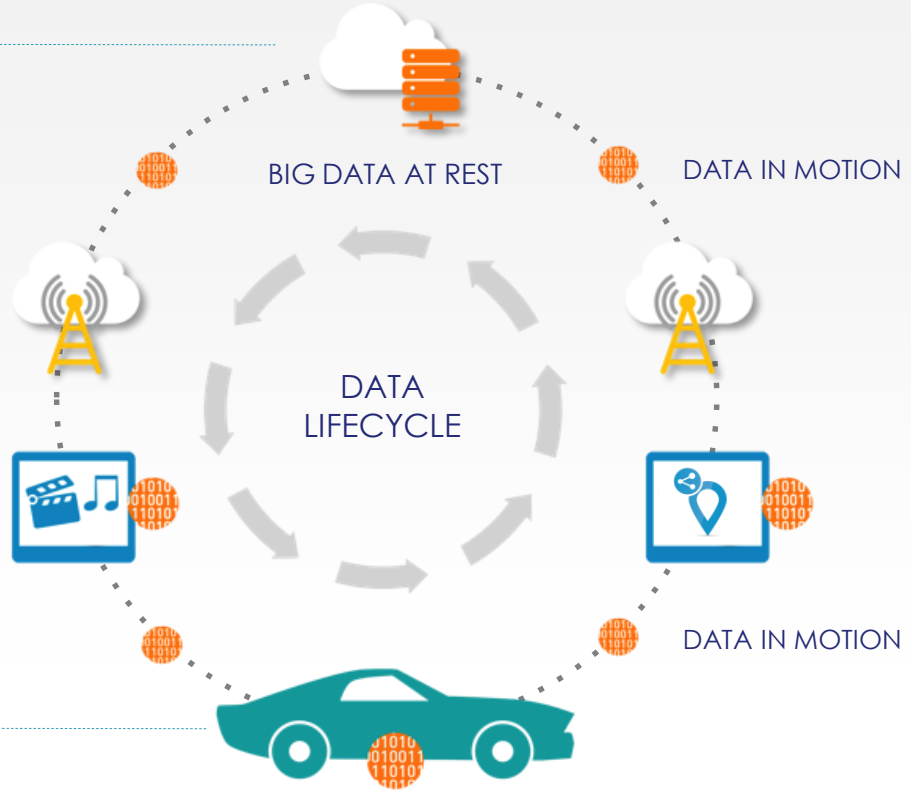
It's about (a) securing the device (b) securing the cloud

SECURE
THE CLOUD

Security needs to be built from the device to the cloud.

SECURE
THE DEVICE



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Securing the device, *by design*.

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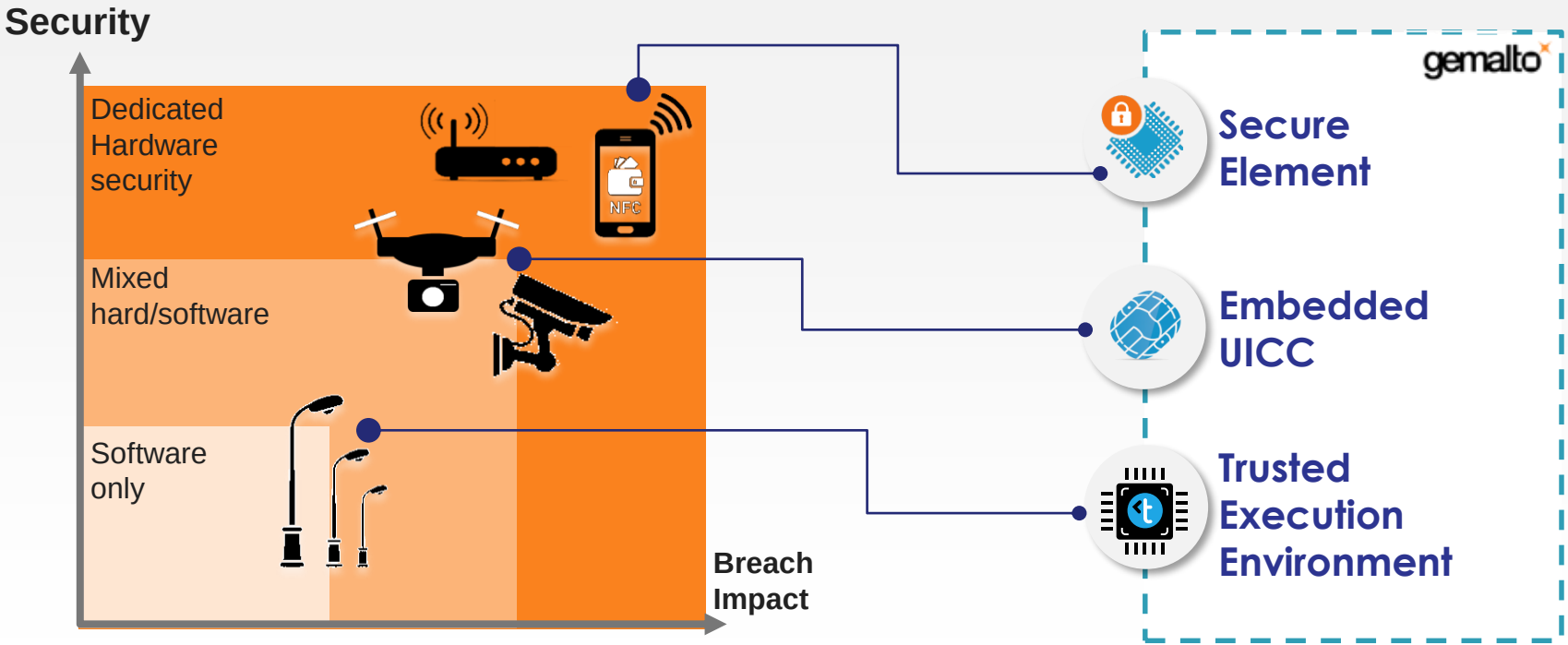
Secure by design – Multiple Solutions for Multiple Needs



