

"HOW TO PREPARE  
WORLD CLASS DIGITAL GOVERNMENT",  
LESSONS FROM WASEDA-IAC WORLD  
D-GOVERNMENT RANKING 2018

Prof. Emeritus Dr. Toshio OBI

Prof. Dr. Naoko IWASAKI, Waseda University

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"Leveraging Thailand Digital Government  
to Global Scale through AI"

# NAOKO IWASAKI (PHD)

**PROFESSOR,**

INSTITUTE OF E-GOVERNMENT WASEDA UNIV.  
PRESIDENT, INTERNATIONAL ACADEMY OF CIO



**Academia** : PhD of Global ICT from Waseda University, and Master of International Relationship from Waseda University Japan

**Award** : Jantima Memorial Award for Women CIO and ICT leadership 2017/09, “IAC distinguished Leadership Award on CIO & e-Government Development” 2015/09

**Business Career** : **President, International Academy of, CIO**, Deputy Director, APEC e-Government Research Center, Visiting Researcher, Nanyang Technological University Singapore and Beijing University.

**Member Committee** : “Smart Government by Utilization of AI”, “Government Innovation”, Ministry of Internal Affairs and Communication in 2018 etc..

**Publication** : “A Decade of World e-Government Rankings” (IOS Press, Co-editor, 2015) …etc

# HIGHLIGHTS AND TRENDS OF WORLD DIGITAL GOVERNMENT

(WASEDA PROJECT WITH 14 YEARS RESEARCH RESULTS BY GLOBAL VIEW)

@Cloud computing

@Internet of Things

@One Stop Services

@Open Data / Big data

@AI Innovation

@Blockchain

@Cyber Security

@Citizen Centric

@Smart City

# WORLD D-GOV RANKING 2018

## BY WASEDA - IAC

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

# 10 INDICATORS AND 35 SUB INDICATORS FOR EVALUATION

## Indicators

1. Network Preparedness/Infrastructure
2. Management Optimization/ Efficiency
3. Online Services / Functioning Applications
4. National Portal/Homepage
5. Government CIO
6. Digital 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.)

# LESSON FROM JAPAN (1)

## GOVERNMENT CIO

No	Country	Score
1	Denmark	9.545
1	Singapore	9.545
1	Japan	9.545
4	Taiwan	9.318
4	UK	9.318
4	Estonia	9.318
4	South Korea	9.318
8	USA	8.000
9	Australia	7.272
9	Iceland	7.272

# GRAND DESIGN FOR ROADMAP ON "NEXT GENERATION DIGITAL GOVERNMENT"

## ◆ Innovative and Inventive government

"Accessible" "Usable" "Affordable" "Diversified"  
"Accountable" "Simple" "Privacy protection"  
"Anti-Cyber terror"

## ◆ Benefits

"Cost reduction" "Efficiency" "Speed" "Transparency"  
"Citizen centric"

