Digital Government

Asian perspective

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➢ **Ex-Special Envoy of ITU Secretary** **Academia**
➢ **Chair, National e-Government Promotion Council of**
➢ **Member, MIC Minister's ICT Growth Strategy Council**
   Chair,APEC on E-Ageing project
Honorary President, International Academy of CIO
Awards: Minister's Distinguished Award in 2013 /15(twice),ICT Leadership by IAC (2012),Emperor'sMedalwith Dark-Blue Ribbon M(2013) ;Recognition on World most Influential 100 people on Digital Government(2018)
Books :31 books such as [Ageing and ICT][Digital government][e-Government rankings]

Highlights and Trends of Digital Government

- @ Cloud computing
- @Internet of Things
- @One Stop Services
- @Open Data
- @AI
- @Blockchain
- @Cyber Security
- @Citizen Centric
- @   Smart City

World d-Government Ranking 2018 by Waseda

| No	Total Rankings	Score	No	Total Rankings	Score
1	Denmark	94.816	23	Belgium	64.776
2	Singapore	93.843	24	Ireland	64.528
3	UK	91.921	25	Malaysia	63.965
4	Estonia	91.125	26	Portugal	63.567
5	USA	90.340	27	Italy	63.490
6	South Korea	85.500	28	Spain	63.341
7	Japan	84.493	29	Macau	63.092
8	Sweden	81.700	30	Russia	62.580
9	Taiwan	80.383	31	UAE	62.564
10	Australia	80.248	32	China	62.079
11	Norway	79.760	33	Indonesia	61.486
12	Switzerland	79.030	34	Kazakhstan	61.285
13	Finland	78.982	35	Philippines	61.281
14	New Zealand	74.694	36	India	61.009
15	Iceland	73.942	37	Poland	60.846
16	Canada	72.459	38	Romania	60.757
17	Netherland	70.259	39	Czech Republic	60.169
18	Hong Kong	70.236	40	Georgia	59.840
19	France	69.761	41	Turkey	59.481
20	Germany	68.176	42	Israel	59.111
21	Thailand	68.131	43	Oman	58.071
22	Austria	65.412	44	Mexico	57.768

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10 Indicators(35sub)

| Indicators |
|---|
| 1. Network Preparedness/Infrastructure |
| 2. Management Optimization/ Efficiency |
| 3. Online Services / Functioning Applications |
| 4. National Portal/Homepage |
| 5. Government CIO |
| 6. D-Government Promotion |
| 7. E-Participation/Digital Inclusion |
| 8. Open Government (Open data) |
| 9. Cyber Security |
| 10. The use of Emerging ICT (Cloud,IOT,AI etc) |

Top 10 countries of 3 Indicators

National Portal			Government CIO			D-Government Promotion		
No	Country	Score	No	Country	Score	No	Country	Score
1	Denmark	8.000	1	Denmark	9.545	1	Denmark	9.677
1	UK	8.000	1	Singapore	9.545	1	Singapore	9.677
1	Estonia	8.000	1	Japan	9.545	1	Taiwan	9.677
4	USA	7.900	4	Taiwan	9.318	4	Japan	9.354
5	Australia	7.703	4	UK	9.318	5	UK	8.709
5	Switzerland	7.703	4	Estonia	9.318	5	Estonia	8.709
5	New Zealand	7.703	7	S.Korea	9.200	7	USA	8.387
8	Iceland	7.500	8	USA	8.000	7	S.Korea	8.387
9	S. Korea	7.450	9	Australia	7.272	9	Sweden	8.064
10	Japan	7.300	9	Iceland	7.272	9	Australia	8.064

