Seoul Smart City Initiatives & Cases

Dr. Jungwoo Lee

Director of Seoul Digital Foundation

About Seoul

No.6

Ranked **6th** in
Global Power City index ('16)
-Institute for Urban Strategies,
The Mori Foundation

90%

More than **90%** of Seoul citizens are
Smart Device Users

Account for **22% of Korean GDP**

GDP 22%

20% of Korean population ('16)

10,236,408

Size of Seoul

605.26㎢
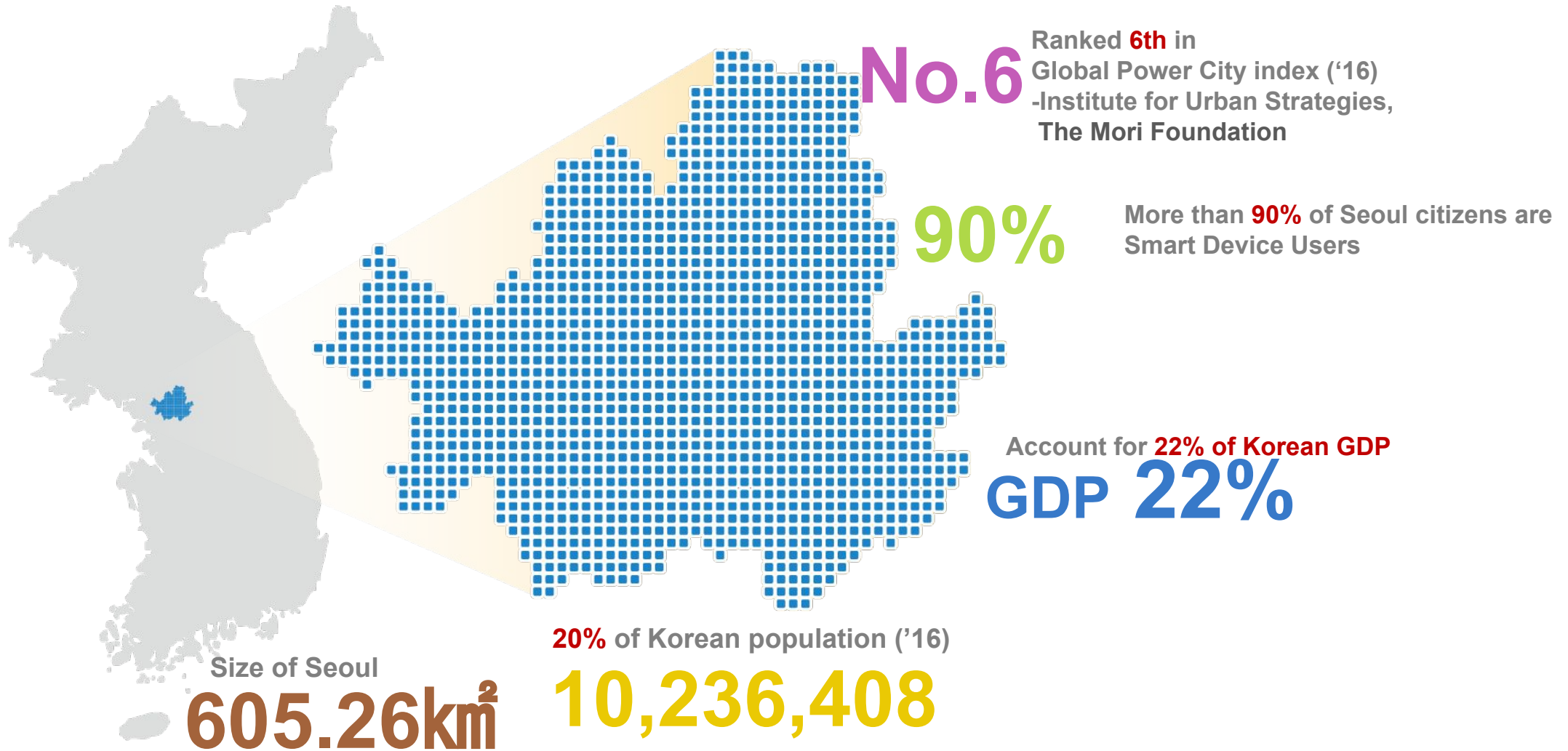
Seoul Digital Plan 2020

Smart City Seoul

New Connectivity, New Experience

Social City

Diginomics

Digital Social Innovation

Global Digital Leadership

Citizen-oriented Digital City	Digital Economy	New Citizen Experience	Global Digital Leading City
Citizen-driven Digital Governance	**Business Incubation**	**Solving Urban Challenges with Digital Tech.**	**Infrastructure**
Participation	Digital Platform		Digital Business Ecosystem
Cooperation	Convergence	Improving Citizen Value	Digital Events

