

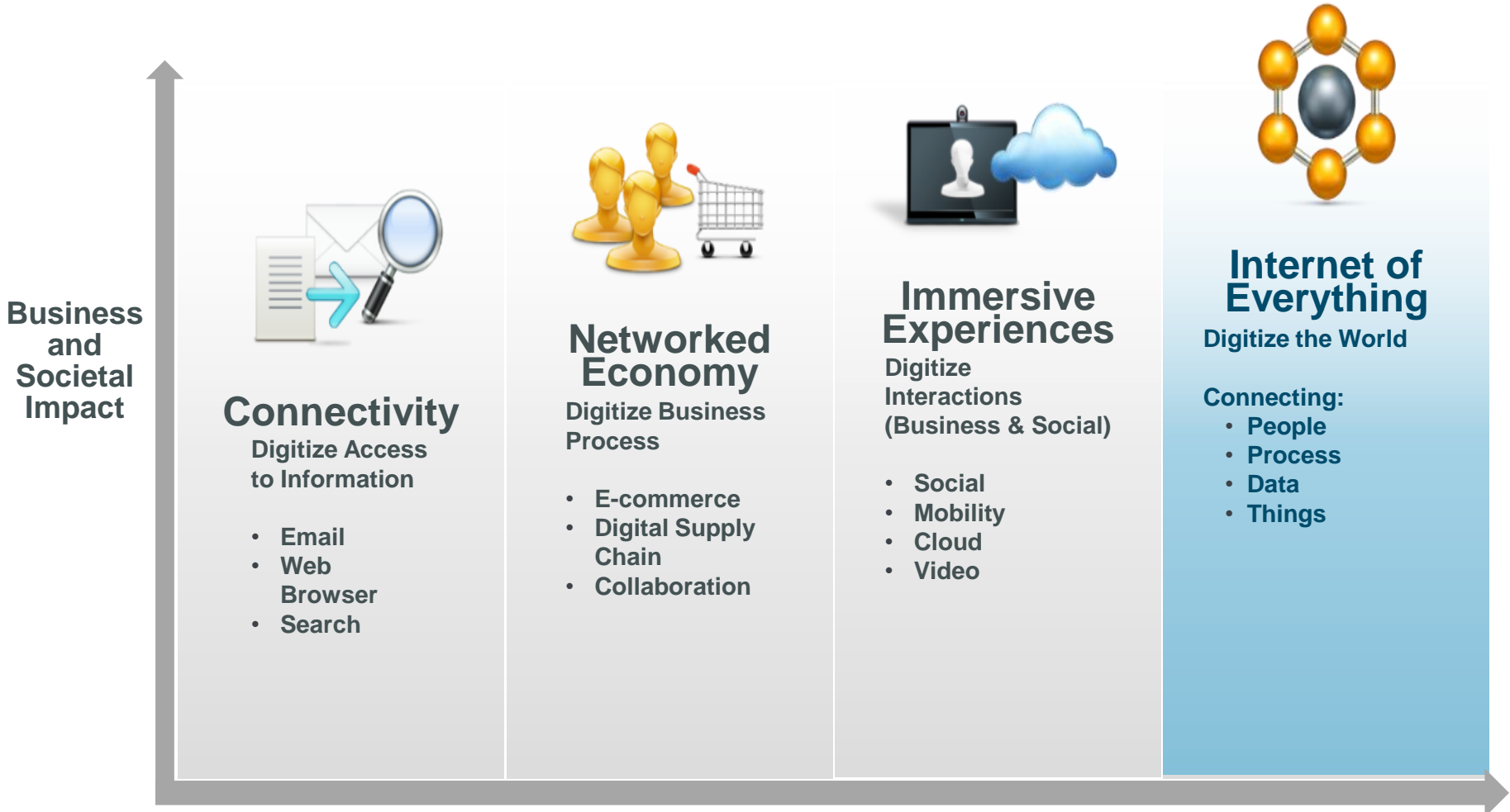


Role of Technology In Sustainable Large Developments

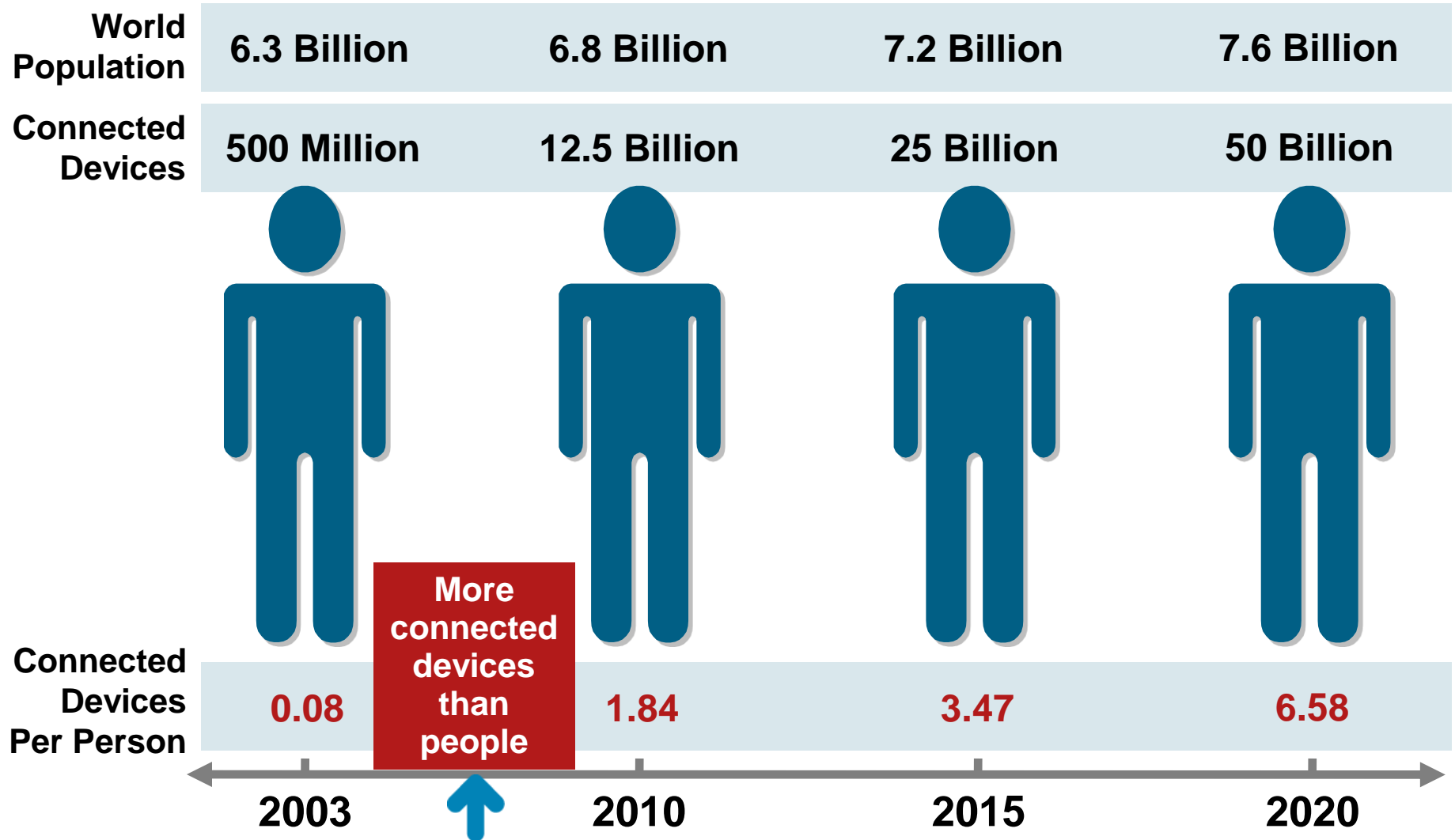
Aamer Azeemi MRICS

Managing Director
December 11, 2012

The Evolution of the Internet



The Internet of Things Is Already Here

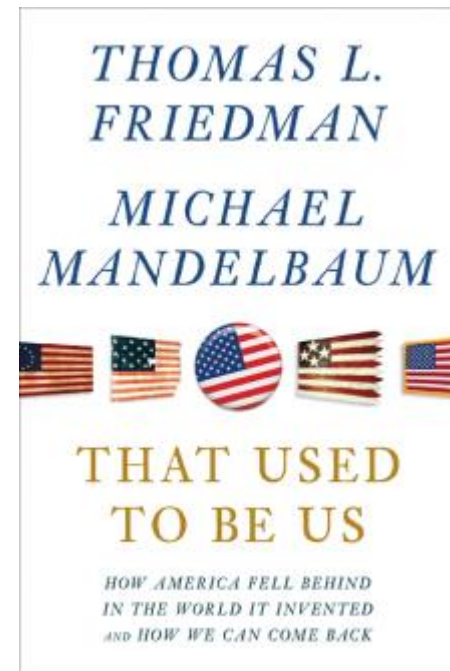


Source: Cisco IBSG, 2011

Moving from Connected ... To ... Hyper-Connected

“When I said the world is flat, Facebook didn’t exist. Twitter was a sound. The Cloud was in the sky. 4G was a parking