Securing the cloud, through
***zero trust security*.**

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Zero-Trust Security – On-Premises and On-the-Cloud

LOOK BEYOND THE PERIMETER

ENCRYPT EVERYTHING

IDENTITY AND ACCESS MANAGEMENT

- Access management
- Multi-factor authentication
- PKI credential management

ENCRYPTION

- Data-at-rest encryption
- Data-in-motion encryption

KEY MANAGEMENT AND PROTECTION

- Enterprise key lifecycle management
- High assurance key protection
- HSM orchestration and crypto operations

Building trust: Securing the edge and the cloud

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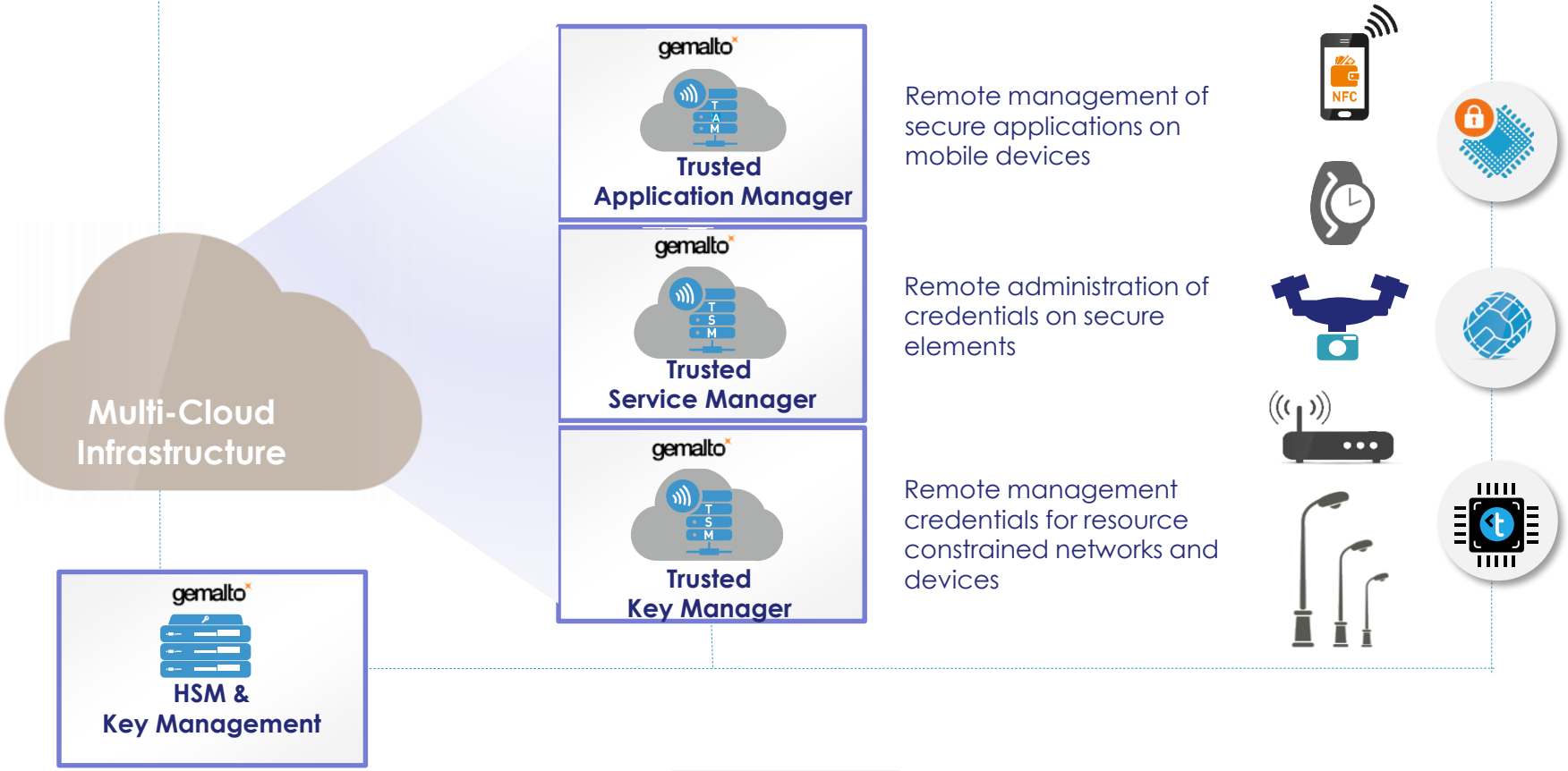
Securing the Edge and the Cloud