The Strategies of Seoul Smart City
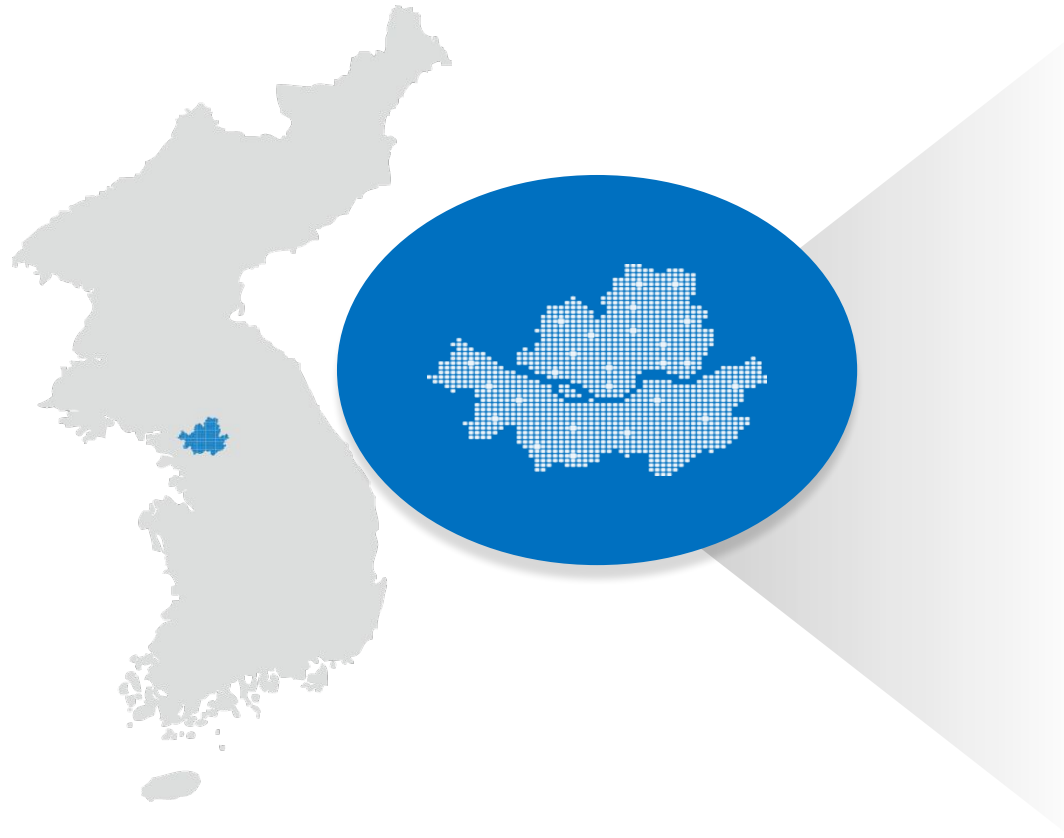
Pillars of Seoul Smart City

1. **The best ICT infrastructure** which connects and empowers citizens

2. **Open Government** focused on communication, participation and sharing

3. **Strong public-private partnership** for sustainable development

4. Adoption of latest technology such as **bigdata, IoT, GIS & Cloud** to solve urban issues

5. **Sharing Seoul's smart solutions** with the world

Open Data Plaza

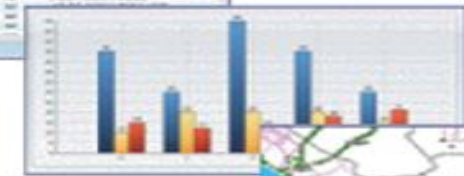## Seoul Open Data PLAZA
(http://data.seoul.go.kr, may, 2017)

Open **4,700 dataset in 10 areas** such as general administration, culture & tourism, public health, and environment

