



Smart City Smart Strategy

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KC Smart Service
KT Corporation

The World is now Urbanized

% of population living in cities

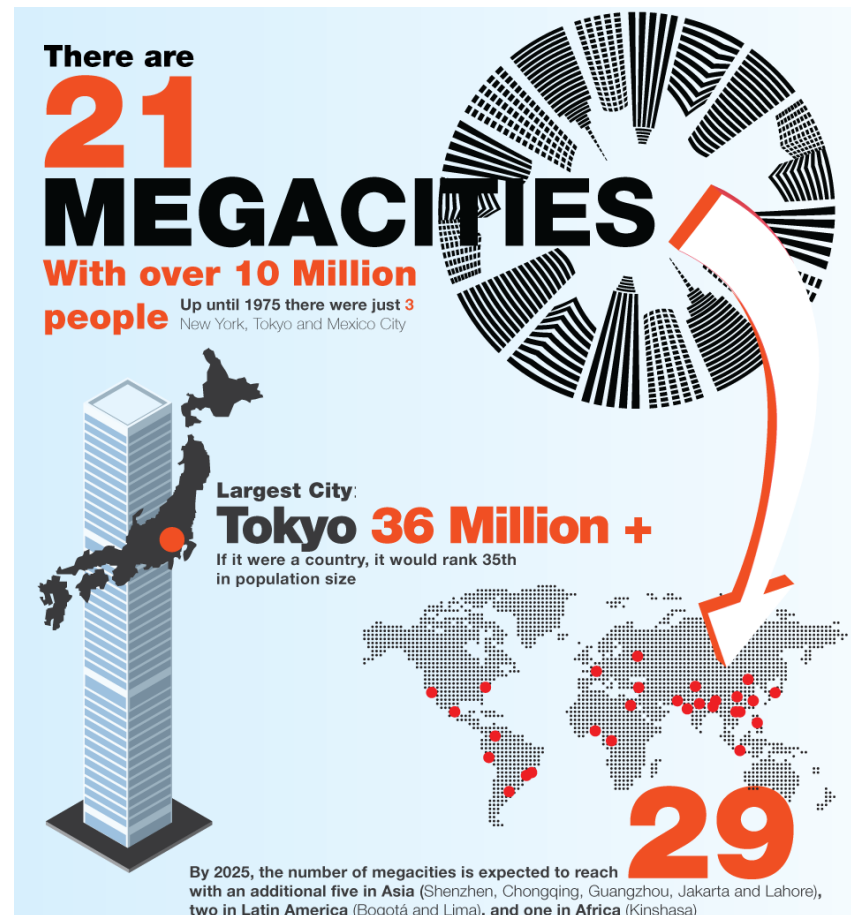
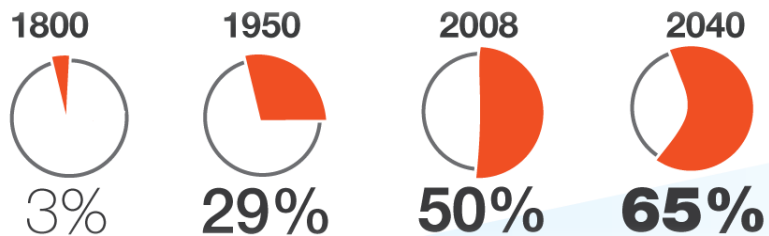