About Gemalto, a business of Thales Group.

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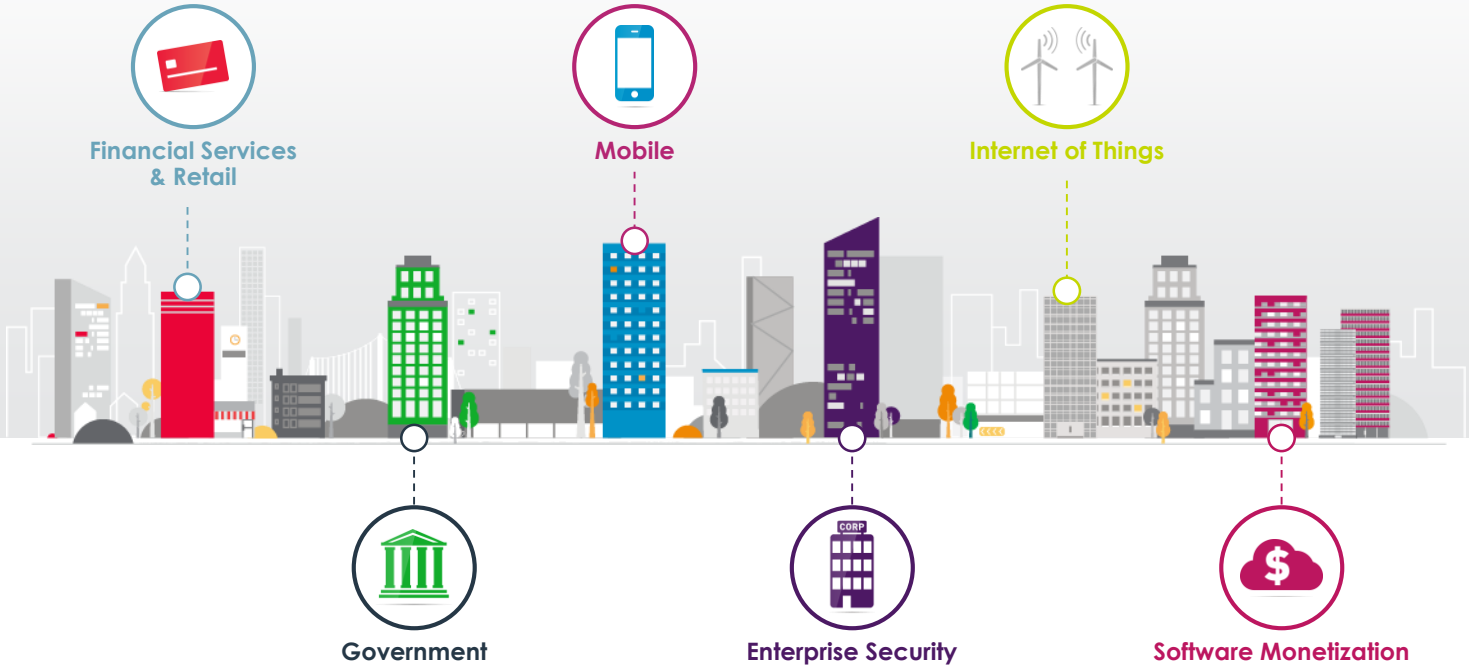
We enable trust in two interlocking ways…

…by developing secure, innovative software.

