I·DIGITAL·U SEOUL

서울특별시 SEOUL METROPOLITAN GOVERNMENT

Dual Approaches to Digital Social Innovation: The way as a Top Down vs. Bottom Up

The Data & Statistics Division
The Seoul Metropolitan Government

Agenda

Seoul's Data based Social Innovation

Top Down Model

Bottom Up Model

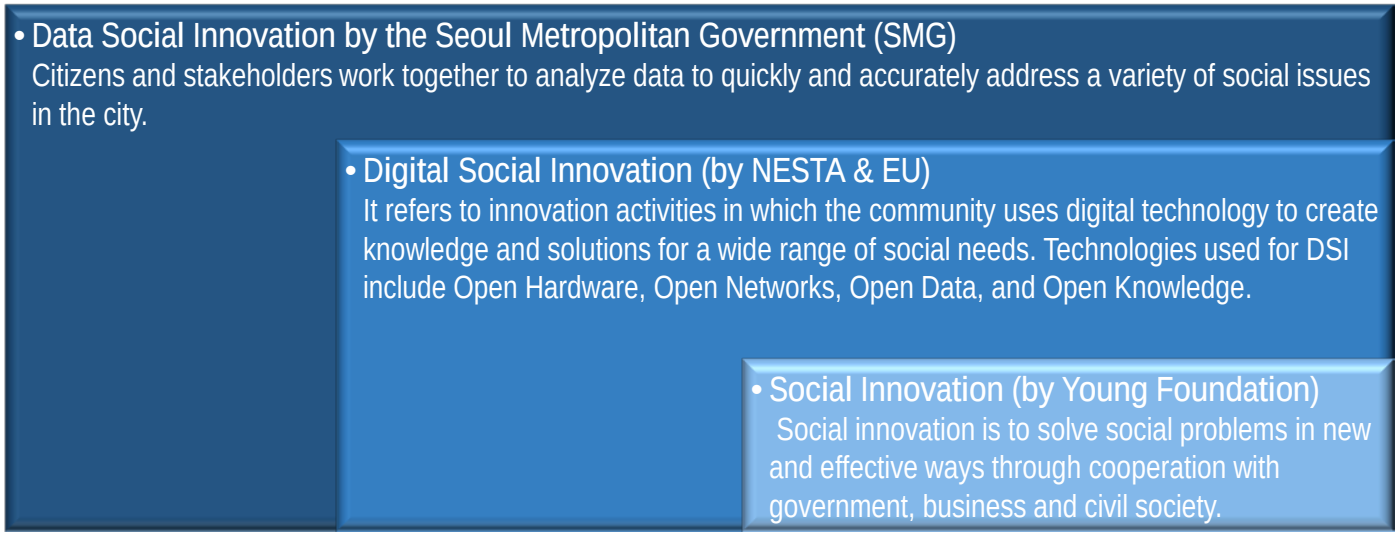
Comparative approaches to the pursuit of innovation

#. Appendix

Seoul's Data based Social Innovation

Definition

Data based social innovation is the activity of citizens and stakeholders to solve social problems through data analysis.



Characteristics of Digital Social Innovation based on the past experiences

I. The Purpose of Innovation
II. The Scope and Speed of Innovation
III. The Scope of Stakeholders
IV. The Method of Data Usage
V. Distribution and Availability of Data
VI. Performance Measurement of Innovation Activity and Achievement of Performance Goal

Top Down Model – The Digital Office for Citizens and Mayor

What is the Digital Office for Citizens and Mayor?

This interactive dashboard structuralizes and visualizes various types of data which is fragmentarily scattered across departments. It supports the data-based decision making and sharing public information with citizens in a timely and swift manner, thus contributing to making a safer and happier city.