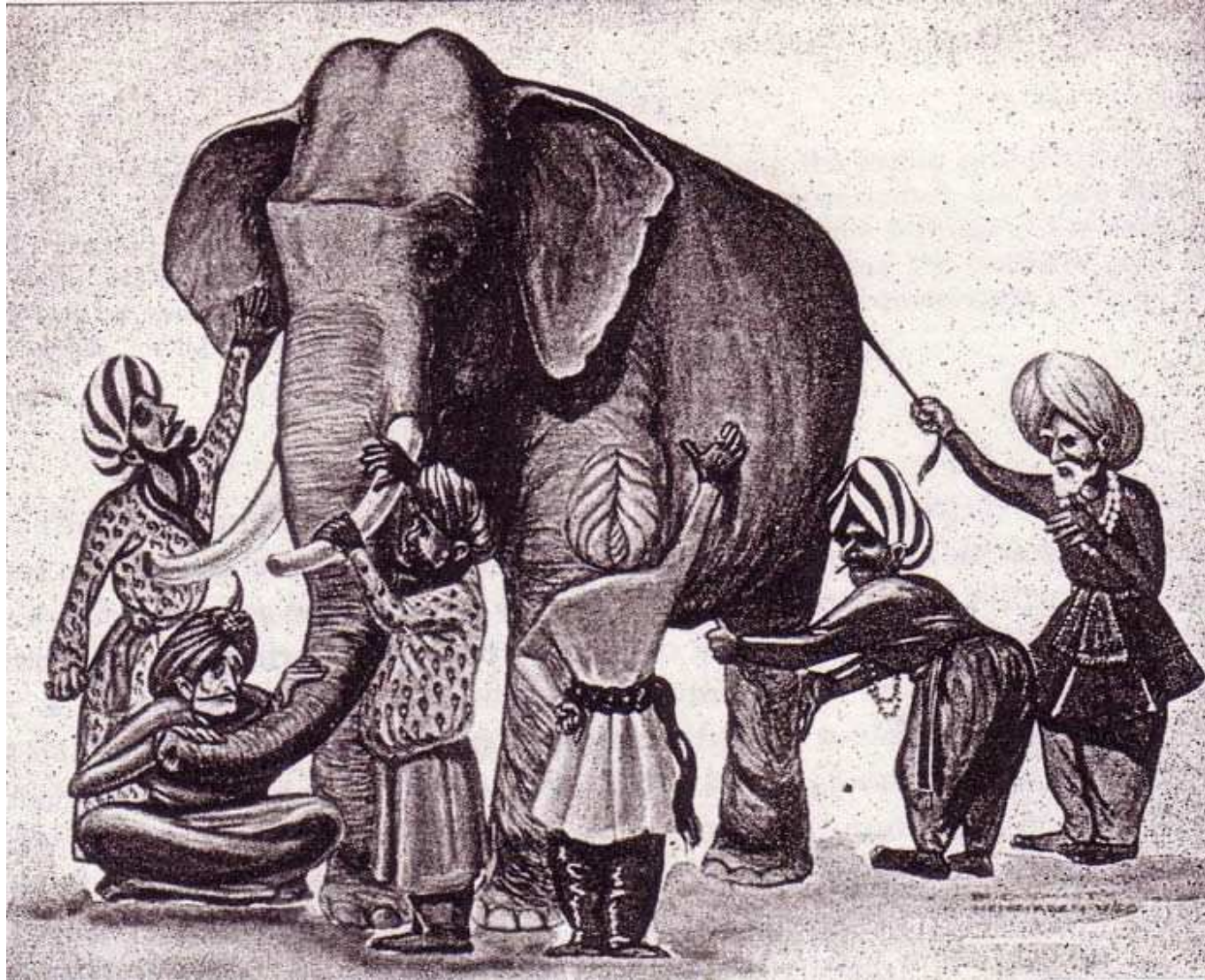


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What is Smart City?