Average 670 thousand use daily

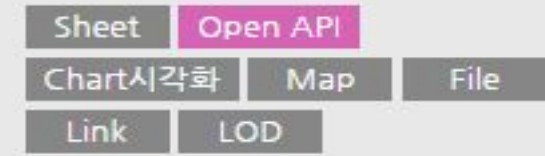Provide data in various forms such as **open API, LOD, chart, map & file**
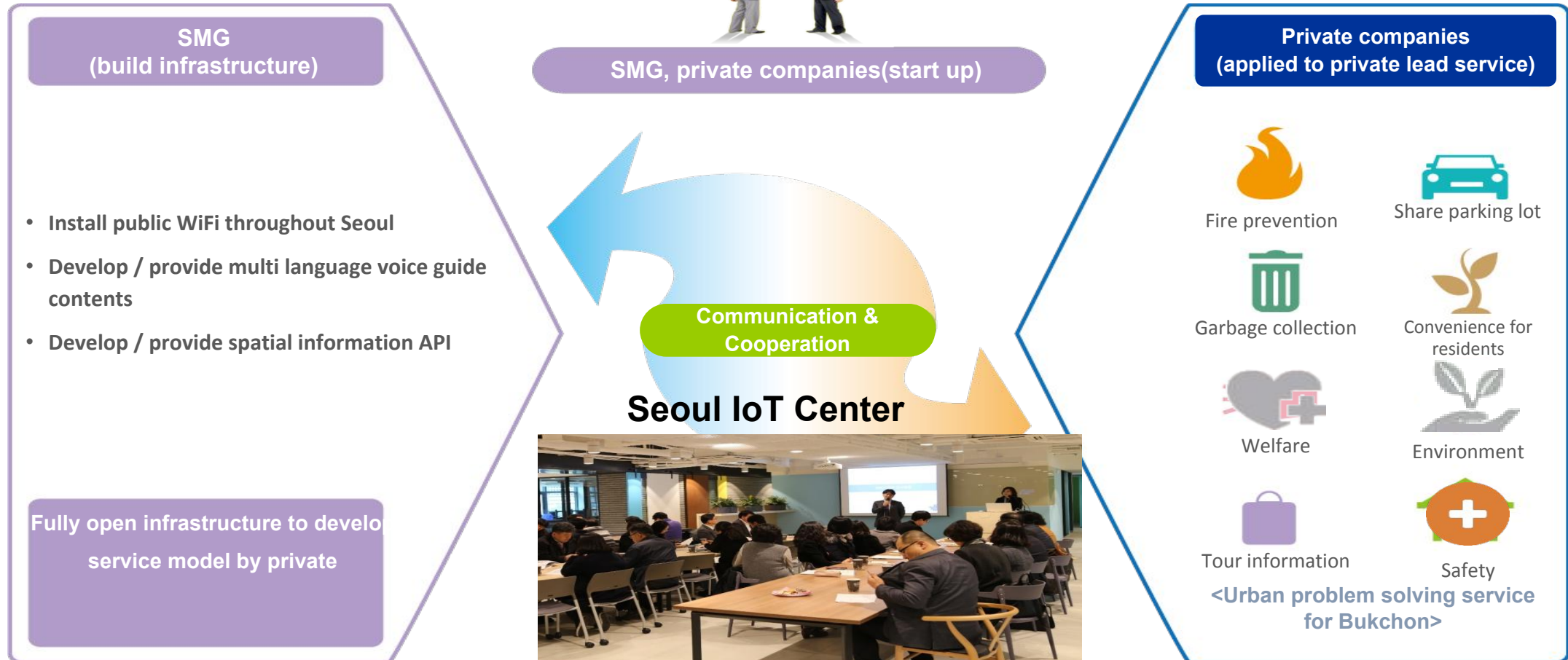

Spreadsheet

Chart

Map

Service forms

Sheet | Open API
Chart시각화 | Map | File
Link | LOD

IoT Pilot Project: leveraging IoT to resolve urban challenges of Seoul through public-private partnership

Implementation strategy

2015: Pilot project in Bukchon area 2016~2017 : 13 area

~2020: Spread to 50 places throughout Seoul

SMG, private companies(start up)

SMG (build infrastructure)

- **Install public WiFi throughout Seoul**

- **Develop / provide multi language voice guide contents**

- **Develop / provide spatial information API**

Fully open infrastructure to develo service model by private

Communication & Cooperation

Seoul IoT Center

Private companies (applied to private lead service)