Society 5.0 – a Next-Generation Socioeconomic Model by Japan
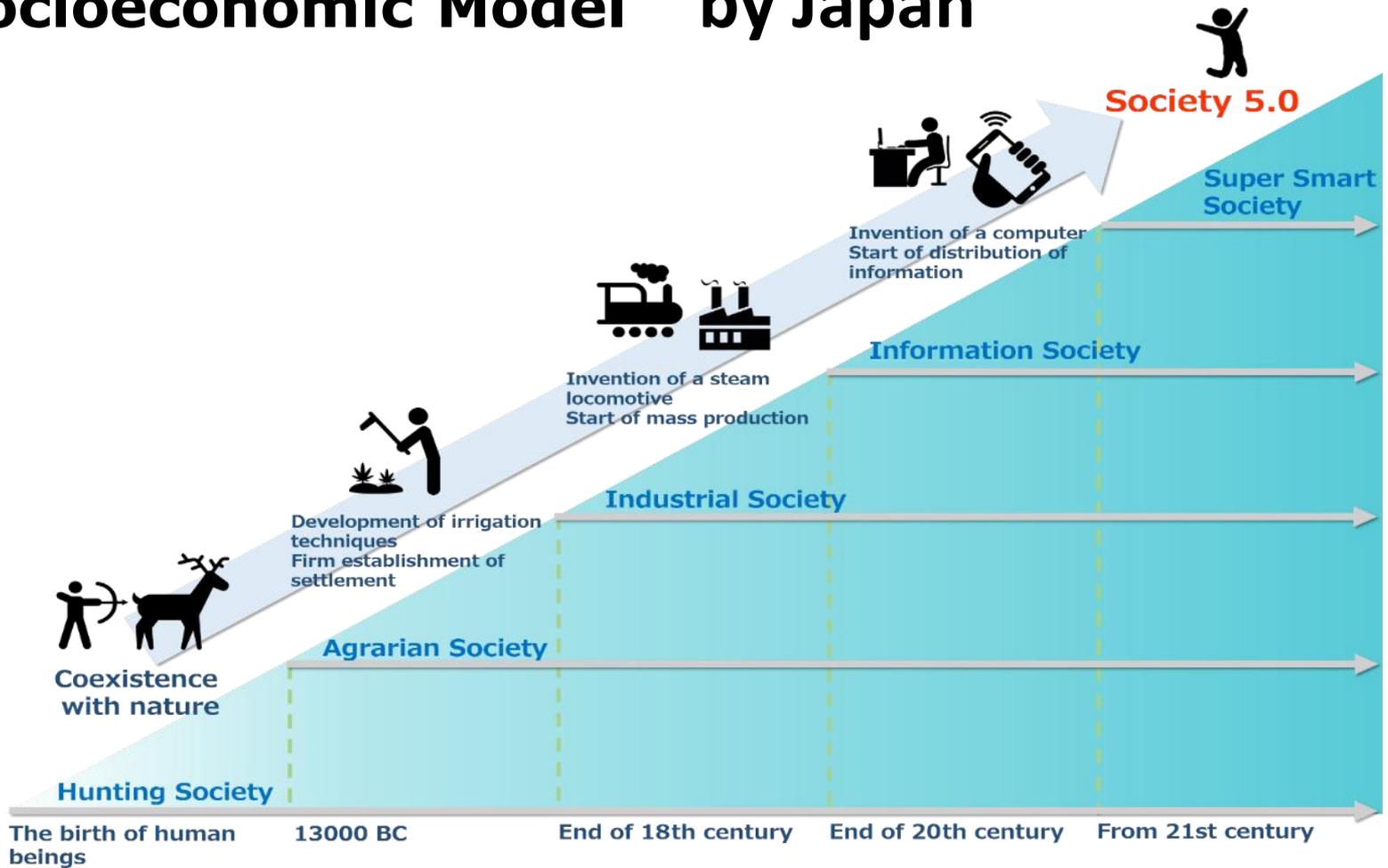
Society 5.0 Platform
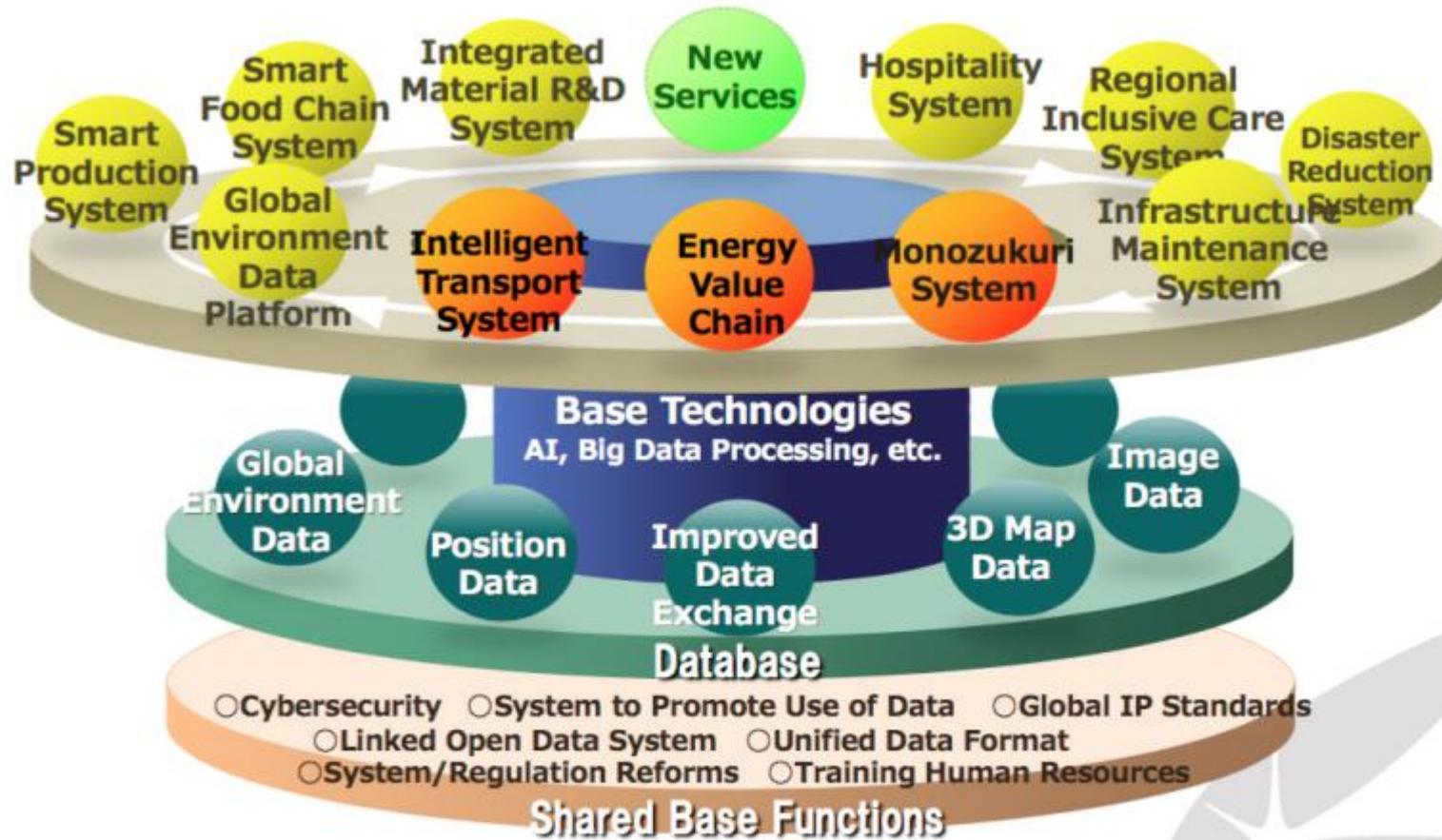
Smart Sustainable Digital Society