## ◆ Technology

DX with convergence of AI, IoT, Blockchain, Cloud and  
5G/8K TV

## ◆ Applications

Open data, BCP for Disaster, Open Innovation for e-  
Health/e-Mobility, etc



# LESSON FROM JAPAN (2)

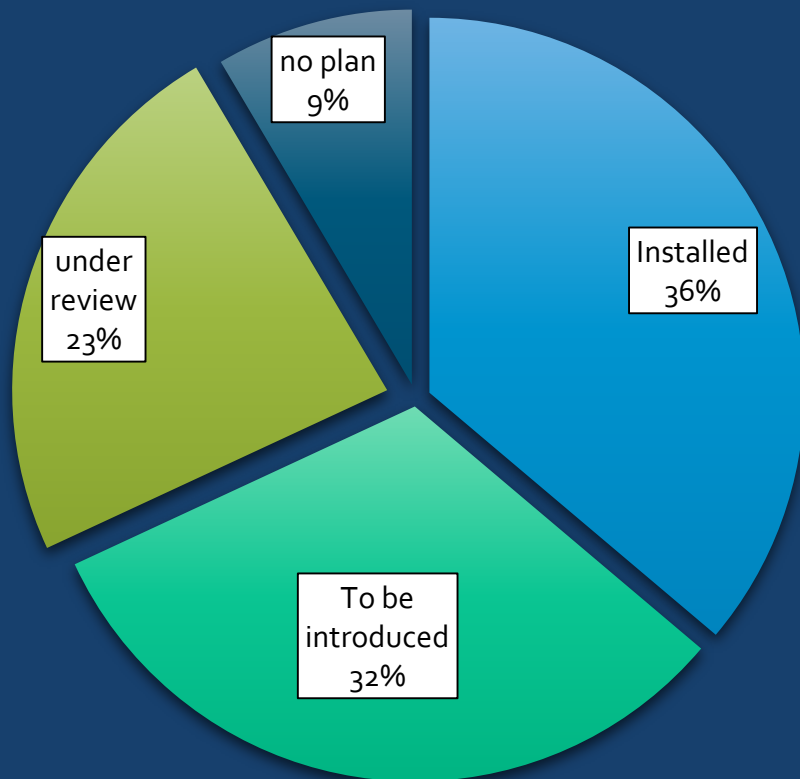
## SMART MUNICIPALITIES

- ✓ A system that only half of the government staff can demonstrate all the functions
- ✓ Smart Municipality which AI and robotics can handle automatically without human intervention
- Standardization and commonality of municipal administration
- ✓ Standardization and sharing of business processes
- ✓ Necessity of framing framework to stop overlapping investment by local governments
- ✓ Law to promote standardization and communization of information systems and application forms