place. LinkedIn was a prison. Applications were something you sent to college. And, for most people, Skype was a typo.

That all happened in the last seven years. And what it has done is taken the world from connected to hyper-connected. And that’s been a huge opportunity and a huge challenge.”



Enabling Social, Environmental and Economic Sustainability



**Running a Campus, Village, City, Community, Country,
the World on Networked Information**

Sustainability Services Delivered by an ICT-based Platform

Social

Enhanced quality of life
for citizens

Environmental

Protecting the world
for future generations

Economic

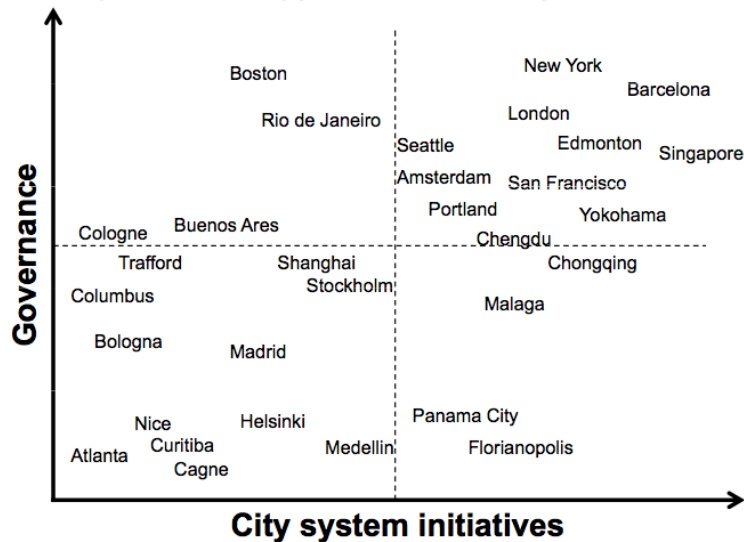
Continuous job and
business growth

From “Smart Things” to “Smart Cities”

Scaling From Large and Grandiose to “Shavings Make a Pile”

Moving Toward Truly “Smart”

Comprehensive approaches versus piecemeal initiatives



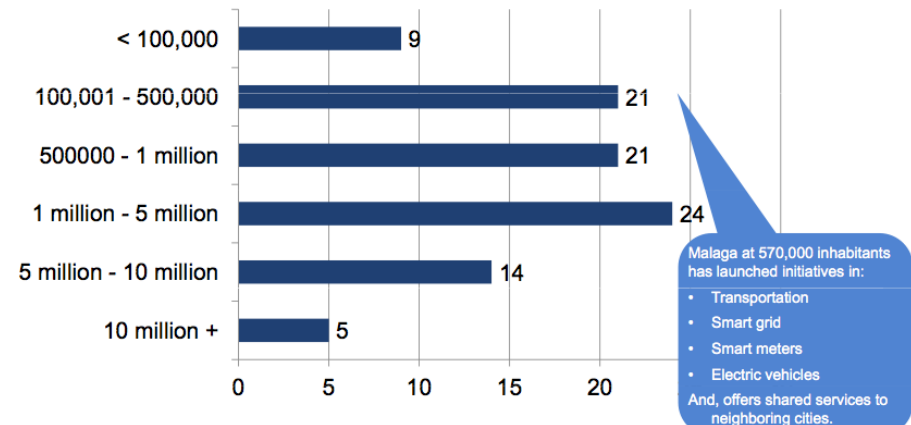
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Smart cities come in all sizes.