Fire prevention

Share parking lot

Garbage collection

Convenience for residents

Welfare

Environment

Tour information

Safety

<Urban problem solving service for Bukchon>

The Late-night bus, a data-based governance of Seoul

No public transportation
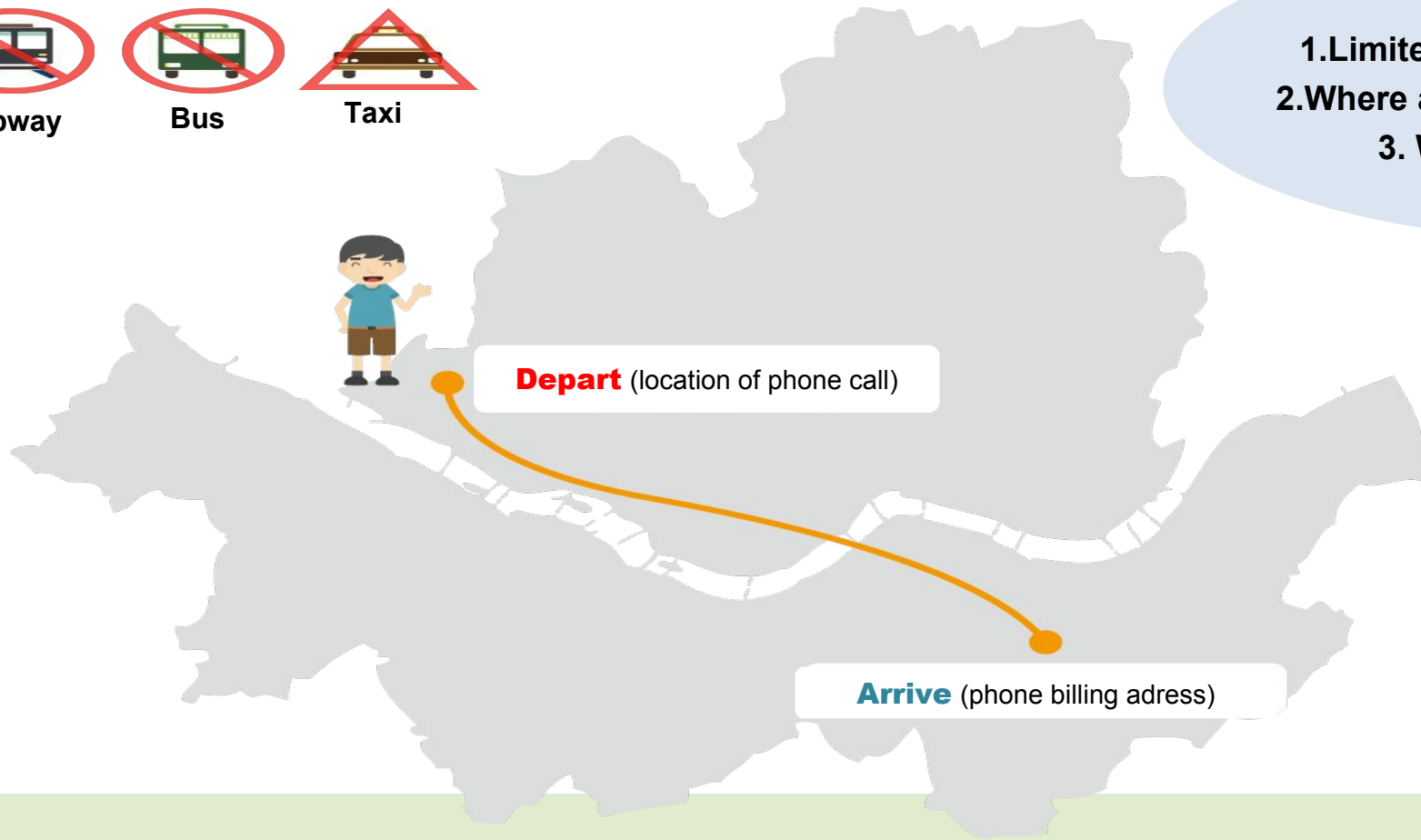between 01:00 AM ~ 05:00 AM

