











Building City Innovation Platforms: based on the DAEGU SMART CITY

Hee Dae KIM | Thursday, Oct 28, 2021



Geographic Characteristics of DAEGU

885

Area

247 million

Population

40 minutes from Incheon Intl. Airport

minutes from Seoul with KTX

Accessibility



Industry

- 19% manufacturing, automobile components, textile, IT
- Water, energy, medical, robotics, future automobile as future growth drivers
- Lowest ranking in Korea in terms of GRDP for 20 years

Daegu DNA

- Innovation through convergence : Wonhyo, Il-yeon, Sueun
- Independence and Resistance : National Debt Redemption Movement and 2.28 Democracy Movement
- Experimentation in Ideology: Moscow of Korea
- Leadership in Industrial Innovation: Samsung, Kolon, POSCO

Technological innovation

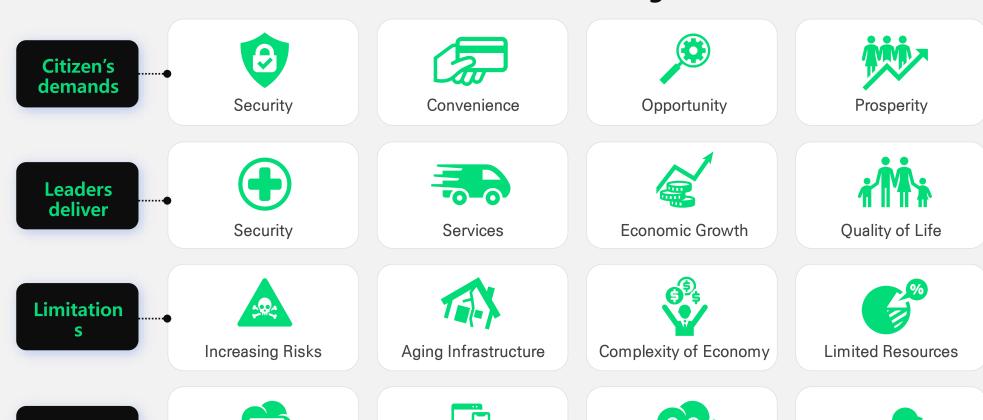


Mobile and Social Media

Demands of Contemporary Cities

Big Data / Al

Cities must satisfy the demands of the citizens using limited resources and budget



IoT

Cloud Computing

HOT SMARTCITY DAEGU

03 **DAEGU Suggests**

4

Smart City

Intelligent high-tech city fostering industry



Living Labs

Citizen happiness through solving urban problems



Traffic (Smart Mobility) Energy (Smart Energy) Safety (Smart Safety) **Life** Smart Living Infrastructure Management (City Management)

 A city with high-tech solutions that solve urban problems and operations

(European Commission, 2012)

 Emergence of cutting-edge technology allows the city's components to become instrumentalized, interconnected, and ultimately intelligent (IBM, 2016)



Data Aggregation

(Social, Uni., Alley, Smart) Living Lab Civic Engagement



City Innovation Platform

Civic Engagement Data

across Daegu as a test bed

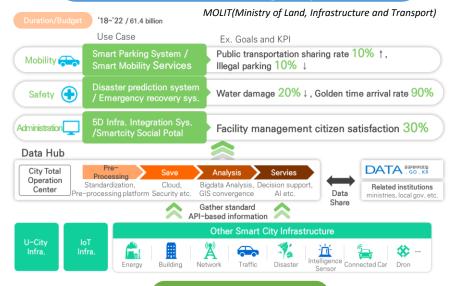
SMARTCITY

Smart city for industrial Growth





National Demonstration City (National Innovation Engine by MOLIT)



Achievements

- Establishment of Daegu Smart City Model: Living Lab & Citizen Participation-Based Urban Problem Solving
 - * Urban problem discovery team and fostering citizen scientists
 - * Spread to other cities with SW-based social-problem solving tools.
- Participation of local companies in R&D Projects (50% †)
- Cross-validation & Exporting products abroad (Amsterdam, etc.)







