

A Case Study about IFEZ(Song-do) Smart-City

Ryan LEE

Director, IFEZ City Integrated Operation Center



Career History

Incheon U-City Corporation - Incheon, Korea

- Director, IFEZ Smart-City Integrated Operation Center (Jan 2017~ Present)
- Project Manager, IFEZ Smart-City Infrastructure Construction (Nov 2013 ~ Dec 2016)
- * Managing IFEZ Smart City Integrated Operation Center
- * Designing IFEZ Smart City Infrastructure & Services System
- * Designing / Implementing IFEZ Cloud Datacenter & City Operation Center

Skill & Accomplishment

Smart City Infrastructure & System Architect
SDDC(Software Defined Data Center) Design / Implementation / Operation
Cloud Datacenter Operation & System Consolidation

Education

Graduate School of Logistics, Incheon National UniversitySeptember 2015 ~ August 2017, Master's Degree in Logistics

Inha University - Incheon, Korea

March 1994 ~ February 2002, Bachelor's Degree in Industrial Engineering

"Smart-City" has all important IT words for the future





"Smart City" Definition

Smart-City

A sustainable city that provides a variety of urban services based on urban infrastructure built with fusion of construction, information and communication technologies to improve city competitiveness and quality of life

Smart-City Service

A Smart-City solution to collect information on major functions of the city such as administration, traffic, welfare, environment, and disaster prevention, and to provide the information or the services linked to each other

Smart-City Technology

Construction, information and communication convergence technology for building Smart-City infrastructure and providing Smart-City services

Smart-City Construction Project

A business that installs, maintains or improves Smart-City infrastructure to provide Smart-City Services in accordance with Smart-City plans

Smart-City Industry

An industry that creates economic or social added value

by utilizing Smart-City technology, Smart-City infrastructure, and Smart-City services

* Act on the Promotion of Smart-City and Industry Promotion (2017.03) KOREA





The Act on Ubiquitous Construction, etc., which has been the foundation of domestic U-City business, has been revised.

(Act on the Promotion of Smart-City and Industry Promotion, etc.) (2017.03)

The shift from U-City to Smart-City represents a tremendous change in the direction of service deployment, coverage, and application of background technologies.

As a result, in order to plan and build Smart-City well, it is necessary to make efforts to provide services according to **each city characteristic** <u>from the design stage of Smart-City</u>.

In the Smart-City <u>construction stage</u>, **service configuration items** should be considered with overall consideration.





"Smart-City"

refers to a sustainable city that provides a variety of city services based on urban infrastructure built by combining construction, information and communication technologies

to improve the competitiveness and quality of life of the city.

The current concept of Smart-City construction business is developed, providing a comprehensive urban service **utilizing the latest IT technology**.

It can be understood that this is changing from the construction industry to the IT industry, from the U-City project of Korea's future city concept to the Smart-City project.

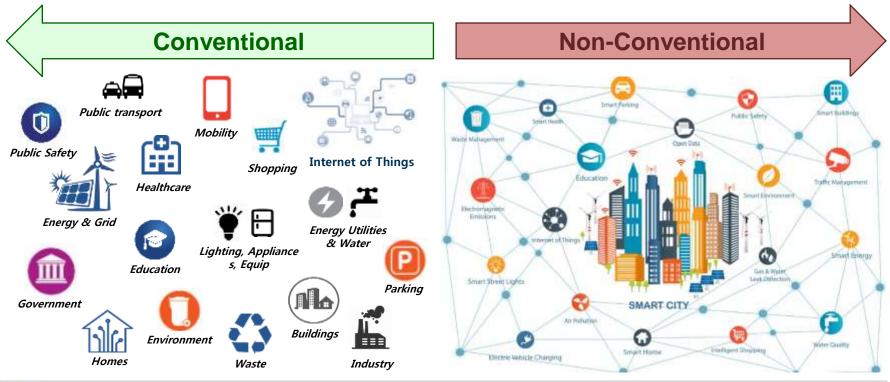


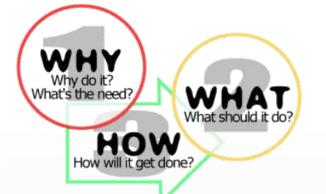




Why "Smart City"?

through "Smart City", services that were previously configured individually are integrated into one



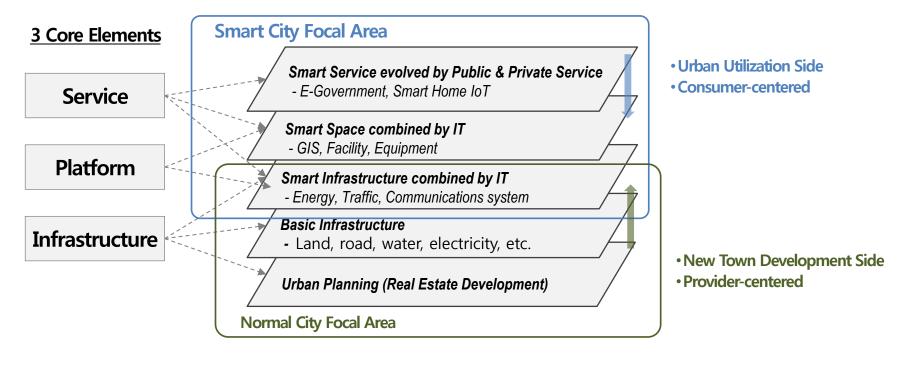


global Leading 5mart V-City 答到

How to build "Smart=City"?