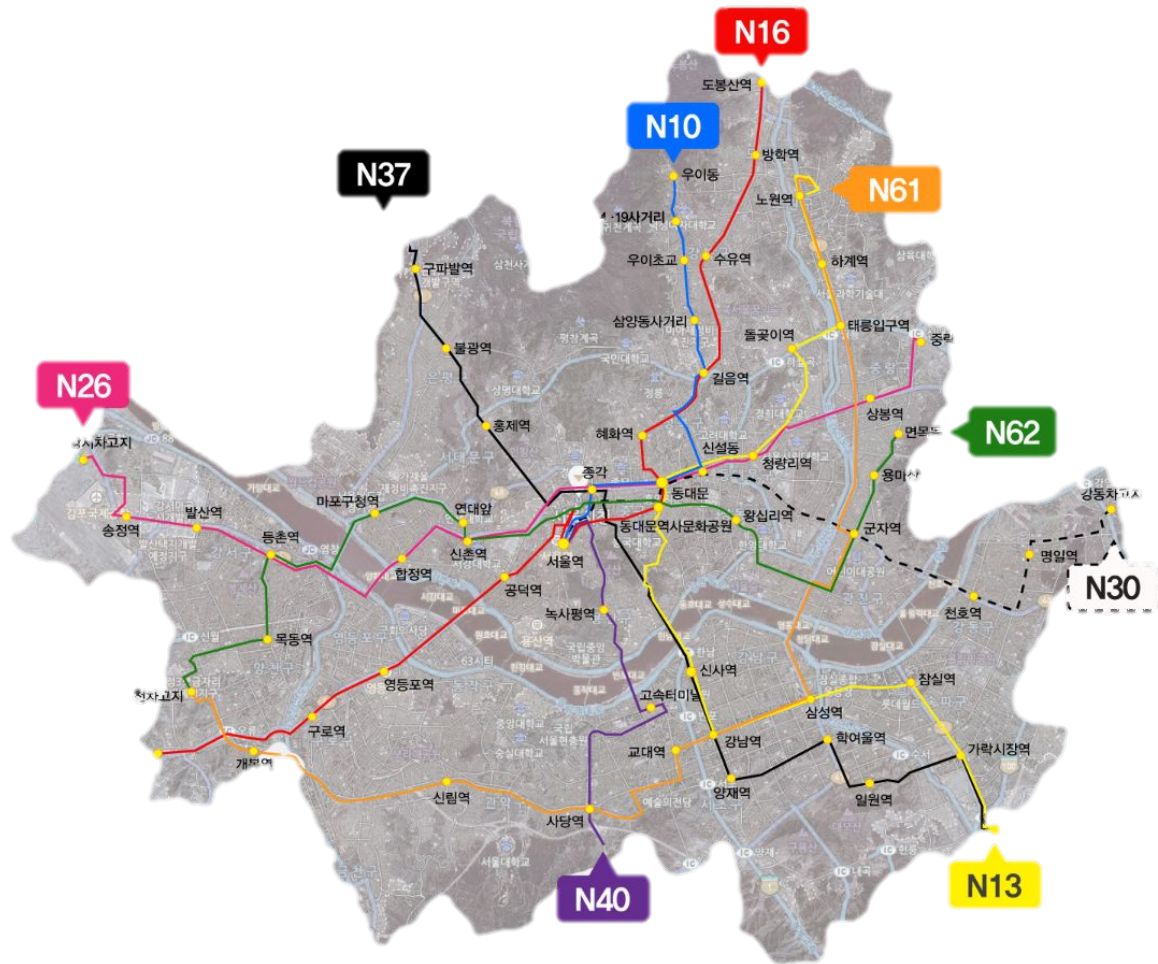**Subway**   **Bus**   **Taxi**

Let's set-up Late night bus routes

Facing Problems

1. Limited resources – drivers & budget
2. Where are the passengers in mid-night?
3. Where do they want to go?

Depart (location of phone call)

Arrive (phone billing adress)