Mid-sized cities represent opportunity, often as the “challenger.”

Population distribution of sample cities



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Do You Have a “Smart-ification” Strategy?

It Starts With an Information & Communication Technologies (ICT) Strategy

Digital Urban Renewal

Retro-fitting existing cities with smart solutions is the urban challenge of the 21st century

OVUM

Reference Code: OT00037-004
Publication Date: April 2011
Author: Jeremy Green

ANALYST INSIGHT

Is Your City Smart Enough?

Digitally enabled cities and societies will enhance economic, social, and environmental sustainability in the urban century

Reference Code: OI00130-007
Publication Date: March 2011
Author: Dr. Steve Hodgkinson

SUMMARY

Catalyst

Population growth, urbanization, and global warming are fueling an increasing focus on the challenges facing the world's cities. As the global population heads towards 7 billion we are discovering that more people want the benefits of urbanization than our economies, societies, and the environment can necessarily sustain. Accommodating the future billions will require cities that make smarter use of resources to deliver more with less.

Information technology is an important enabler of a more sustainable approach to designing, building, and operating cities. New greenfield cities and major urban renewal projects provide the focus and investment needed to reengineer the way cities work.

Ovum view

Population pressures are driving an unprecedented explosion in city building. United Nations projections suggest that the world's cities will need to accommodate an additional 2.9 billion people by the middle of what is being called “the urban century.” Existing cities will grow and hundreds of cities will be built and expanded to accommodate migration and growth.

Building good cities is expensive and we will see a rise in competition between cities to secure investment and to attract and retain the businesses and people needed for economic success. The limits of economic, social, and environmental sustainability will be tested by this competition.

Is Your City Smart Enough? (OI00130-007)

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Page 1

Networked Society 'On the Brink'

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Networked Society 'Thinking Cities' - Ericsson

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TEDPrize Wishes big enough
to change the world

THE 2012 TED PRIZE WISH: THE CITY 2.0



READ THE WISH

Digital and Physical Infrastructure Need to be Seamless in order to Create Sustainable Cities