Smart Home-Smart Town―Smart City-Smart Region-Smart Nation-Smart ASEAN

Transformation of Digital Economy by Smart Silver Community The first in history for convergence of Ageing and ICT Societies

United Nations Conferences on Ageing Society 3 Speeches by Prof.Obi Japan [Creating Smart Silver Innovation]

Definition of Smart City

Digital Transformation of the Society

Smart is Autonomous
Smart is Decentralized
Smart is Sharable
Smart is On-Demand
Smart is Self Regulated
Smart is Ecosystem
Smart is Diverse
Smart is Resilient
Smart is Trustable

Image Source =
"https://commons.wikimedia.org/wiki/File:
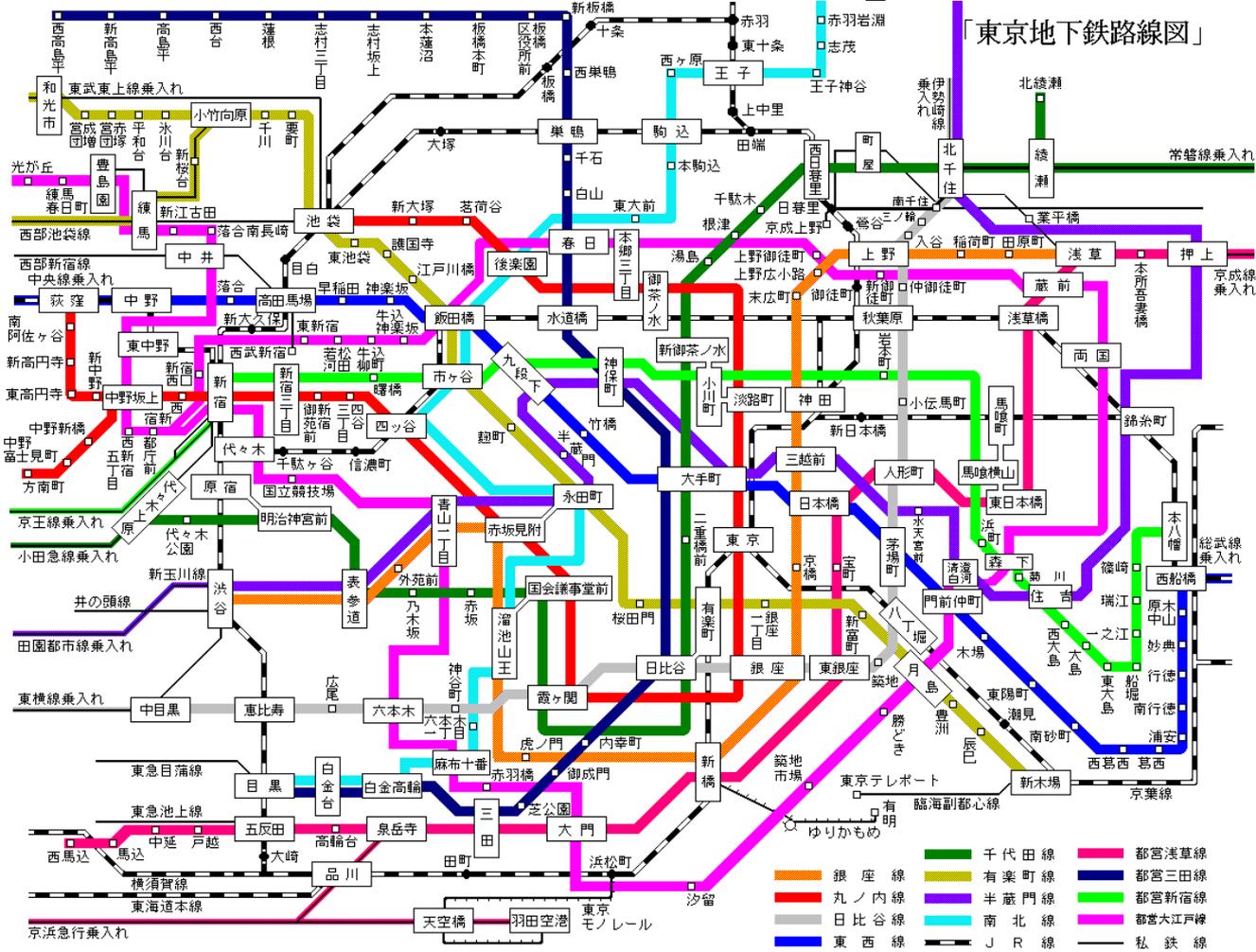Smart_City_2.jpg"