*Analyzing **3**billion taxi-call data*

Design the best 9 bus lines

About Us

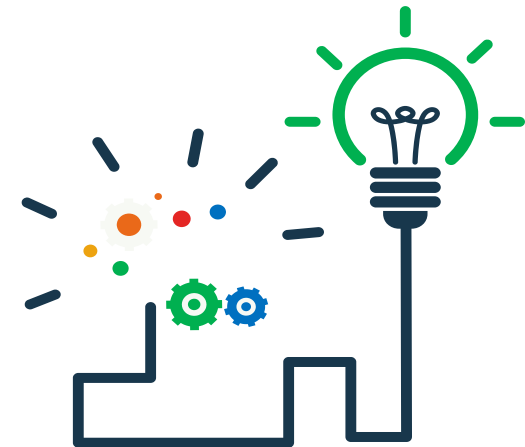**Digital Think Tank/ Innovator of Seoul**
which pursues smart sustainable urban development based on ICT
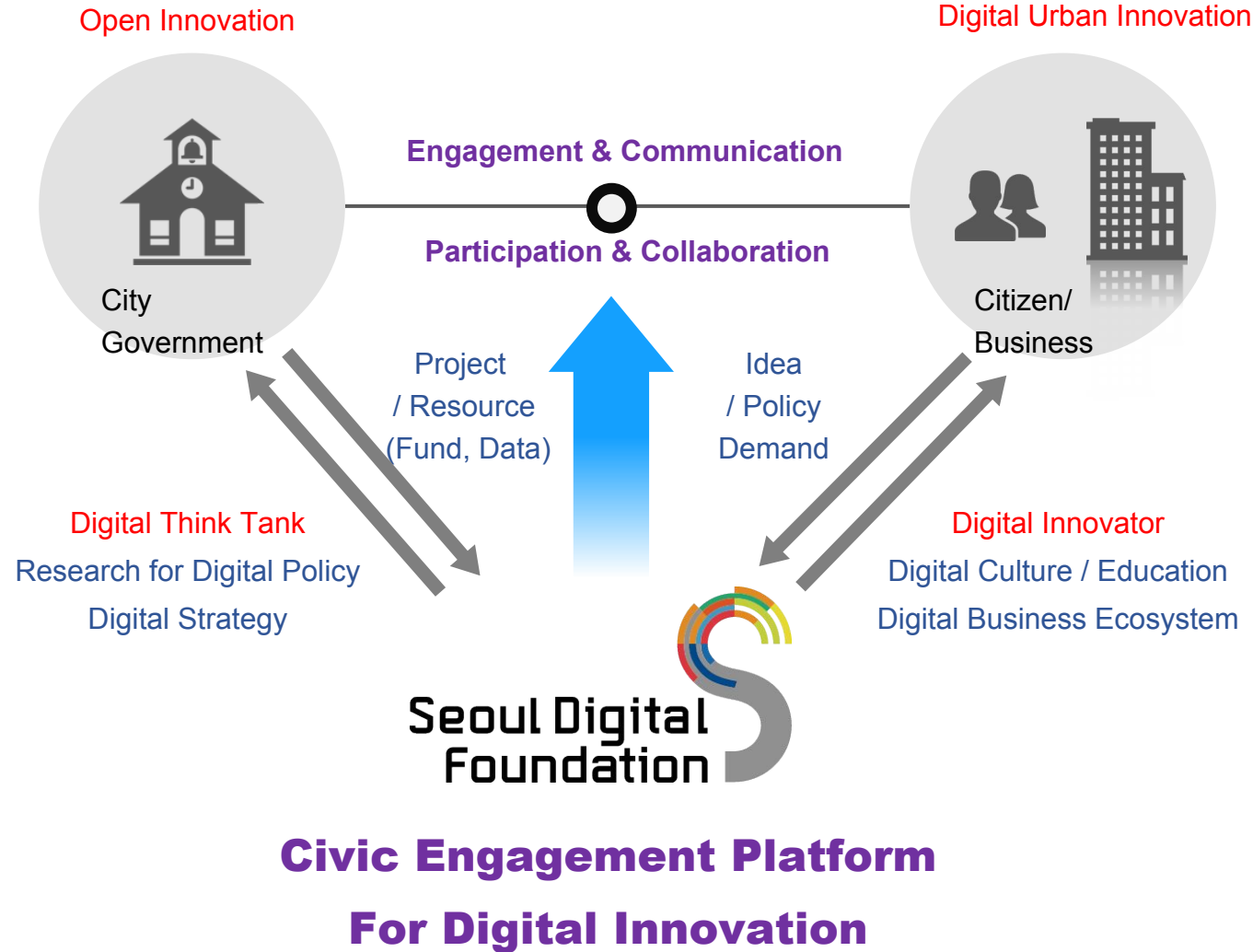
- **Mission and Vision**

  Promotion of smart and sustainable cities for the enhanced well-being of urban citizens

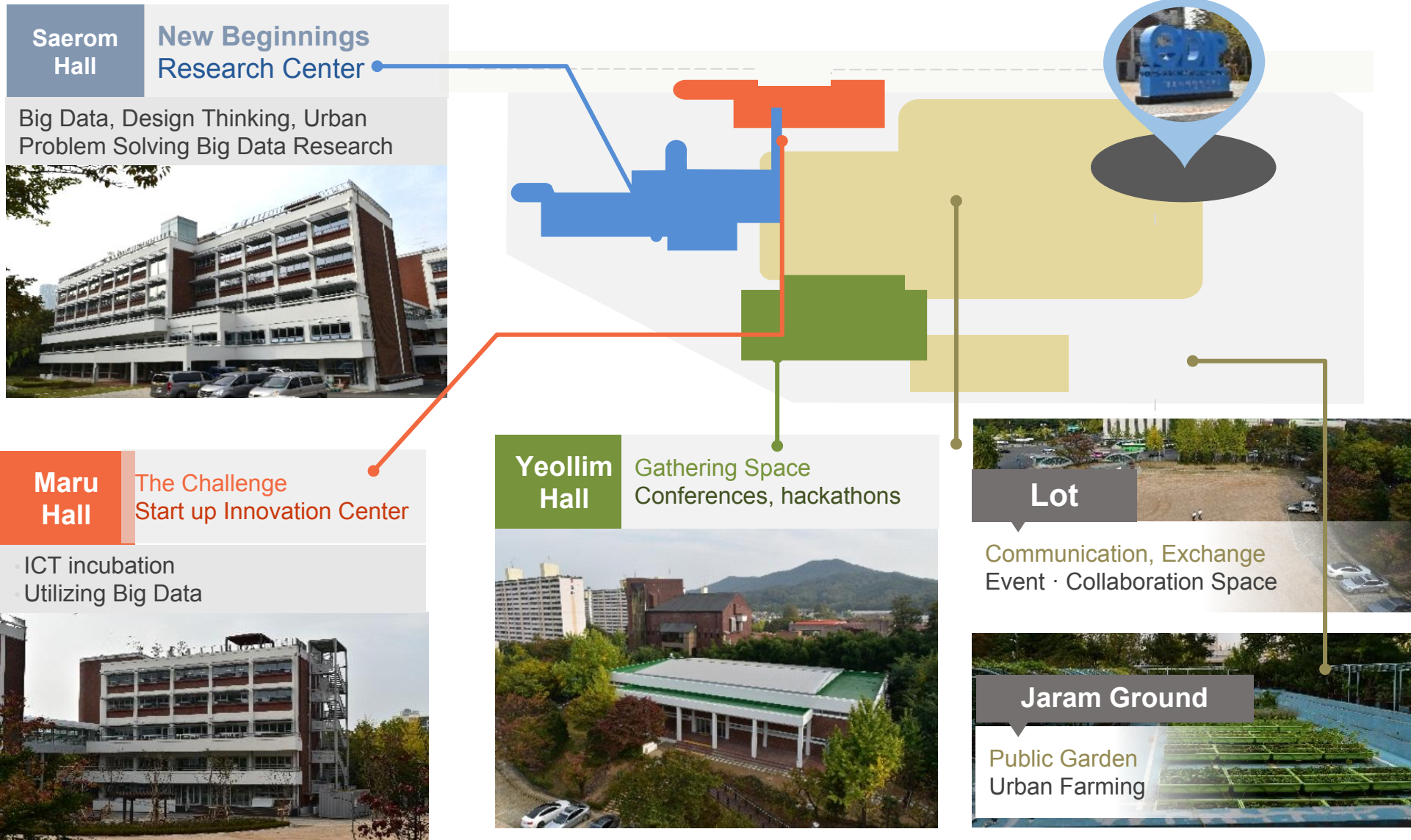 *Provision of solutions for diverse social challenges in Seoul using the power of technologies*