We enable secure services in six main markets

Bringing trust to connected devices, payment, online banking, cloud access, transport ticketing, eGovernment, vehicle telematics, software licensing and more.



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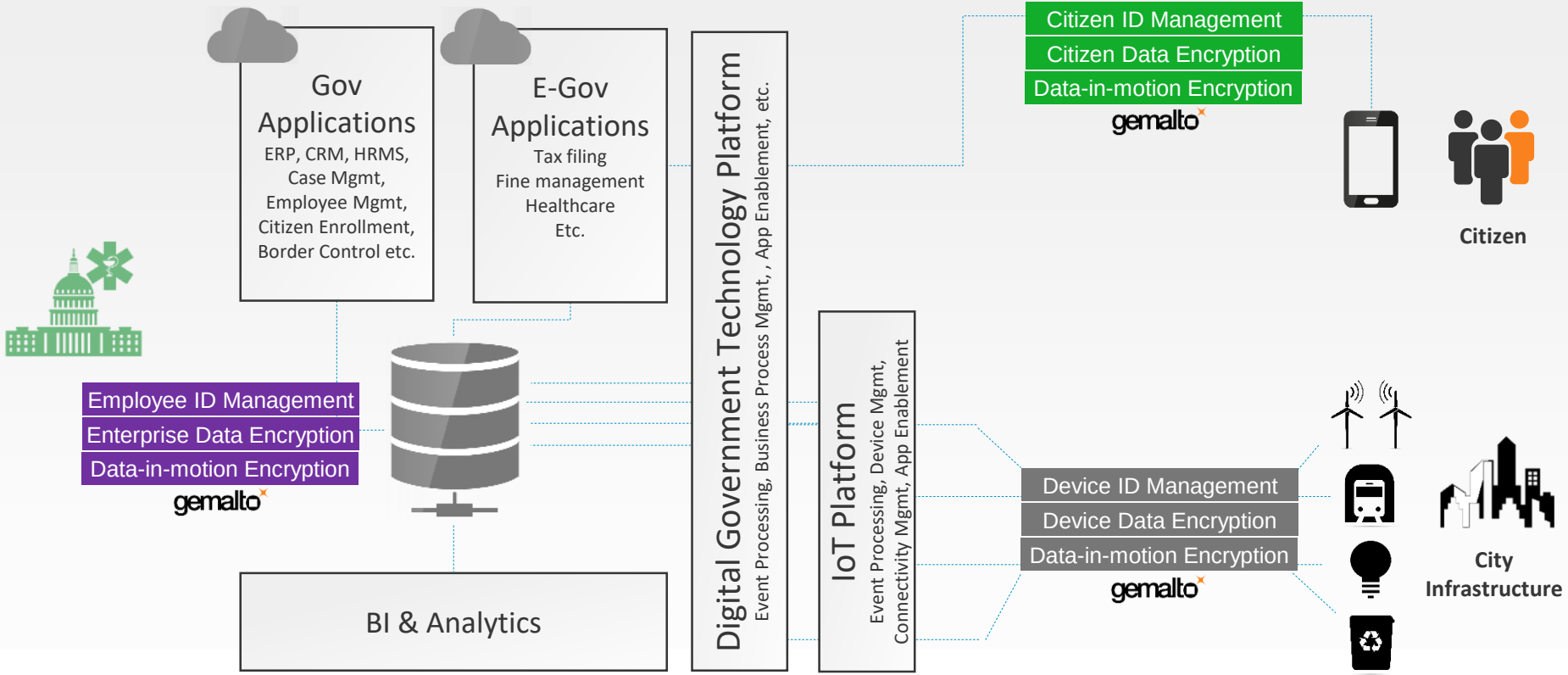
Building trust in Smart Cities

Gemalto capabilities for securing Smart Cities

Click on Gemalto logo to learn more.



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