Urban Issues for Smart City

- Urban Poor ← high cost of living

- Increase Wider income and digital gaps

- Lack of communication among community

- Inconvenient infrastructure―old and risky heavy traffic road /building/railway-need Resilient and Sustainable community

- Unemployed (mismatched)people/Crime

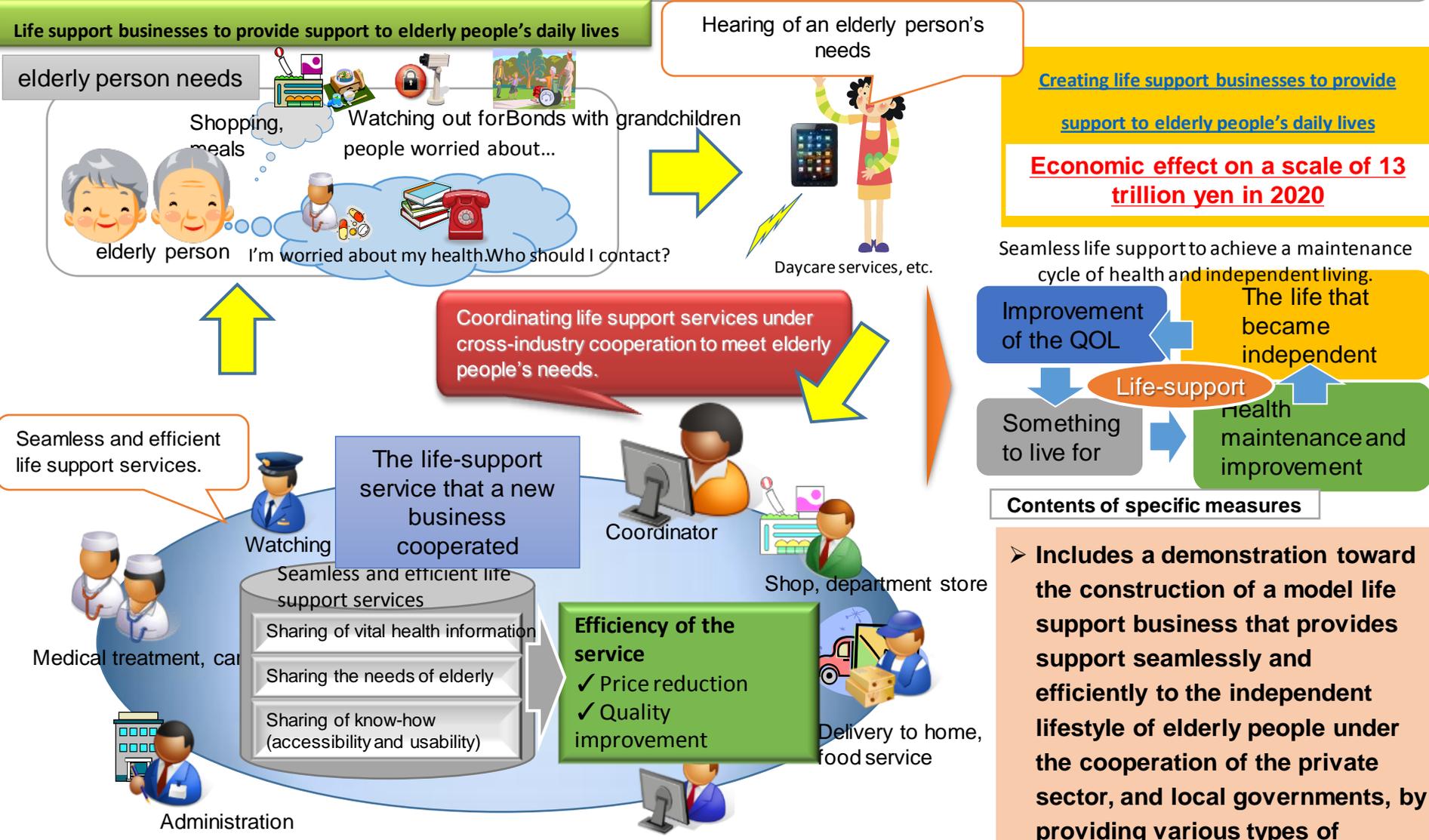# TOKYO –World biggest metropolitan with
Little pollution,Crime Traffic

Tokyo MRT=Subway system
Convenient e-Mobility

「東京地下鉄路線図」

Big data Creation of Life Support Businesses for Smart City

■ Constructing sustainable models based on the requirements of users, such as elderly people, to provide circulation in local economies to help resolve problems in each super-aged society. Such models will include a life support business, which will organically link the government, enterprises, local residents, and other participants, to daily life services (e.g., shopping assistance, meal delivery, care watch, and on-demand transportation services) and community-related businesses.