- **Established in June 2016 as a city government-funded agency**

- **Website : http://www.sdf.seoul.kr**

City with Innovation

Open Innovation

Digital Urban Innovation

Engagement & Communication

Participation & Collaboration

City Government

Citizen/ Business

Project / Resource (Fund, Data)

Idea / Policy Demand

Digital Think Tank

Research for Digital Policy

Digital Strategy

Digital Innovator

Digital Culture / Education

Digital Business Ecosystem

Seoul Digital Foundation

Civic Engagement Platform
For Digital Innovation

Gaepo Digital Innovation Park (GDIP)

Saerom Hall | **New Beginnings Research Center**

Big Data, Design Thinking, Urban Problem Solving Big Data Research

Maru Hall | The Challenge Start up Innovation Center

· ICT incubation
· Utilizing Big Data

Yeollim Hall | Gathering Space Conferences, hackathons

Lot

Communication, Exchange
Event · Collaboration Space

Jaram Ground

Public Garden
Urban Farming
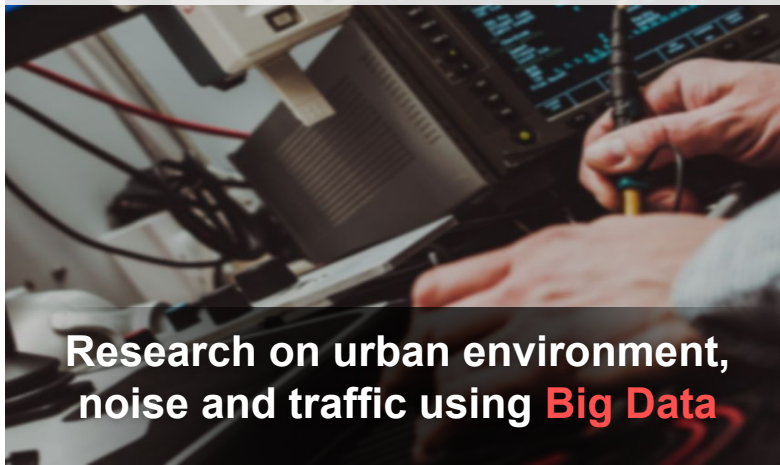
Gaepo Digital Innovation Park (GDIP)