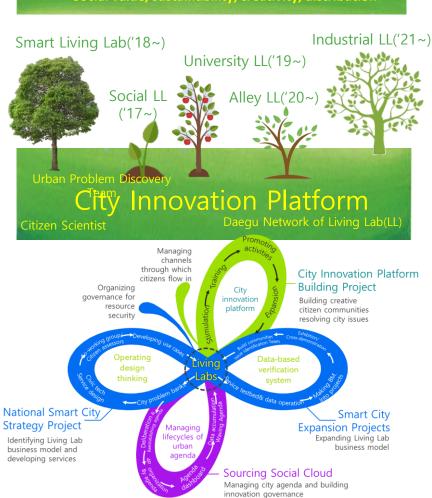
Urban Problem Discovery Team

Smart City Expo (Barcelona)Cross Validation (Amsterdam)

SMARTCITY

05 Smart city for Citizen Happiness

Support for service development with high efficacy Social value, sustainability, creativity, distribution



Living Lab (real-life setting)

 The process of solving various social, economic, and technological problems in cities, and the effectiveness of new products in companies, as if they were experimenting in a laboratory, with various stakeholders in the fields.



Achievements

Corporates: Support developing new products/services (economic value)



Water remote metering System for the elderly living alone



Diabetes treatment (Nullsulin)



Functional pharmaceutical material (Aromate)



Fine dust absorption wall

Cities and Citizens: Civic Participation Solving Urban Problems (Social Value)



Citizen Training & Citizenship **Expansion**



Mass production of technology

Youth Safe Return Service



Prevention of unauthorized waste companies for solving social problems disposal

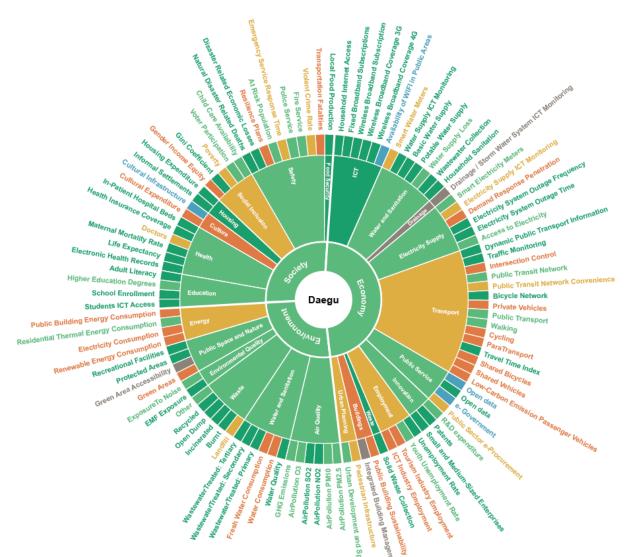


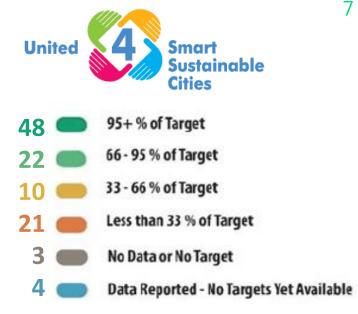
Daegu Network of Living Lab



ENoLL membership acquisition

Snapshot of Daegu Smart City



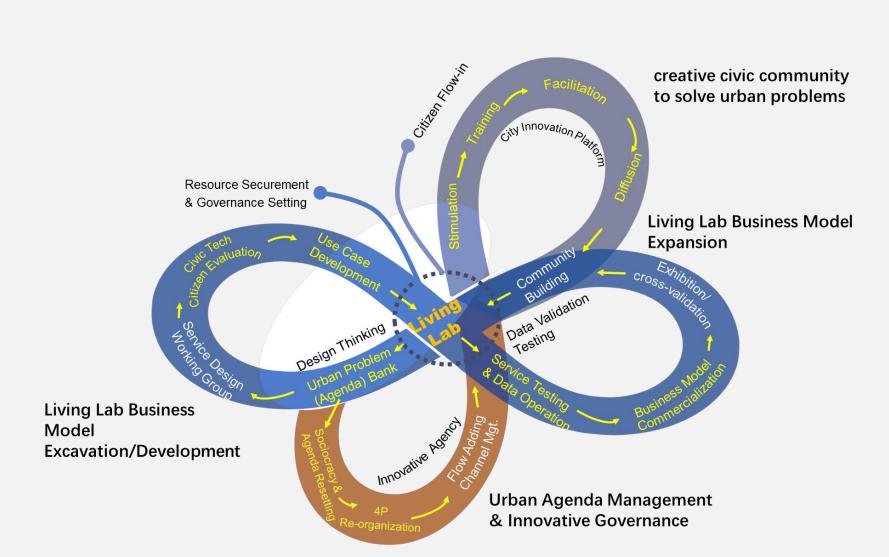


4th CASE STUDY of smart city published by U4SSC

108



Self Organizing System for City Problem Solutions



9