Life support businesses to provide support to elderly people's daily lives

elderly person needs

Shopping, meals

Watching out for people worried about...

Bonds with grandchildren

elderly person

I'm worried about my health. Who should I contact?

Hearing of an elderly person's needs

Daycare services, etc.

Creating life support businesses to provide support to elderly people's daily lives

Economic effect on a scale of 13 trillion yen in 2020

Seamless life support to achieve a maintenance cycle of health and independent living.

Improvement of the QOL

Life-support

Something to live for

The life that became independent

Health maintenance and improvement

Coordinating life support services under cross-industry cooperation to meet elderly people's needs.

Seamless and efficient life support services.

The life-support service that a new business cooperated

Coordinator

Watching

Seamless and efficient life support services

Sharing of vital health information

Sharing the needs of elderly

Sharing of know-how (accessibility and usability)

Medical treatment, ca...

Efficiency of the service
✓ Price reduction
✓ Quality improvement

Shop, department store

Delivery to home, food service

Administration

Contents of specific measures

➤ **Includes a demonstration toward the construction of a model life support business that provides support seamlessly and efficiently to the independent lifestyle of elderly people under the cooperation of the private sector, and local governments, by providing various types of**

Future Challenges for Megacities

1. alone & living longer people   as social Inclusion
2. Decreasing new Digital divide
3. Accepting nursing at home and national health Plan
4. Trends of enlarged usage with desructive innovation
5. Popular applications for Open Innovation
6. Solution for the critical issues
(1) BCP for disaster reduction by IoT
(2) Cyber security on digital economy
(3) Smart mobility (auto driving ,etc)
(4) Urban social infrastructures

Year 2030 "Digital Urban Society"

- **New Mega cities- Rapid Urbanization - 80% of Population in Japan will live in urban areas-Need of new Infrastructure**

@ Ageing Society

   - smart healthcare, senior employment

@ Digital Society

- **Auto driving /Smart home / Mobile 5G/TV 8K /IOT/RobotAI**

@ Globalization – cross-country economy

@ Convergence of 3 societies - ageing,IOT/AI and globalization

@ Digital goverenment for e-Ageing

* Innovation - Need of Capacity building in ICT on CIO, Cyber security, Big Data and AI