Inter-Government, Citizen and Business Services



Education /
Healthcare



Utilities



Public
Safety



Economic
Development



National
Security



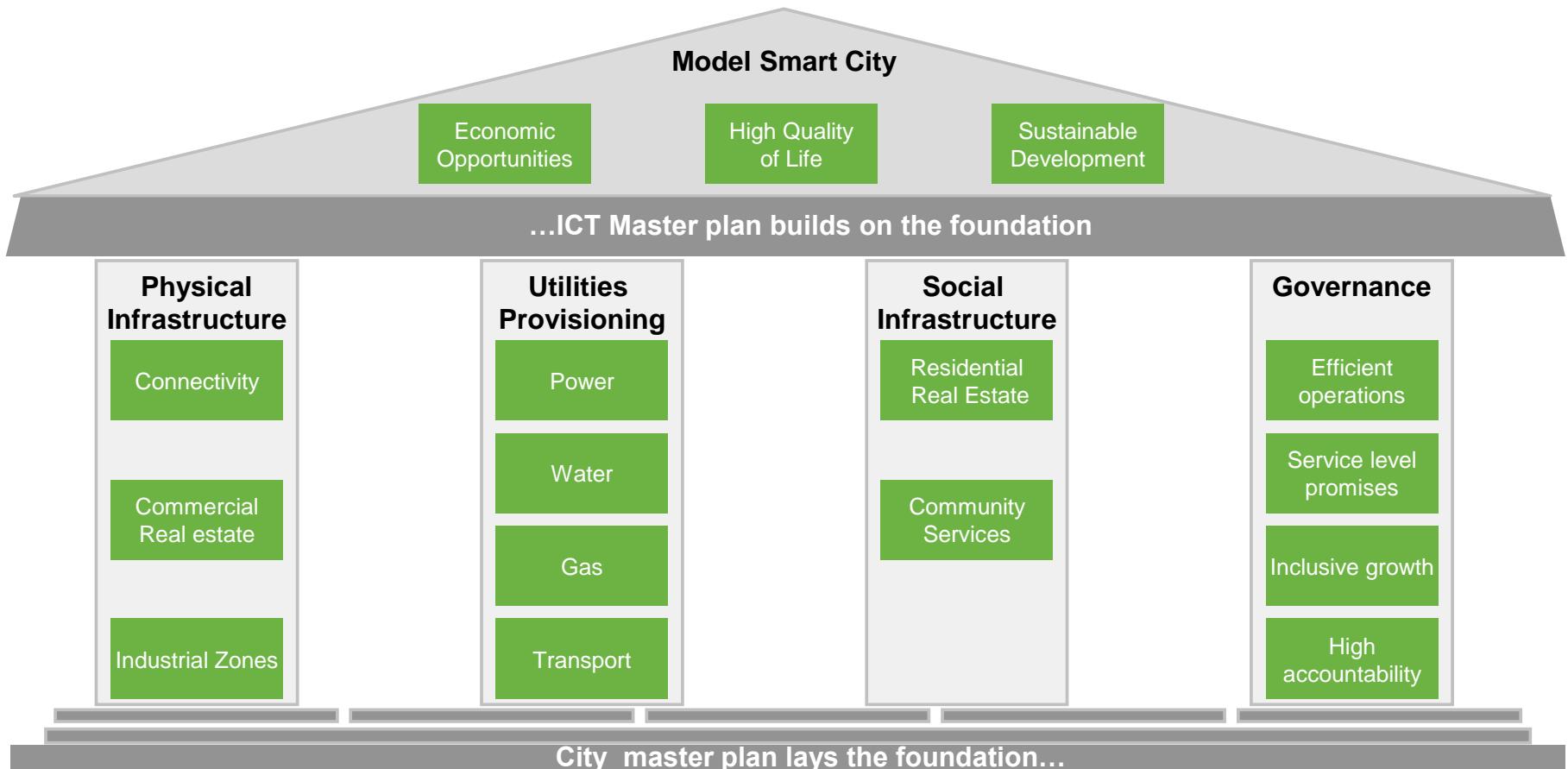
Policy and
Regulations

Affordability

ICT

ICT Master Planning Process

City Master Plan is the basis for an ICT Master Plan – both plans jointly create a Smart City