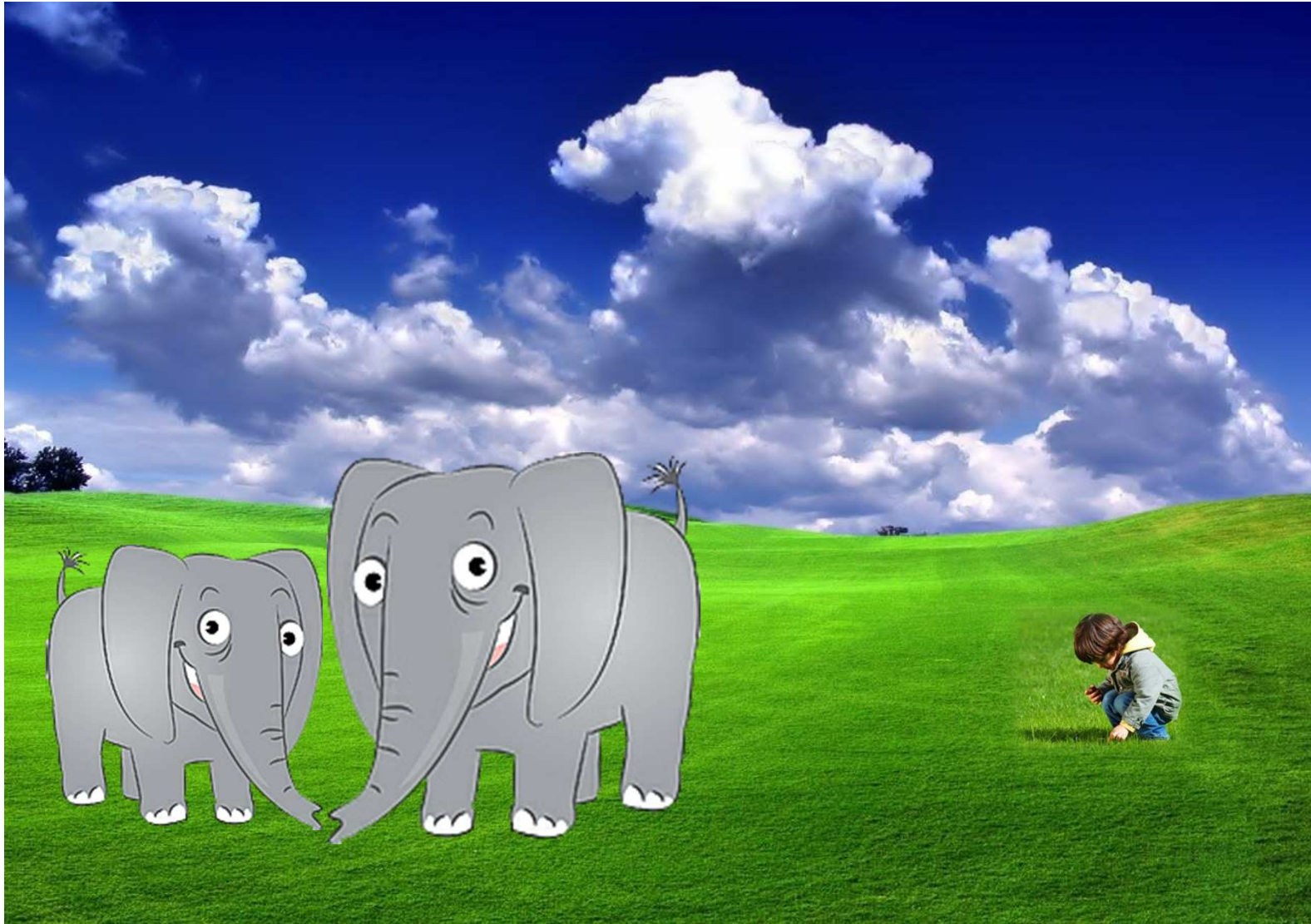
Traditional Urban ICT



U-City

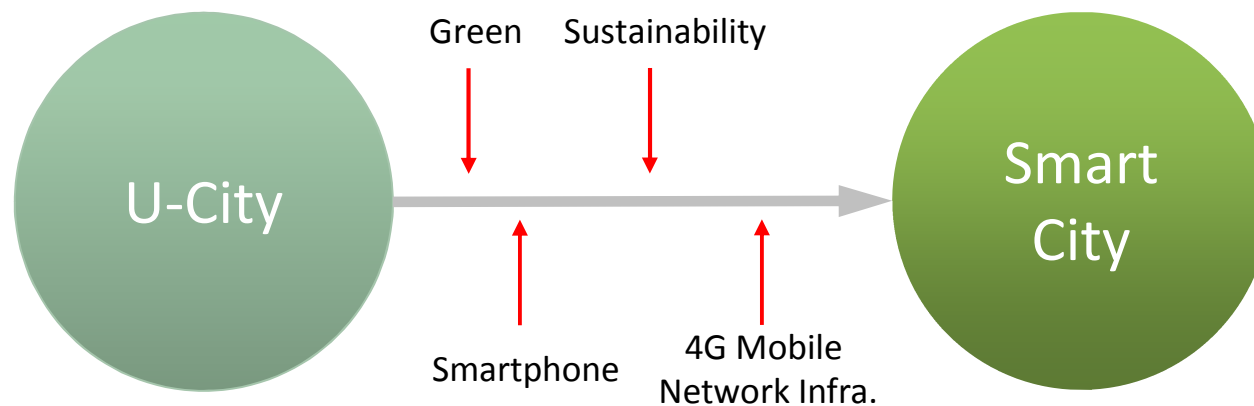


Smart City



U-City to Smart City

Early concept of U-City is changed to Smart City adapting the needs of green and sustainability for cities, and the introduction of Smartphone and 4G mobile network infrastructure.

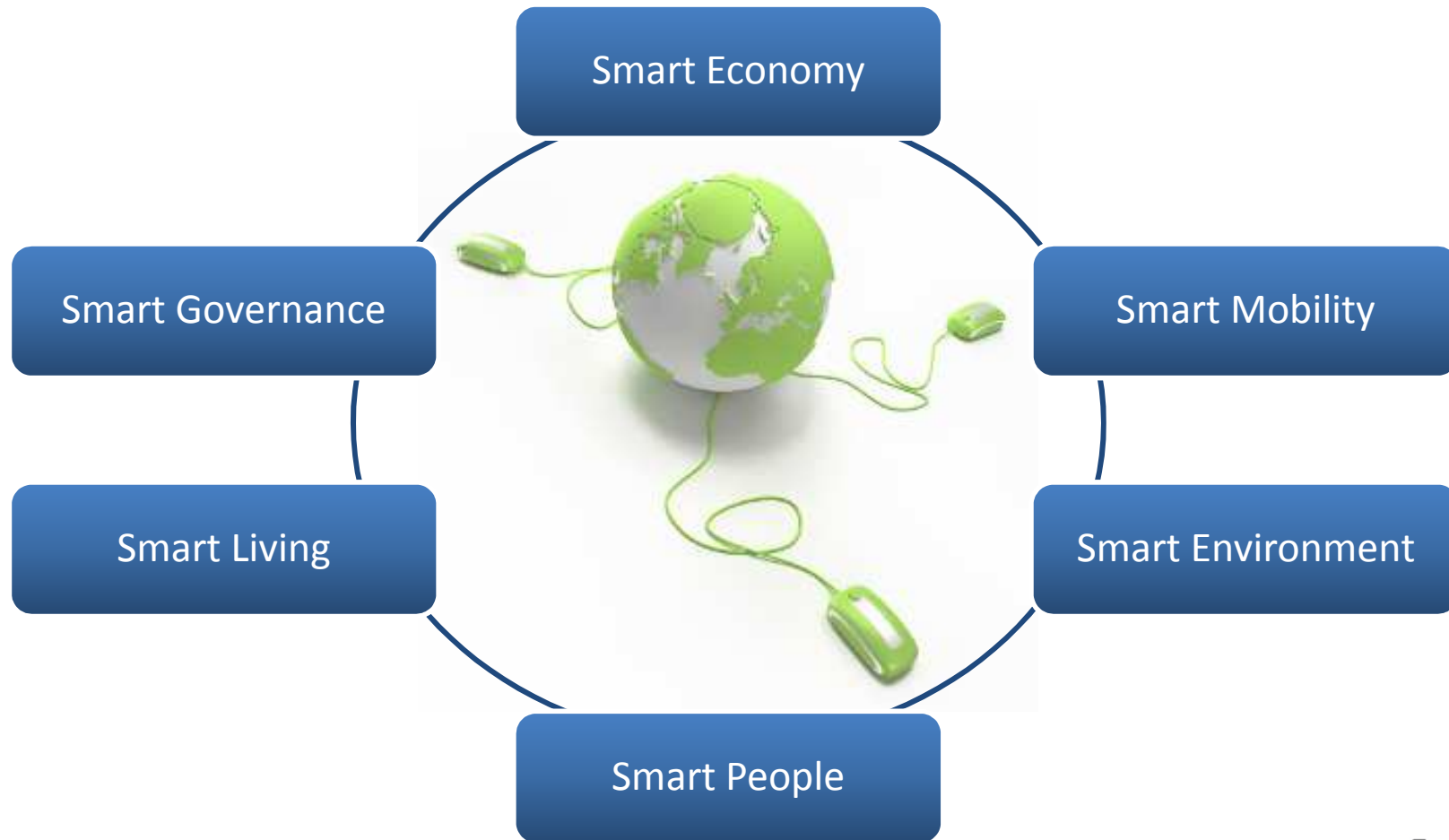


- **Government Driven**
- **Customized Mobile Devices**
- **Operator Friendly Services**
- **Fixed Network**