Urban Data Science Lab with SNU

Research on urban environment, noise and traffic using **Big Data**

Design Thinking Center with SAP

Promote **Design Thinking Education** for problem solving
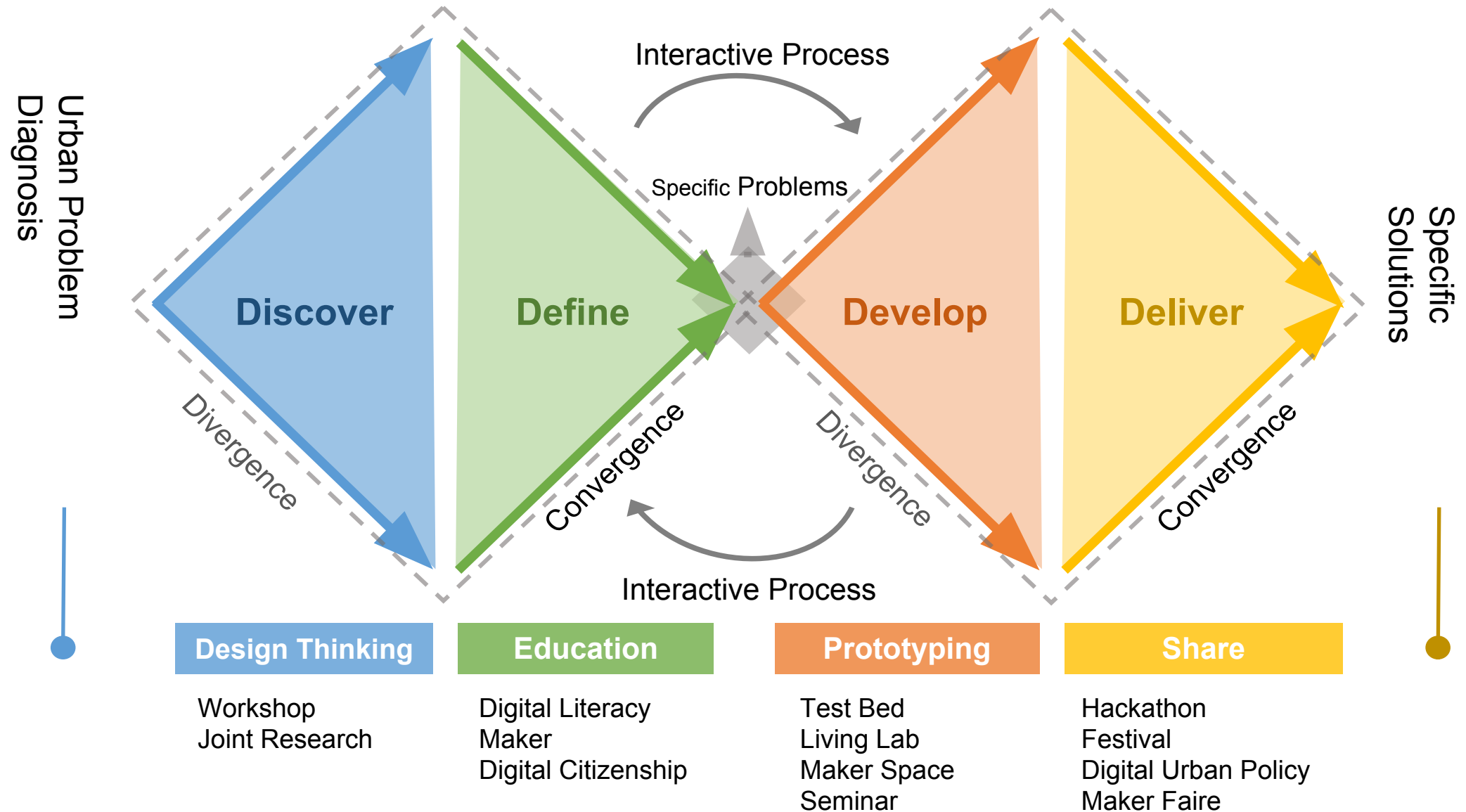
Start-up Incubating with D.CAMP

Youths who dream of IT-related start-ups, **Start-up education and support**

Big Data Campus with SMG

4,500 Big Data Provided to citizens

The Process of Citizen Engagement Programs

The Process of Citizen Engagement Programs

1. Design thinking

2. Education

3. Prototyping

4. Sharing

Citizen engagement project : Urban Fine Dust

Step1. Design Thinking

Step 2. Education

Step 3. Prototyping

Step 4. Sharing

Defining problems
- Lack of fine dust measuring station
- Inaccurate Information etc.

Provide Maker comprehensive education course
- Arduino base, Demonstration test, Project-type curriculum

Global Innovation Park Alliance (tentative)

1. Joint Agenda	Solving Urban Issues	Civic Engagement	Joint Projects

2. Organization	**Executive Office**	**Members**	**Advisory Organization**
	SMG, Seoul Digital Foundation	Amsterdam, HongKong, etc	UN, Nonprofit organizations, etc

3. Main Contents	Sharing Knowledge	Learning social innovation Model	Promoting Joint projects

Thank you

Dr. Jungwoo Lee

leejw@sdf.seoul.kr