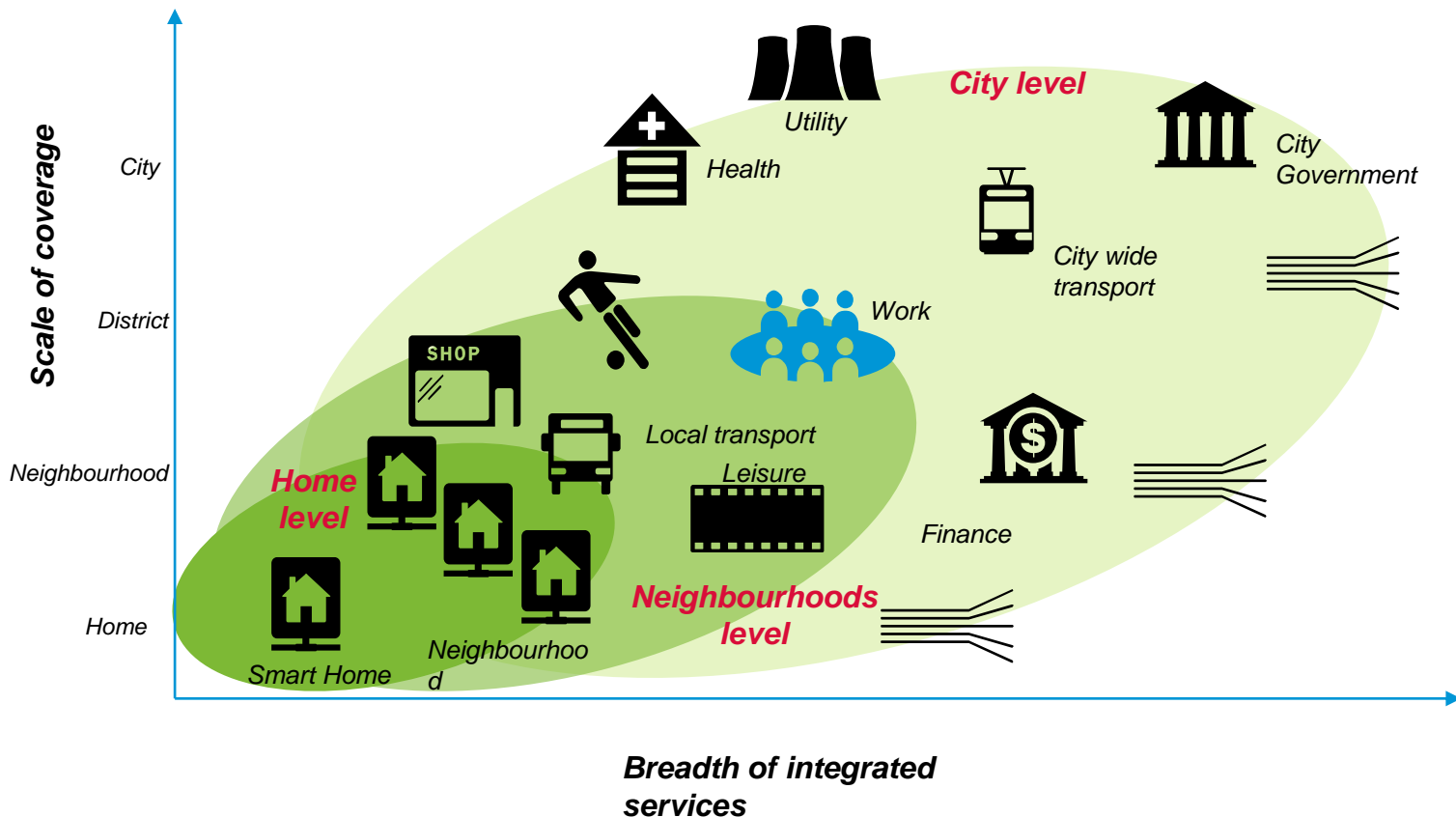


Three categories of ICT services come together to form a smart city

ILLUSTRATIVE

Smart City Conceptual Map

Service Hierarchy



Commercial Services
(provided by the private sector)

City Services
(provided by the city government)

ICT Core Infrastructure
(city-wide ICT infrastructure)