New issues- [Mega cities] Jobs & Income

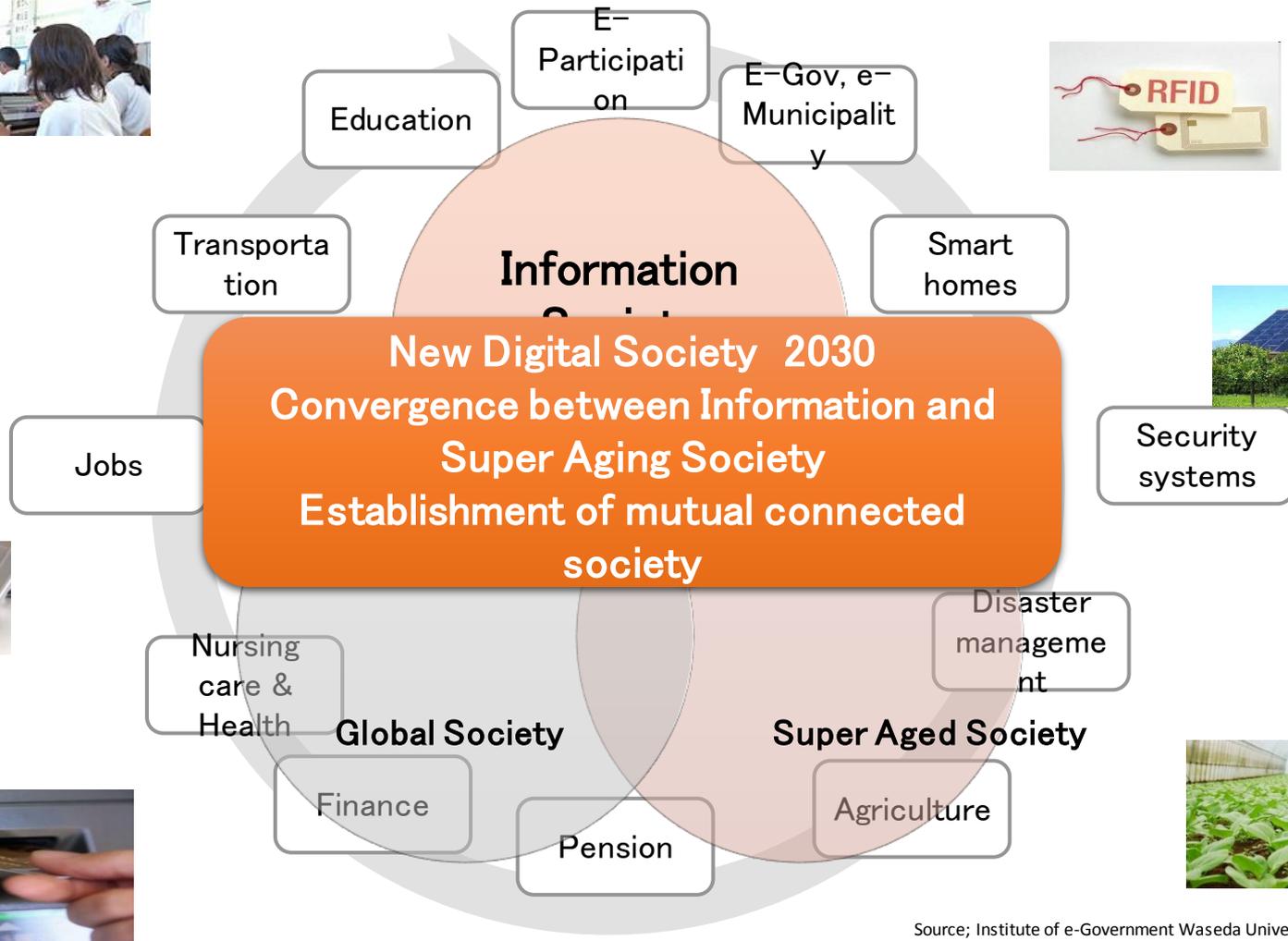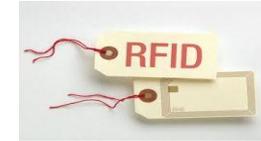- People tends to live in Urban Area　—　Japan case 80%
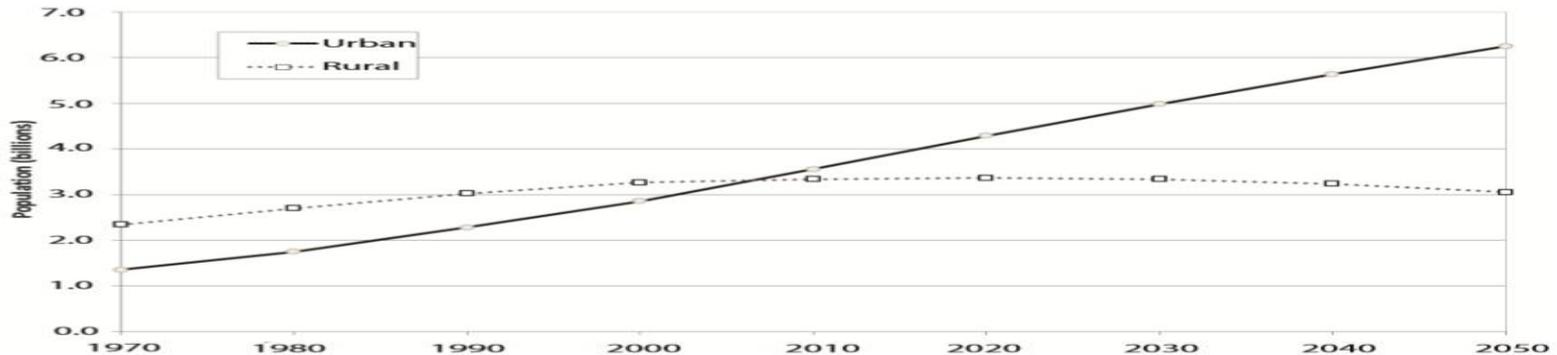
Source: United Nation Concise Report 2014 on World Population

■ Increase in Energy/Food/Water Consumption by Middle Class
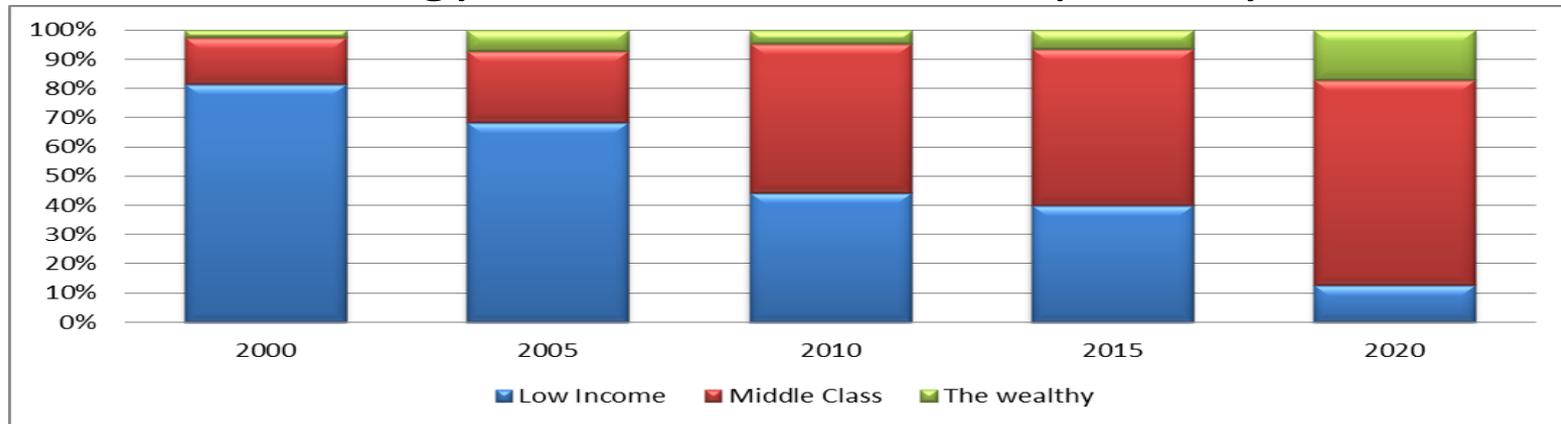
Source: Ministry of Economy, Trade, and Industry, 2011