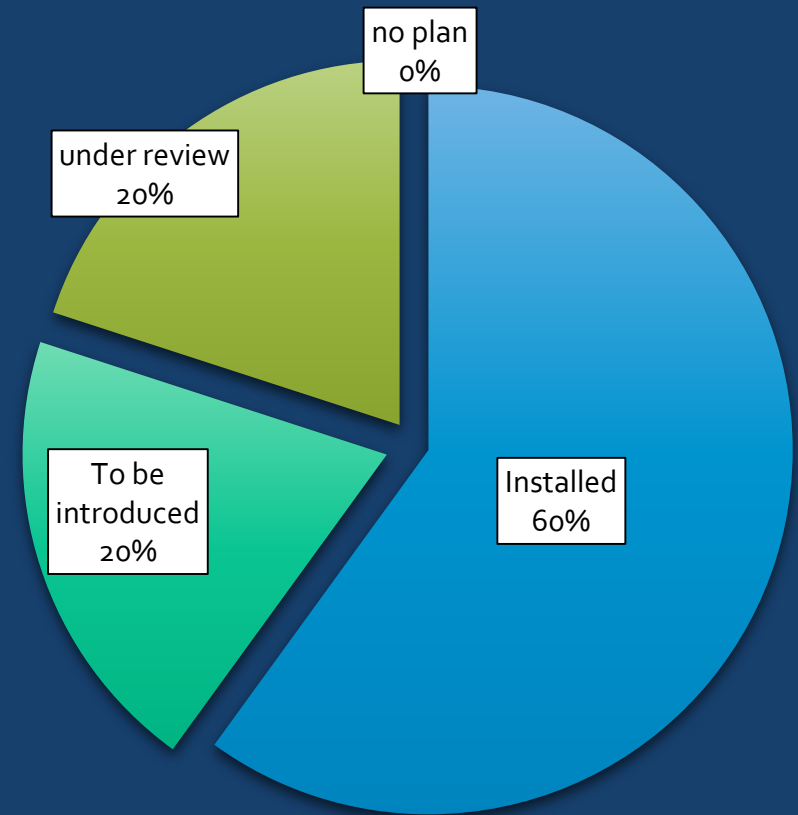
# PROGRESS OF AI INTRODUCTION IN GOVERNMENT IN JAPAN

## Prefectures



■ Installed ■ To be introduced ■ under review ■ no plan

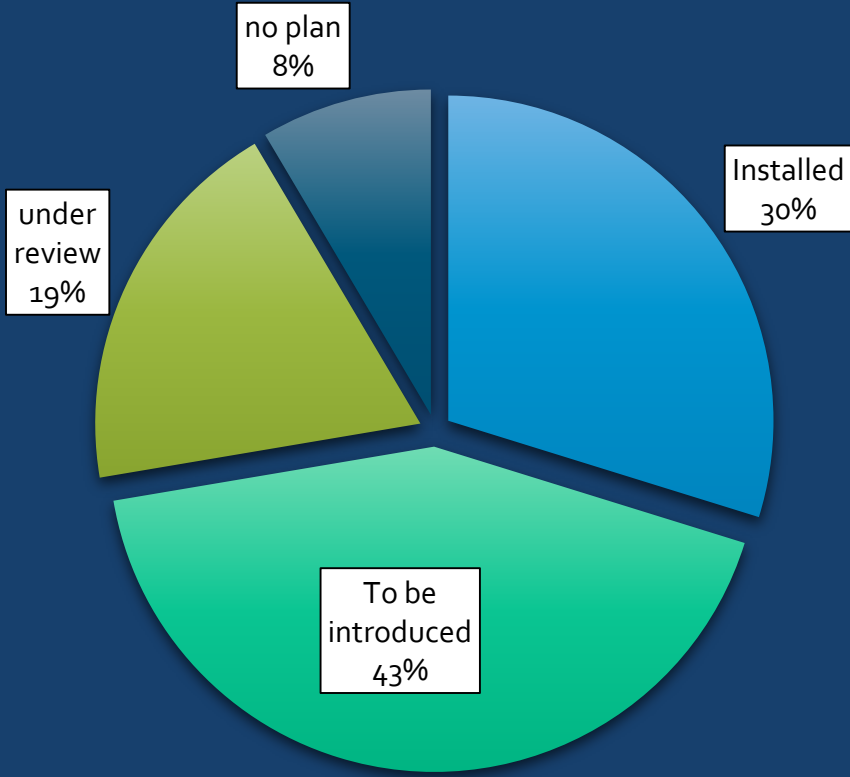
## Designated Cities



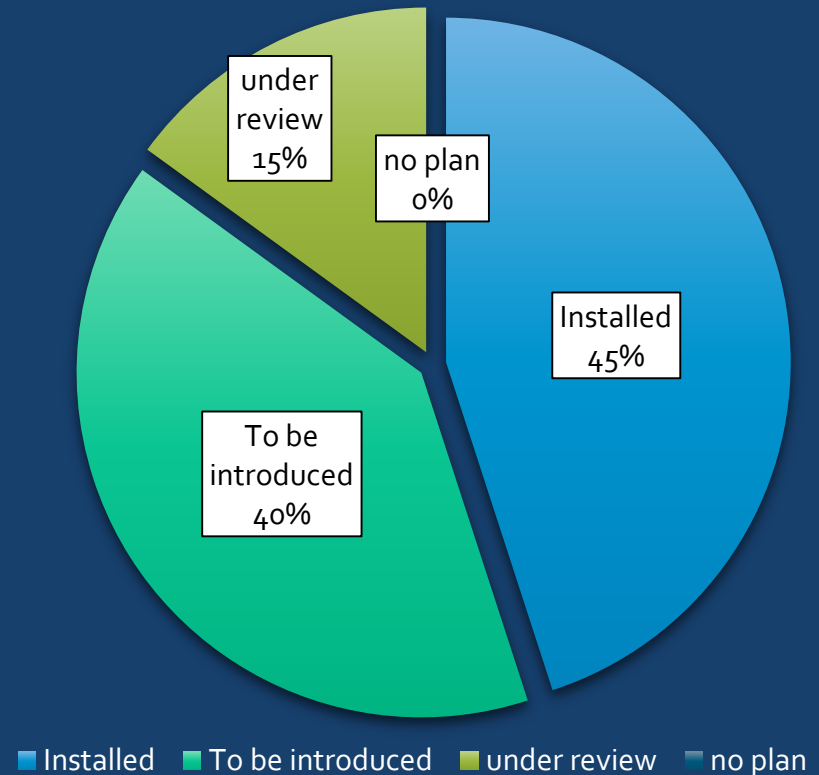
■ Installed ■ To be introduced ■ under review ■ no plan