The ICT Master Plan Deliverables

Public/Private Cloud Strategy

Residence



Office



Building



Retail



IOC



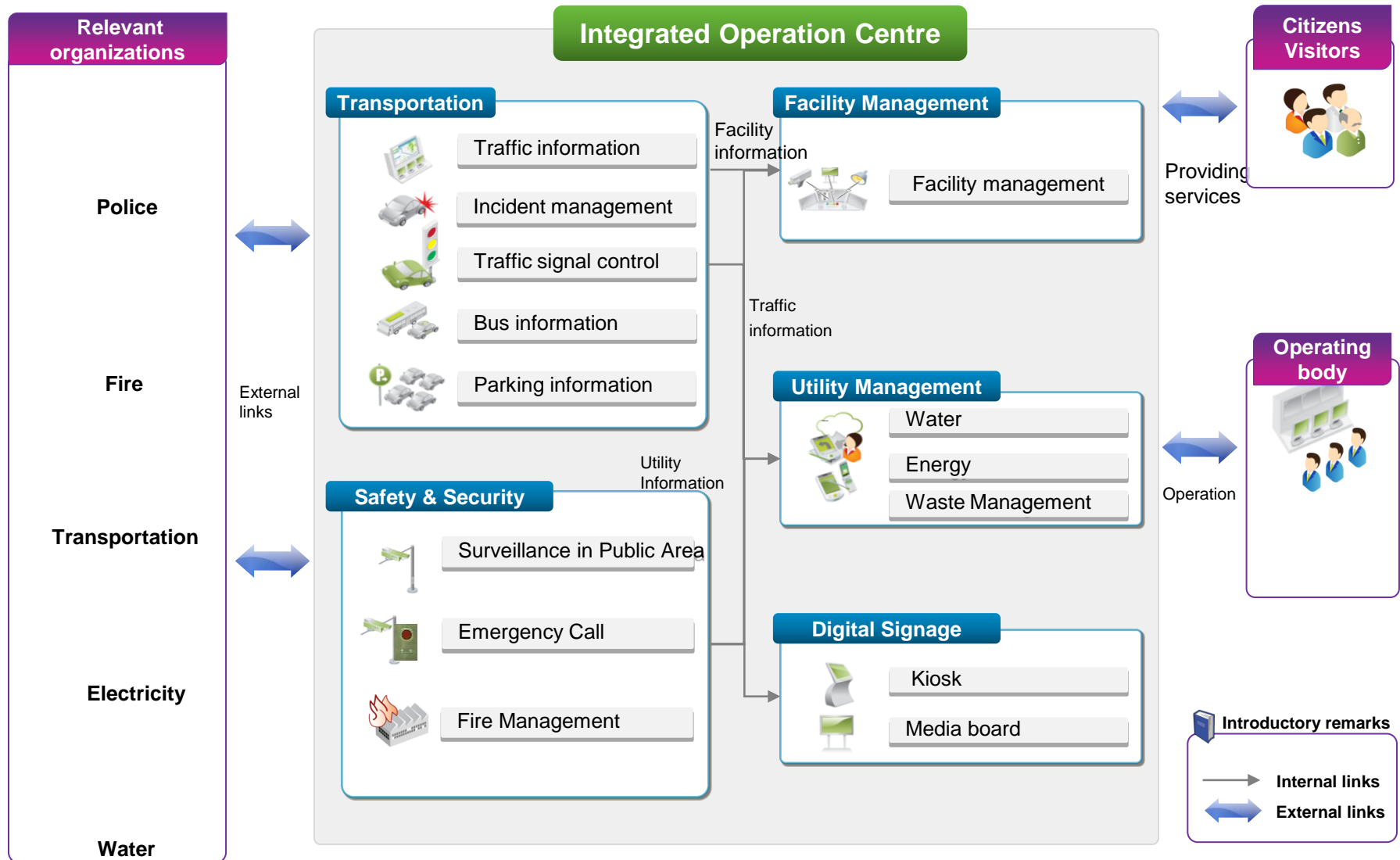
Cloud

Education



Others...




City-wide Services: Integrated Operations Center with Centralized Operating Platform









Smart+Connected Communities

Implementations Around the World









Proof Points

-  **Amsterdam:** Smart Working Centres
-  **Seoul:** Personal Travel Assistant
-  **San Francisco:** Urban EcoMap; Connected Bus











Case Studies

-  **Kuwait:** Al Hamra Tower
-  **Philippines:** Twin Oaks Place
-  **NYC:** Yankee Stadium
-  **Vietnam:** Times Square
-  **India:** UST Global, Kerala
-  **Cisco on Cisco**

New Development

-  **South Korea:** Songdo
-  **China:** Chengdu
-  **India:** DMIC
-  **Portugal:** PlanIT Valley
-  **Russia:** Skolkovo
-  **S Arabia:** King Abdullah Financial District
-  **India:** Mantri Developers
-  **Malaysia:** Iskander

Revitalization & Growth

-  **Toronto**
-  **San Francisco**
-  **Barcelona**
-  **Colorado:** Connected Communities Initiative
-  **Holyoke,** Massachusetts
-  **China:** Chongqing
-  **Vancouver**
-  **London**
-  **Jacksonville, Florida**
-  **Chicago:** Lakeside