Source; Institute of e-Government Waseda University

ASEAN Smart City Network 26 cities

ASEAN Smart City Network 26 cities

- **Brunei**- **Bandar Seri Begawan**
- **Cambodia**- **Battambang** **Phnompenh** -**Siem Reap**
- **Indonesia**- **Makassar** **Banyuwangi** **DKI Jakarta**
- **Laos**- **Luang Prabang** **Vientiane**
- **Malaysia**- **Johor Bahru** **Kuala Lumpur** **Kota Kinabalu** - **Kuching**
- **Myanmar**- **Nay Pyi Taw** **Mandalay**
- **Myanmar**- **Yangon**
- **Philippines**- **Cebu City** **Davao City** **Manila**
- **Singapore**- **Singapore**
- **Thailand**- **Bangkok** **Chonburi** **Phuket**
- **Vietnam**- **Da Nang** **Ha Noi** **Ho Chi Minh City**

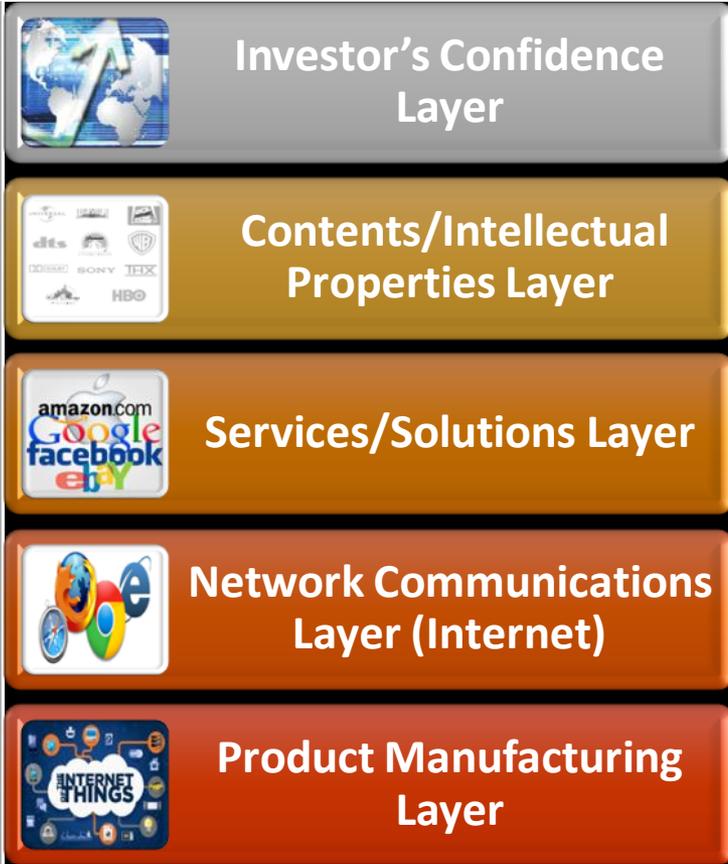# Roadmap Model for Innovative Smart City

- 1. Vision/ Concept
- 2 Plan/Policy/ Strategy
- 3.Design Master and Action Plans
- 4.Integration of Stakeholders
- 5. Financing
- 6. Social Infrastructure
- 7.Building Multilayers
- 8 PDCA
- 9.Network of Sustainable Smart Cities

Multilayered Structure in Smart Cities and Digital Transformation

Digital Transformation Layers

Layer	Issues
Investor's Confidence Layer	Geopolitical Issues · BEPS · Financial Regulations
Contents/Intellectual Properties Layer	Digital Piracy · Source Code Disclosure Req. · Technology Transfer · Patent and Copyrights
Services/Solutions Layer	Personal Data Protection · Data Security · Network Security · Intermediaries Liability
Network Communications Layer (Internet)	Internet Assigned Numbers · Net Neutrality · Domain Names · Internet Exchange Points · Internet Governance · Enhanced Cooperation
Product Manufacturing Layer	Import Tax · Place of Origin Regulations

Standard United for Smart Sustainable Cities Innitiative (U4SSC)

AI,IoT,Blockchain for Smart Cities

@UN SDGs 2030

- **Key Performance Indicators (KPIs) based on ITU Standards**

- § set new standards to compare cities;

- § be the first international set of coherent metrics;

- § uniquely coordinate data input from all international resources

- UN, World Bank, OECD) and the evaluated KPI city data utilizing state of the art scientific methods;

- § benchmark the cities of contribution to sustainability and smartness, as well as

- their ongoing efforts towards implementing the UN Sustainable Development Goals (SDGs);

- § be a highly useful tool for any city to improve, advance and further develop its related to society, economy and the environment; and

- allow cities to learn from each other in a transparent manner.