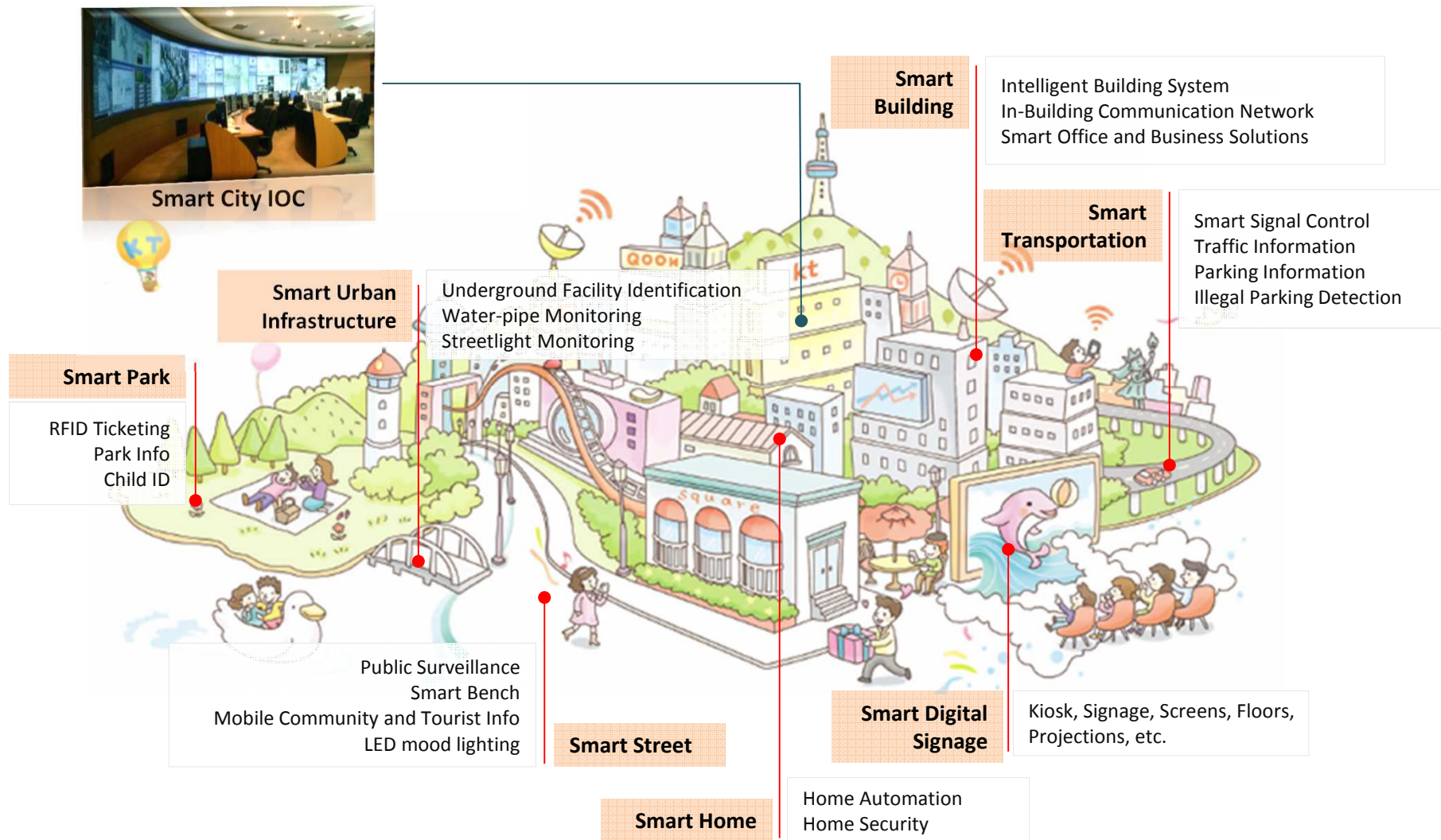
- **Citizen Driven**
- **Smart Devices – Smartphones/Pads**
- **User Friendly Services**
- **Fixed Mobile Convergence Network**

What is Smart City?

A Smart City is a developed urban area that creates sustainable economic development and high quality of life by excelling in 6 key areas that can be done through strong ICT infrastructure.



Smart City at a glance



Integrated Smart City Platform

Video Clip

Value Proposition

Government, Master Developer



Public Benefit through Smart City Services

Smart City Benefit/Cost ratio: 1.8 – Dongtan case



Minimizing Operation Cost of Smart City Services

10% saved Smart City Implementation and Operation Cost



Increased Asset Value & Marketing Effect

10% increased property value (USD 600/m²) – Dongtan case

Citizens, Visitors



Improved Safe and Secure City

40 % decreased crime rate – Gangnam case



Effective Urban Infra

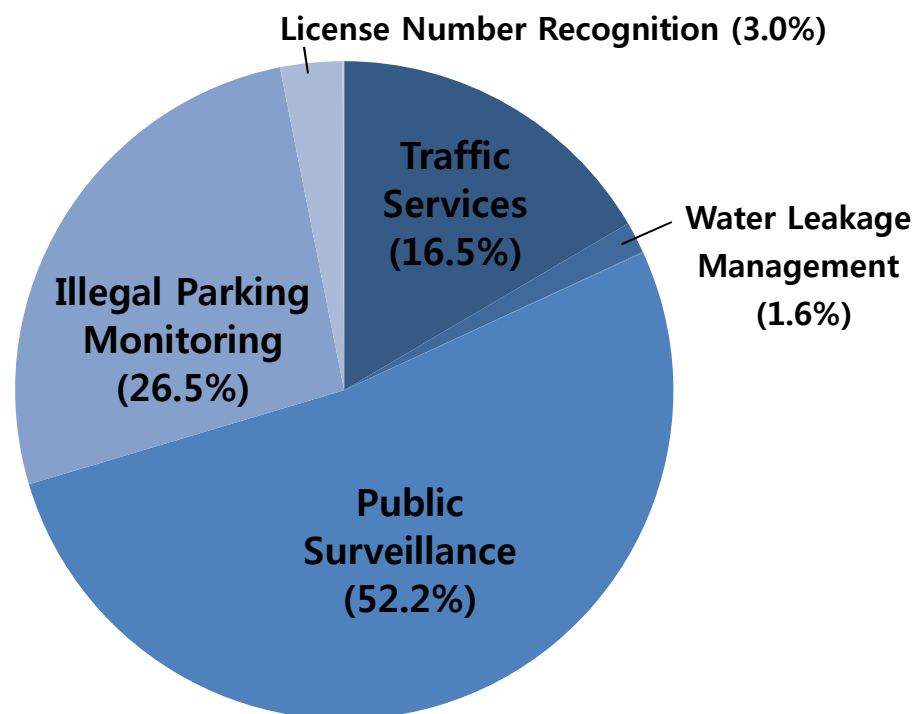
40 % increased parking lot capacity case

Economic Benefits

The yearly social and economic benefits of Smart Services are estimated to be about 28 million USD.