<Direction>

To support the swift decision-making based on data integration and visualization

- Collection of real-time data for city management
- Establishment of integrated video monitoring system for city safety management
- Indicator selection to evaluate the performance of the main city projects and integrating data
- Data Visualization for Intuitive Objectivity
- Establishment of data-based communication and collaboration system

<Major Role>

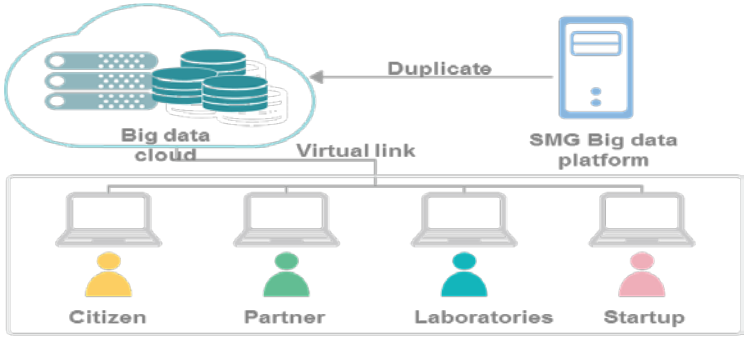
To show the work of the city closely related to the quality of citizen's life with visualized data

- Intuitive information about Seoul using real-time information and simplified maps
- Real-time information on disaster safety, traffic conditions and air quality
- City homepages & social media information
- Information on major city projects
- Provide information on implementation of the city master plan based on 32 indicators
- Interactive features such as voice & motion recognition and video call

Bottom Up Model – Big Data Campus

Big Data Campus is,

A physical space where various members of the society analyze real-life related data to resolves various urban problems, thus achieving the creation of the data-based social innovation.



<Direction>

To resolving urban issues with citizens by using data

- The SMG, citizens, and civil society work together to solve social problems
- Public private buildings in the center of Seoul
- Integration and utilization of data collected from public and private sector
- Expand the scope and target of social innovation through online

<Major role>

To support citizens to easily access and analyze data, thus driving social innovation

- Realize open source-based public services
- Provide a space for citizens to access and analyze data
- Cooperation through data (providing economically and socially valuable data collected from private sector)
- Data analysis support such as data analysis staff, infrastructure, tools, etc

Comparative approaches to the pursuit of innovation

Digital Office for Citizens and Mayor		Big Data Campus
• Support for quick and accurate decision-making • Enable data governance	Purpose of Innovation	• Build data-driven innovation ecosystem (long-term) • Solve urban problems (Mid-term)
• Internal data (continuously expanding) • Mainly real-time information	The scope and focus of information	• Public and private(corporate + personal) data • Information related with social issues
• Expand the opening of the data to citizens (2nd) • Internal decision makers (1st)	Scope of stakeholders	• Citizens as data-based social innovators(Mid-long term) • Citizens who have data and analytical capability (short-term)
• Secure and combine the distributed data • Display the secured data	How to use data	• Converge internal data with external data and analyze them (mid / long-term) • Analyze data related with current issues
• Mgt. & Dist'n of data by each responsible division • Obtain data through internal consultation	Data distribution & ease of data acquisition	• Secure private data in finance, teleco, .etc • Difficult to secure data due to legal issues
• Target: for measurement : # of secured, integrated & analyzed data • Performance measurement: # of information provided and reliable services	Performance Measurement	• Target for measurement: Activation of the data analysis • Performance measurement : # of analysis tasks

Appendix – Analytic Items

Data Analysis Cases by the SMG since 2013

1. Analysis for establishing the night bus routes
2. Location analysis of leisure facilities for the seniors
3. Location analysis of life double cropping centers
4. Analysis of the location of the city's PR material
5. Traffic accident analysis for the transportation vulnerable
6. Taxi service data analysis
7. Analysis of taxi services for disabled people
8. Big Data analysis for an efficient call taxi service for the visually impaired
9. Big Data analysis for the location selection of tactile paving
10. Efficiency analysis of the expansion of traffic safety signs installation
11. Free shuttle bus route analysis for the transportation vulnerable
12. Characteristic factors analysis according to the classification of TP patient types
13. Businesses' performance analysis during culture and tourism festivals in Seoul
14. Data analysis for the expansion of nighttime service of village buses
15. Provision of preventive policies through the analysis of places with frequent traffic accident occurrence
16. Looking for a solution plan for parking issues using Big Data
17. County’s Christmas Festival effectiveness analysis
18. Data analysis for reassigning taxi ranks