Dholera SIR - DMIC

A New Gujarat Within Gujarat



Central Spine

900+ sq km greenfield “Smart Inclusive” city

Innovative energy, water, waste infrastructure & operating models

ICT as the Fourth Utility

Skolkovo Innovation Hub Russia



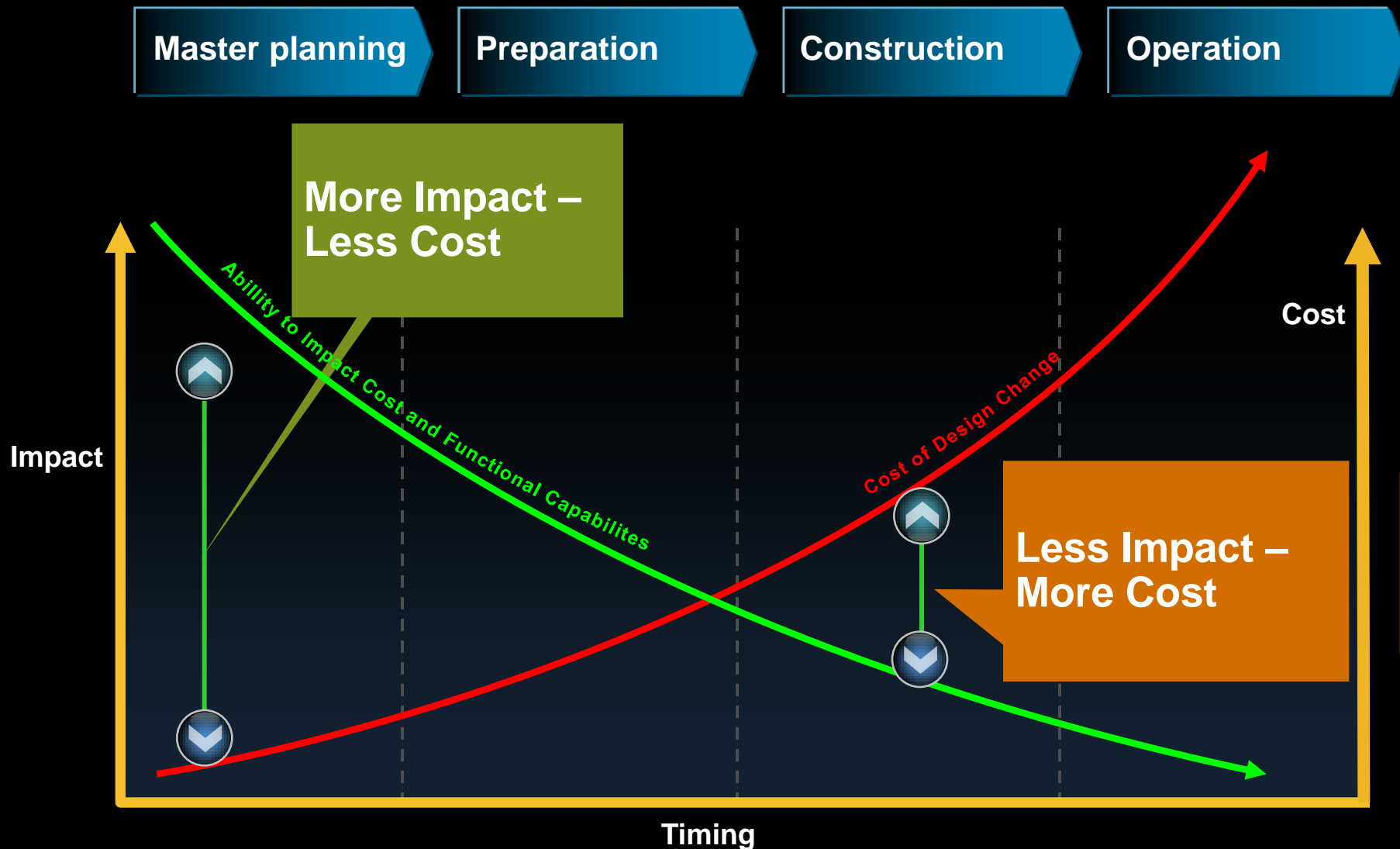
Collaborating with the Skolkovo Foundation.

Living Lab: Residents develop new technologies to sell to globally.

Clusters: Biotech, Energy, IT, Space and Nuclear technology.

Establishing Skolkovo as a **Global Innovation Hub**.

Timing of ICT Master Planning is Critical



One Final Thought...



Visionary
Leadership



New
Ecosystem



Thank you.



CISCO *TOMORROW starts here.*