Social and economic benefits of Smart Services *

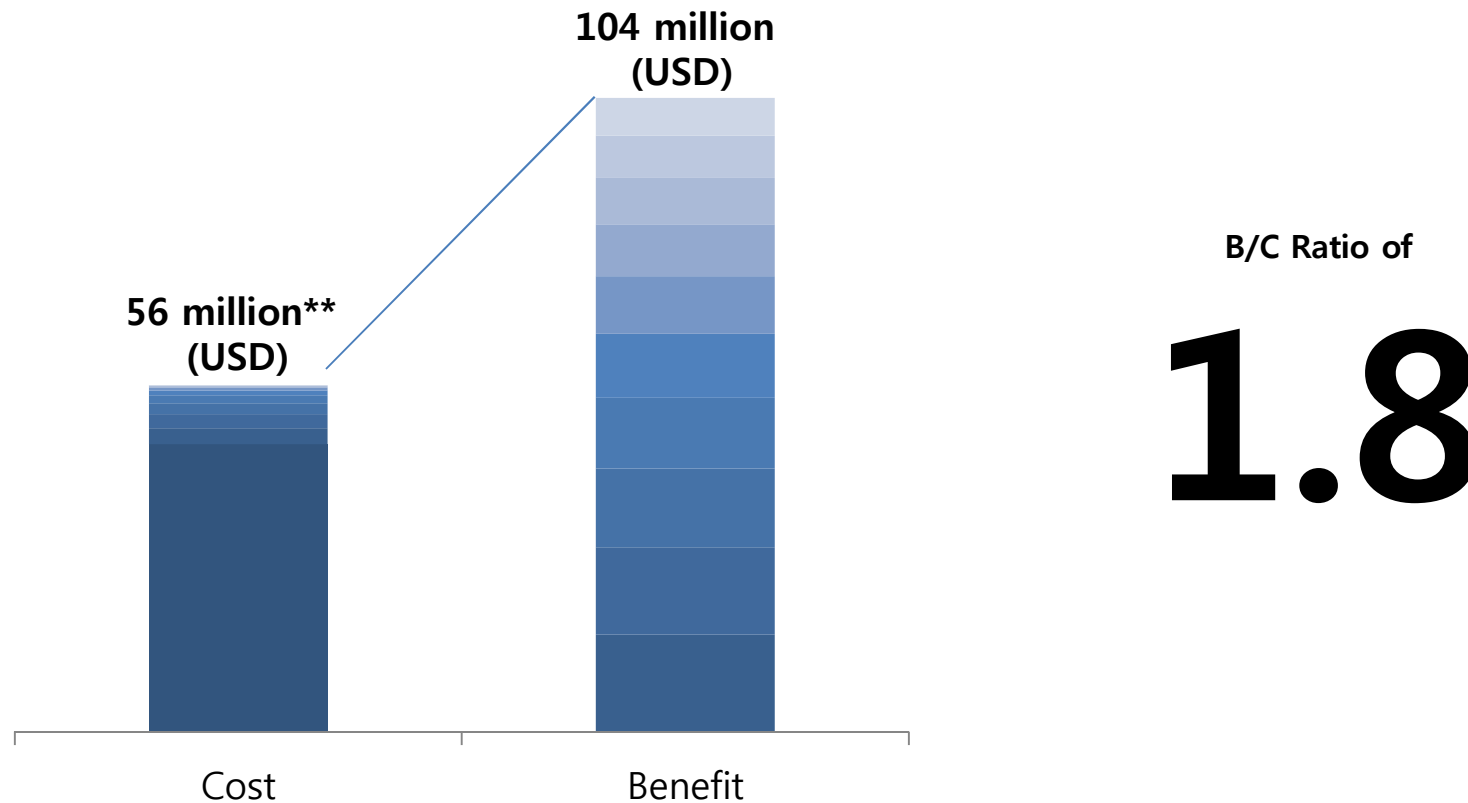
28
Million USD / Year



Feasibility Analysis

The cost-benefit ratio of Hwaseong Dongtan Smart City is expected to be about 1.8, based on feasibility Analysis for Hwaseong Dongtan Smart City implementation and operation between 2008 to 2018.

Cost and Benefit of Hwasung Dongtan Smart City for 11 years*



Smart City References

Smart City References

Public Smart Space

- 13 Strategic Planning projects and 9 detailed design projects including IFEZ U-City Strategic Planning, the world's first Smart City planning project
- Implementation: Dongtan, Paju, Yongin, Pangyo, Homesil, etc.
- Operation: Dongtan (5 years contract for outsourcing)

Smart Building & Complex



• StarCity (Operation)



• D-cube (Planning)



• Jeju Smart Grid(Test-bed)

Smart Park & Street



• Busan U-Park



• Seoul U-Tour



• Media Pole

Global Smart Space

- Smart and Connected Master plan for Nusajaya ('11~'12)
- U-City Master plan for Algeria/ Sidi Abdellah New City ('10~'11)
- UAE/ K-Cluster (Korean Cluster) Master plan ('10~'11)

Reference : Paju U-City



City Overview

- 25km North West from Seoul
- 16.5Km² (3,960a)
- 205,000 population
- 78,000 households