"Smart City" Components

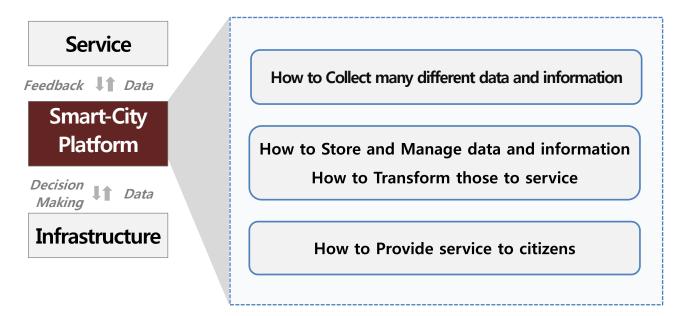
Smart City Approach 5 Layers



The infrastructure and services are linked to each other in the center of the Smart City Platform.

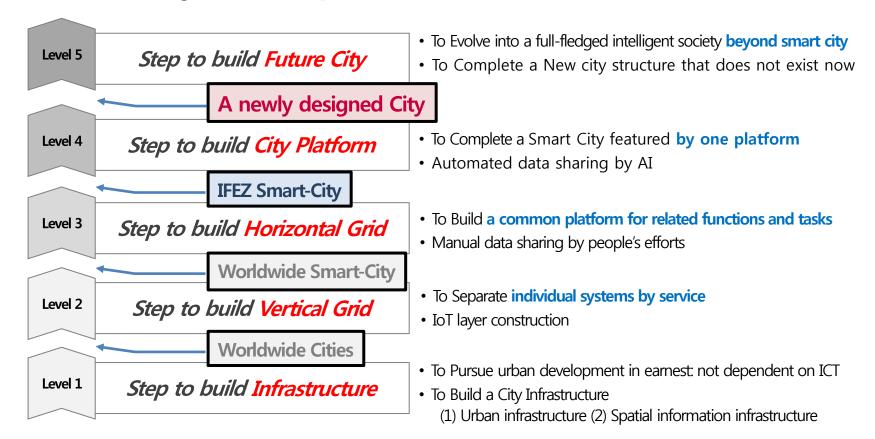
The City Integrated Operation Center is equipped with a technology drive system centered on core technology, a data driven system for integration between areas, and a governance system for continuous implementation

3 Core Elements

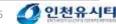




"Smart City" Development Phase









What "IFEZ Smart-City"?

A BUSINESS BASE FOR NORTHEAST ASIA





123.8km²

Period of development

2003 ~ 2022

Estimated population 540,000 people







YEONOGIONATIVE 2003

YCHEONGNADNOW

Vision



Strategy

IFEZ Smart City

One Space



IFEZ Smart City H/W Platform

One System



IFEZ Smart City S/W Platform

Services



IFEZ Smart City

Development Plan



Services



IFEZ Smart City



Public Service U-Traffic U-Crime Prevention U-Facility U-Disaster U-Green U-Traffic Facility



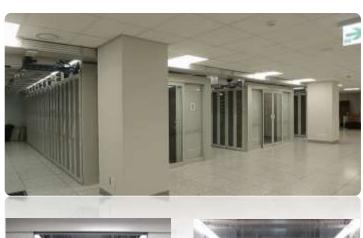
IFEZ SMART CITY (Integrated Operation Center)



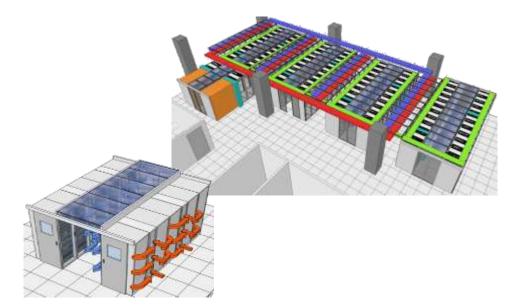


IFEZ SMART CITY (Cloud Data Center)













IFEZ SMART CITY PPP(Public-Private PartnerShip Model) Model





Established
Smart City PPP Company



Public Sector Business

IFEZ Smart City Development Establish Smart City Governance



Public

PPP

Private

Public U-City PPP U-City Private U-City Model Model Model

Global Leading Smart City

Private Sector Business

Smart City & UN Org. IcT Operation
Private Smart City Design
/Build/Operation



Consulting/Design/Build/Operation
Project with Cutting Edge
Smart City

Sustainable Revenue Smart City model

Revenue 20% Refund to Public Sector OPEX

Export Model of IFEZ SMART CITY





To Establish Smart-City Master Plan

Model 2

Smart City Service Design

To Apply Smart-City Solution

Model 3

Smart City Implementation

To Build & Operate Smart-City Solution







Public Sector Business

Private Sector Business