- **U4SSC KPIs** for Smart Sustainable Cities are sorted into three key dimensions:

- 1) Economy,

- 2) Environment

- 3) Society and Culture. sub-dimensions including:

- 1. ICTs

- 2. Productivity

- 3. Infrastructure

- 4. Environment

- 5. Energy

- 6. Education, Health and Culture

- 7. Safety, Housing and Social Inclusion

MOSCOW SMART CITY

Smart living

Smart mobility

Smart economy

Smart enviroment

Smart goverment

Smart people

planning

Housing and utilities

Innovations

Culture

Social

Health

Education

Open Digital goverment

Transpo

Tourism

ICT

Financial Technologies

Industry

Ecology
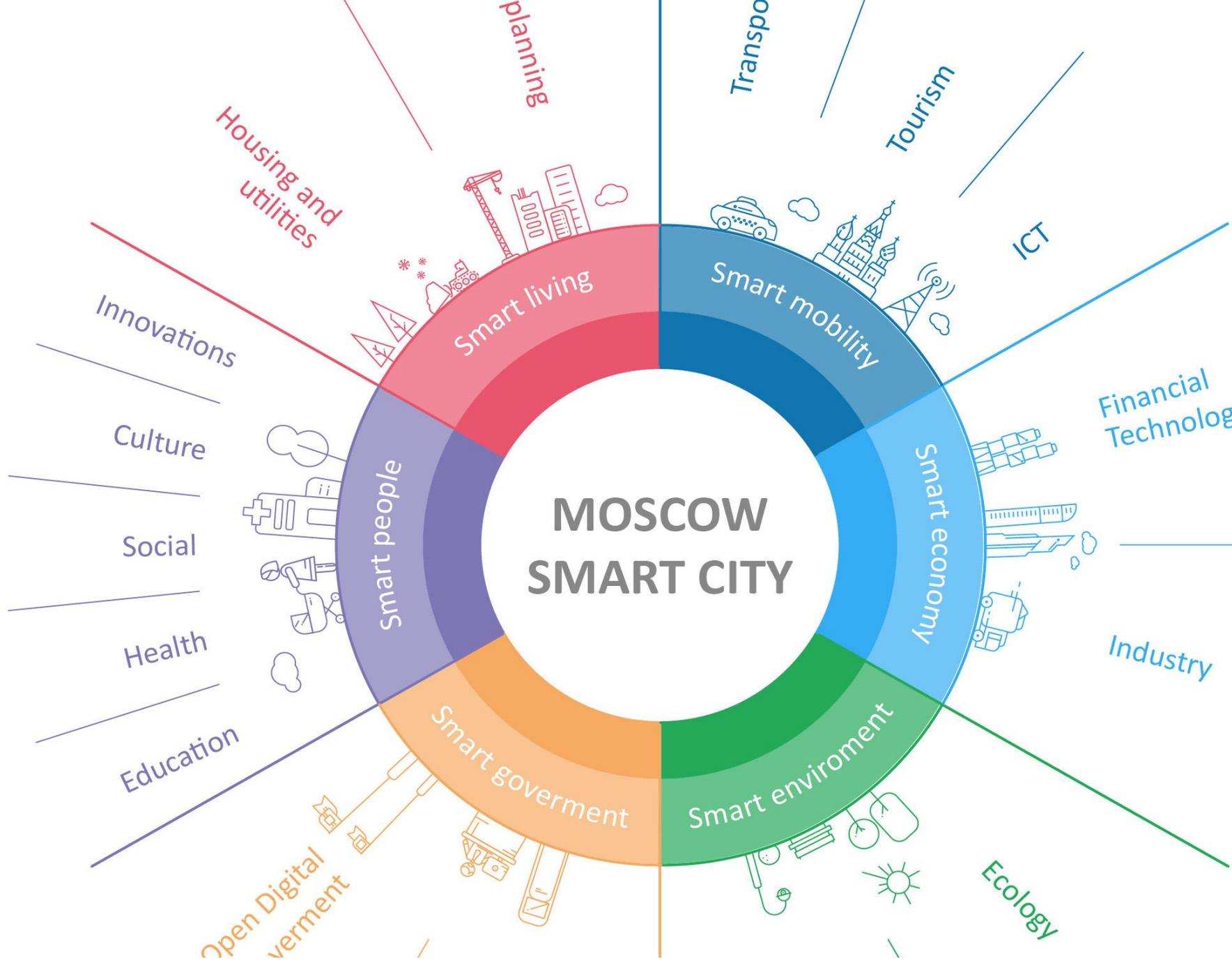
Conclusion

- 1.**Harmonization** between Central and Local governments
- 2.Solution on new **urban** issues
- 3. New agendas on infrastructure for Citizen's **Quality** of Life
- ４．　Network of inter-Smart Cities
- ５. Lessons from **Tokyo**-world biggest Mega city
- ６.**Cooperation** in **Japan-ASEAN**

Thank you!!

Dr.Toshio Obi

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Japan**