Implementation Project Details

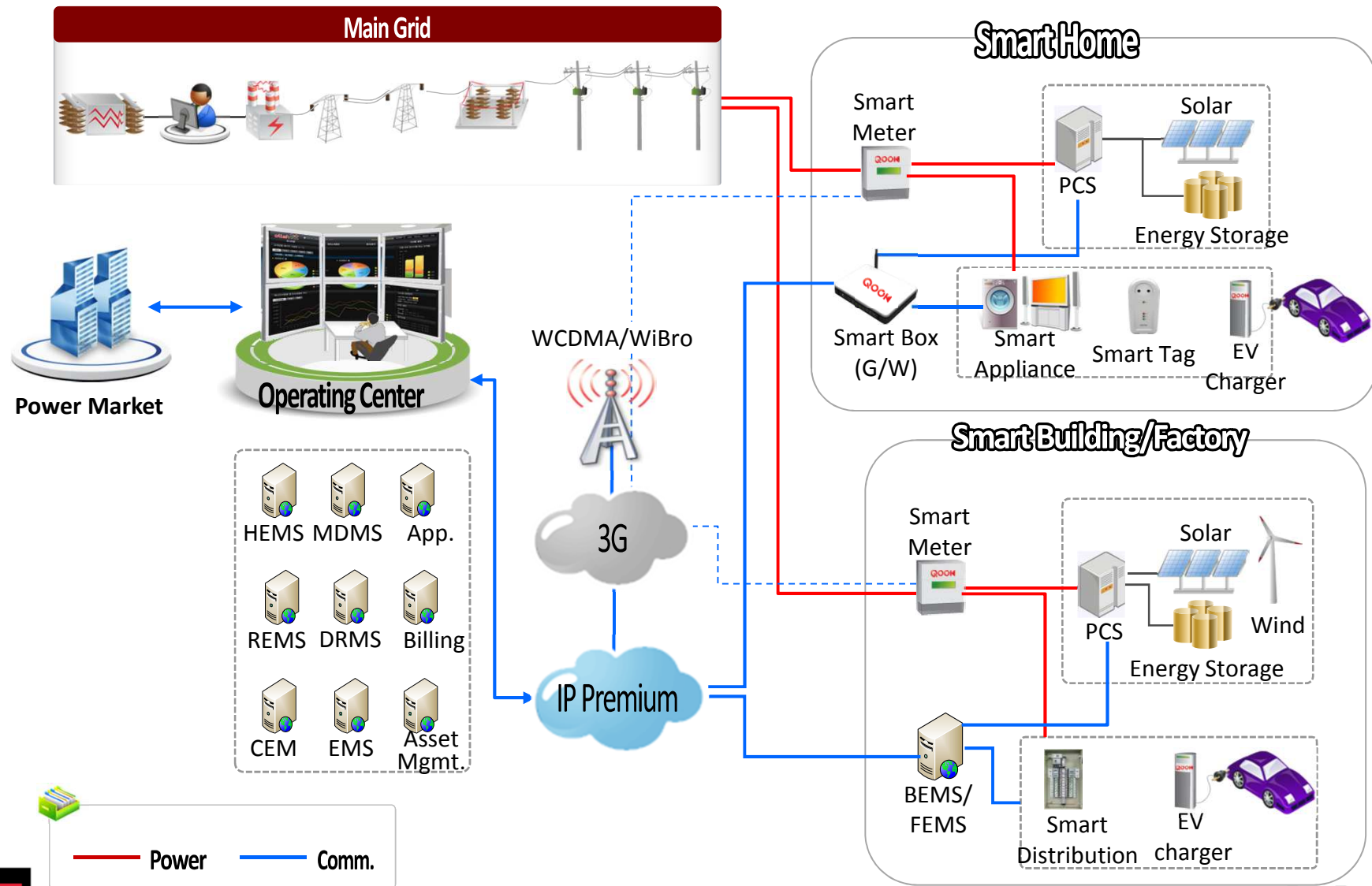
- Project Period : Sept. 2008 ~ Dec. 2011
- Budget: US\$ 67 M
- Smart Services:
 - Mobile, Transportation, Safety & Security, Environment, UIS, Healthcare, Water Management, Portal
 - Integrated Operation Centre (IOC)
 - MPLS 10G Backbone Network Infrastructure
- **Officially up and running from May 2012**



Reference : Paju U-City

Video Clip

Reference : Jeju Smart Grid Test Bed (1/4)



Reference : Jeju Smart Grid Test Bed (2/4)

Energy/Water Usage Monitoring screen for end-user



Summary Information



Energy Consulting Service



Home Energy Consumption Level(Graph)



'Leave and Return Home' Settings

Reference – Jeju Smart Grid Test Bed (3/4)

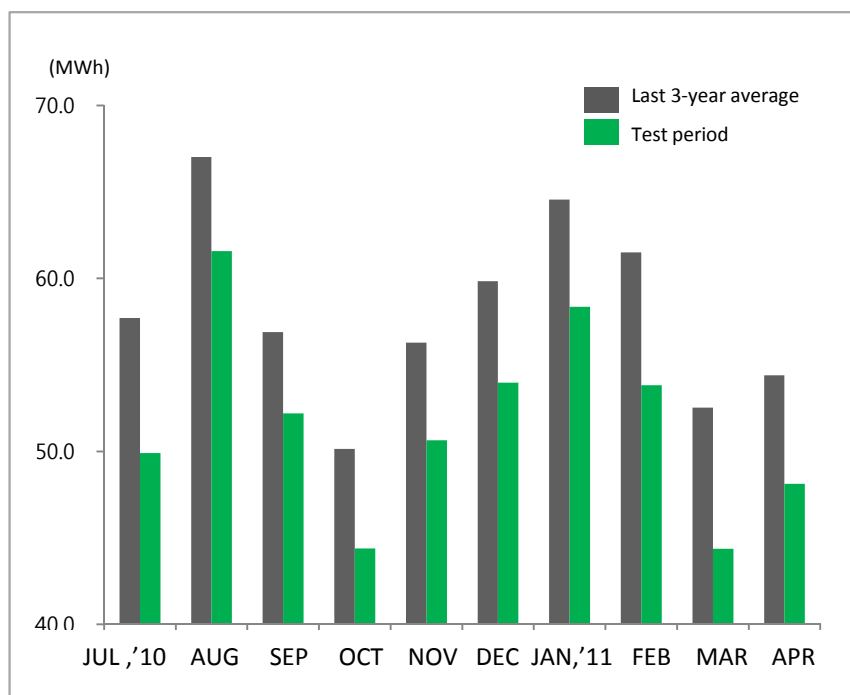
Smart phone UI of energy monitoring service



