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Cisco Expo 2010

Role of Technology in Smart Communities



Amr Salem Director, Emerging Markets Smart+Connected Communities

"Cisco is quietly preparing for markets that don't exist – yet."



March 7, 2009

"More than ever before, cities are home to humanity's great expectations...

...they are also home to increasing social disparities, poverty, pollution, waste and environmental problems."

UN Habitat Report, 2008

The Internet of Things



Industrialisation of the Internet

Source: Forrester Research

Smart+Connected Communities

Running a City on Networked Information

city management

Helps Transform

economic development

citizen quality of life

Why build Smart+Connected Communities?



Source: Smart2020 (http://www.smart2020.org/)

The Goal: Sustainability







How do "Smart+Connected Communities" deliver these values?



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Connected Community Effect

Smart Solutions

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Enhanci6gnthre+TranebEtqueTienceportation



Optimize city transportation and logistics

Deliver key citizen services anytime, anywhere

ProtectSchitzenScameSteeduSeaCebynandnSeatuioity

Automatic and unobtrusive detection and prevention

Informed assessment, coordinated response

Reduce human error and time lag

Increase effectiveness of response

Delivering Bettent-Case te Citizelealth

Improve quality of care and simplify communications

Prompt and secure access to digital images

Safeguard patient records and clinical applications

Managing Snoaving Emeegyed Watienties Gas Demand



Connected Community Effect

Energy Management

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Energy is becoming a Global Concern

The distribution of energy consumption by sector



Buildings (Real Estate) 50%

Sources: BOMA 2006, EIA 2006, AIA 2006

Traditionally, all systems are built independently and supplied through different contracts...

Services	Video Intercom				Physical Security (CCTV)				Parking Management					Telephone			TV					
Systems	Access Control	Audio	Video Display	Video Feed	Cabling	Storage & Analytics	Video Display	Video Feed	Cabling	Gates & Barriers	Access Control	Audio	Video Feed	Cabling		Call Manager	Audio	Cabling		Video Management	Video Display	Cabling

... But there is too much overlap ...

What if we remove the overlapping systems?



Lower Cost (CAPEX and OPEX) Better Controls



Example: Energy Management



- CAPEX savings on Equipment and Space
- OPEX savings on Maintenance and Energy

EnergyWise Management Scenario: Reducing Headquarters Peak Power Usage

- EnergyWise controls laptops, phones, and building cooling
- Peak power reached smooth and time shift power use





EnergyWise Management Scenario: Reducing Bank Branch Carbon Footprint

- Operation 9 to 5
- Power off phones after hours and power on phones next day
- Legacy phone and switch





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City of San Francisco: the connected bus



Connected Transportation: Personal Travel Assistant



City of San Francisco – San Francisco leading: EcoMap



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Smart City Bill Improved Convenience – One Payment For All Services

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Smart+Connected City: Incheon, Korea

One Common Infrastructure...

Address Many Issues

Smart Connected Citizen Services Smart Connected Transportation Smart Connected Real Estate Smart Connected Utilities Smart Connected Safety & Security

What do I do?

1- Call Cisco!! Or just come to Networkers Bahrain 2010

2- Define your vision and associated services catalogue

3- Define the impact of these services on your Infrastructure

4- Include in the design from day ONE

Smart+Connected Communities Learning from the Legacy

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