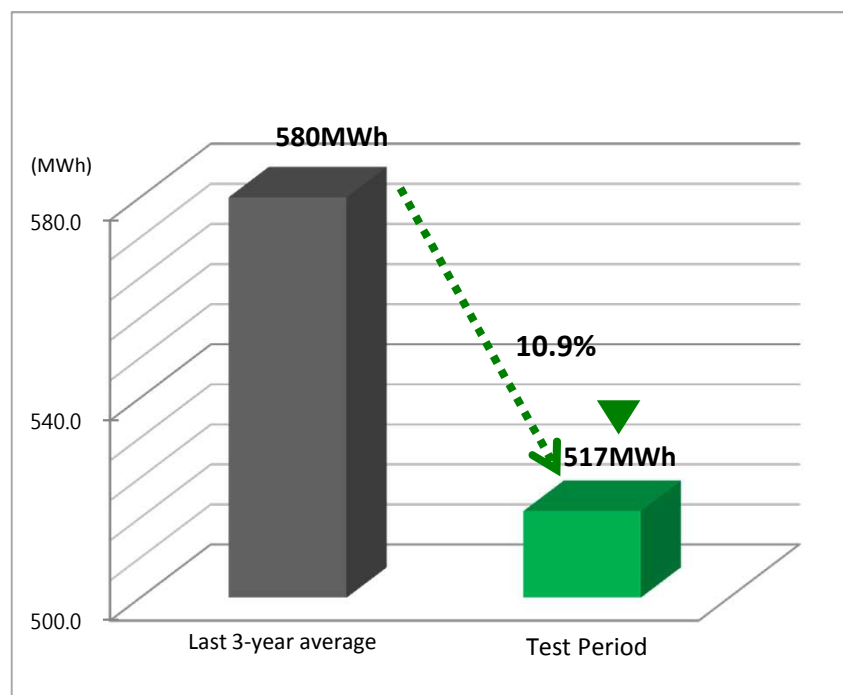
Reference – Jeju Smart Grid Test Bed (4/4)

Energy consumption has dropped 10.9% from the past 3-year average, and 14% of energy consumption reduction considering potential economic growth is estimated.

Monthly Power Usage Comparison



Power Usage During Test Period



- Sample: 150 households of the test bed
- Sampling period: July 2010 – April 2011

(Reference: Korea Electric Power Corporation)

Reference – Busan U-Park



Overview

- Busan(Korea's 2nd largest city)
- 0.54Km² (130a)

Project Details

- Project Period
 - Design: Oct. 2010 ~ JUNE 2011
 - Implementation: ~2014
- Budget: US\$ 12.8 M

Reference – Global Smart Space

Nusajaya, Malaysia



Smart and Connected Master Plan for Nusajaya (July 2011 ~ Jan 2012)

- Project Owner: UEM, IIB
- Area Size: 97 km²
- Designed Public Security, Transportation, City Portal, Integrated Operations Center, Smart Facilities Management system

Sidi Abdellah, Algeria



Smart City Master Plan for Sidi Abdellah New City (Aug 2009 ~ Dec 2011)

- Project Owner: Algeria Government
- Area Size: 3 million square meters
- Newly developing city specialized for science and technology

Smart Community Business, UAE



- ### Joint business development with major telecom provider in UAE
- Performed Feasibility Study to UAE's major developers

Abu Dhabi Masdar K-Cluster Masterplan, UAE

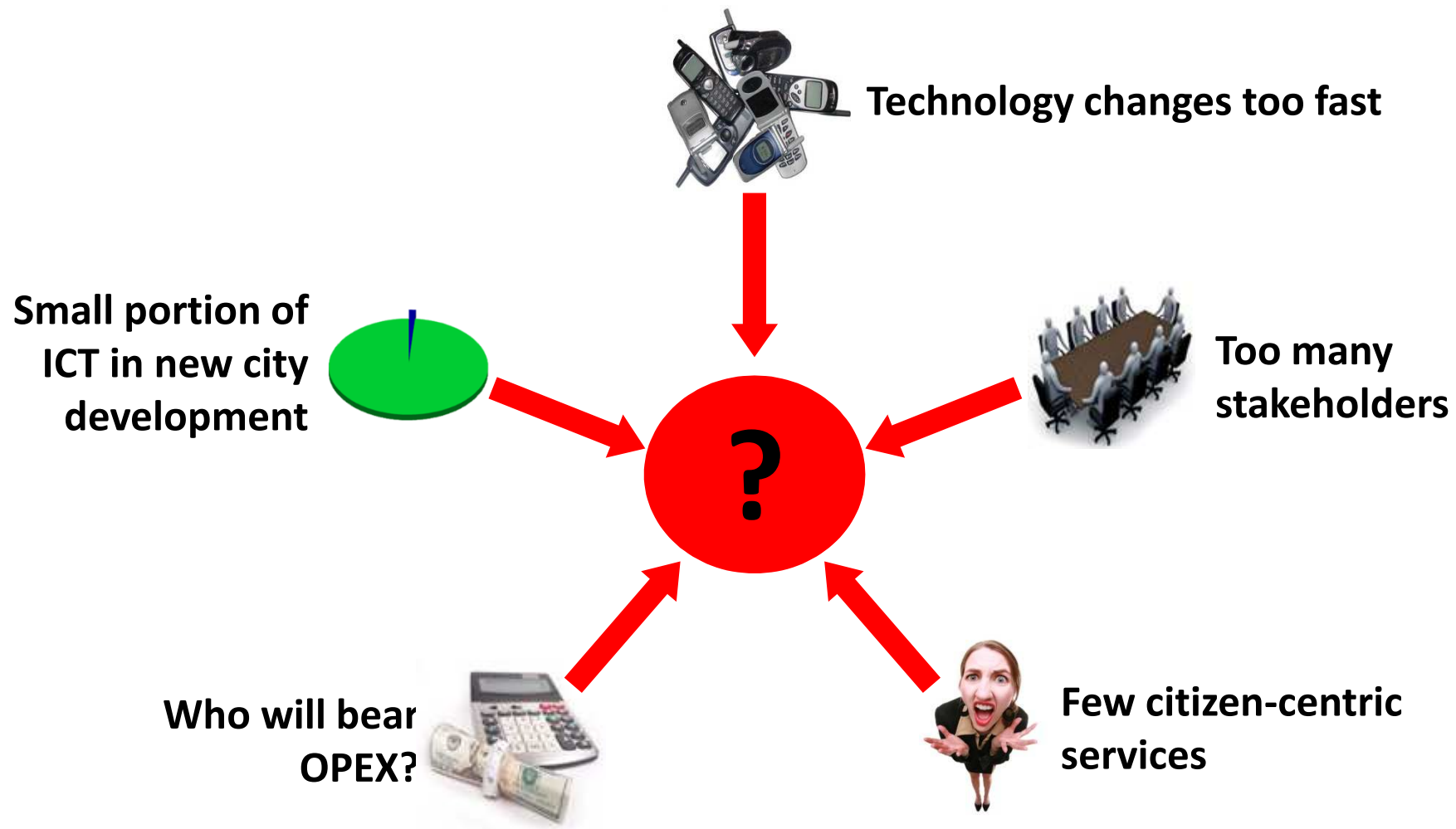


K-Cluster (Korean Cluster) Master plan (Smart City Part) (Sep 2010 ~ Sep 2011)

- Project Owner: Abu Dhabi Future Energy Company
- K-Cluster is designated area within Masdar City for attracting Korean Clean-tech industries

Lessons Learned

Challenges



Smart City Strategy

Partnership Background

“Specialized subsidiary company for Smart space”

KT-Cisco Partnership

**The pioneer of Smart Space business
with latest technologies and innovative services**

**Aims to provide Differentiated & competitive model
to the emerging cities in the world**



**Korea's No.1 Telecommunication
Service Provider**

**Experience and knowhow
in U-City Business**



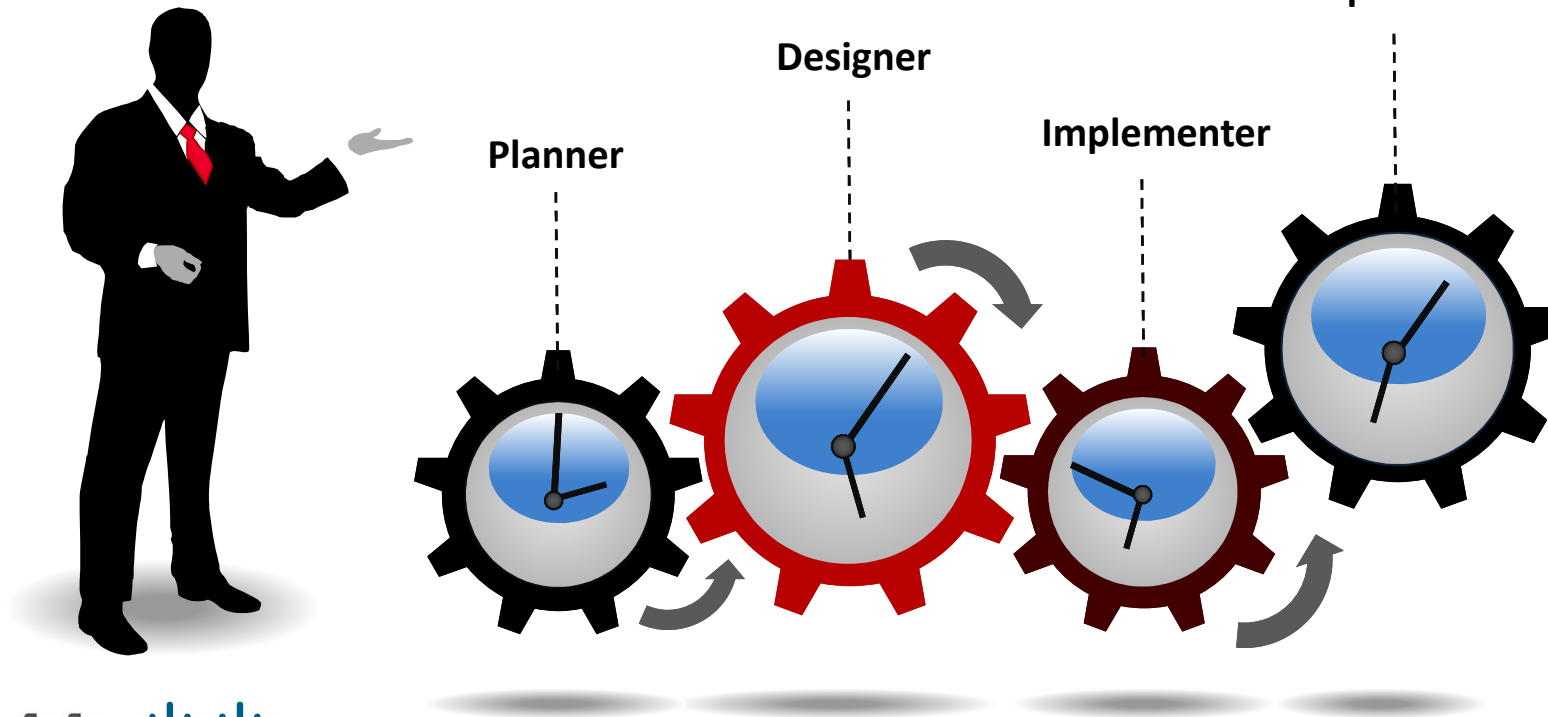
**Global leader in
Network Solution Provider**
**Experience and knowhow
in S+CC Business**

Who is KCSS?

“Total ICT Service provider through full life cycle of space development”

KCSS

Information and Communication Technology



Incheon U-City Company on May 24, 2012



First PPCC for Smart City

Public Biz : Traffic, Security, Emergency Mgmt
Facility Mgmt, Public Info and Notices

Private Biz : Healthcare, Safety, Bldg Mgmt

Export Smart City Knowhow

Vision

Smart Green Life

More Convenient

More Comfort

Healthier

Safer Life



Change the World

Deliver the Value

Q & A



谢谢
Thank You!

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