# PROGRESS OF RPA INTRODUCTION IN GOVERNMENT IN JAPAN

## Prefectures



## Designated Cities



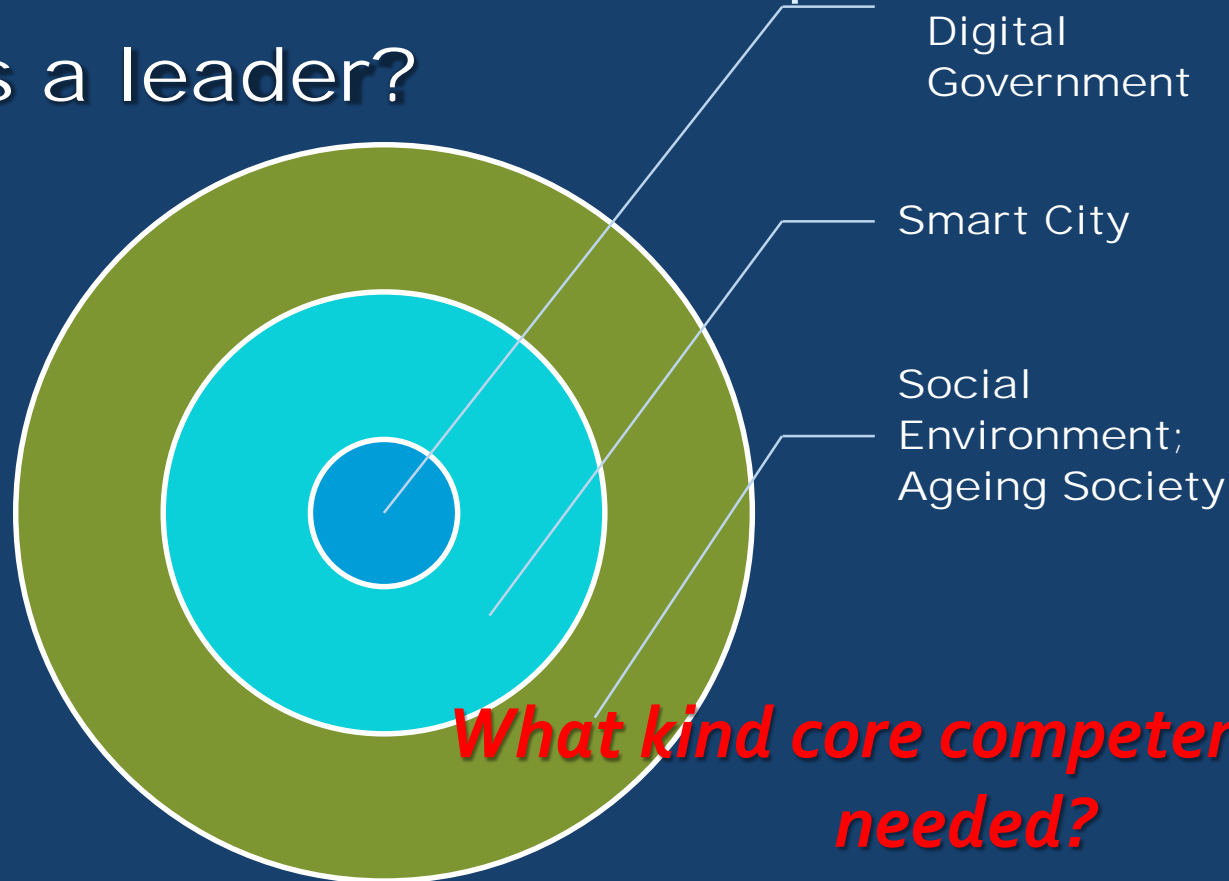
Speed, Budget, Capacity Building( Human Resources)

# LESSON FROM JAPAN (3)

## THE ROLE OF CAPACITY BUILDING FOR SMART CITIES

Human Resource Development for

Who is a leader?



# CAPACITY BUILDING / HUMAN RESOURCE DEVELOPMENT TRAINING CURRICULUMS ON SMART CITIES AT UNIVERSITY-1

## 1. The definition of Smart city

- ✓ What is the smart city? Sustainable or resilient or livable?
- ✓ Comprehensive approach

## 2. Emerging technologies for solution

- ✓ Big data
- ✓ Cloud and COGNITIVE computing
- ✓ IoT
- ✓ AI
- ✓ Block chain
- ✓ Open data and Big data analytics

## 3. System case studies

- ✓ Water, Energy, Transportation, Buildings
- ✓ Food production
- ✓ Urban and Universal Design
- ✓ Digital Government and social services
- ✓ Sustainability
- ✓ Environment
- ✓ SDGs2030

## 4. Capacity building for Chief Smart City officer (CSCO)

- ✓ Preferential core competencies of experts for building smart cities
- ✓ Cooperation among governments, municipalities

# CAPACITY BUILDING / HUMAN RESOURCE DEVELOPMENT TRAINING CURRICULUMS ON SMART CITIES AT UNIVERSITY-2

## 5. Risk management

- ✓ BCP (Business Continuity Planning)
- ✓ Cyber security
- ✓ SCM

## 6. Finance

- ✓ Investment and Procurement

## 7. Project management

- ✓ Quality management
- ✓ Life cycle of project management
- ✓ Evaluation

## 8. Privacy and Data protection

- ✓ Compliance
- ✓ Strong infrastructure

## 9. User /Citizen oriented

- ✓ Generations
- ✓ Digital divide
- ✓ Friendly for ageing people
- ✓ Happiness index

## 10. Case Studies worldwide

- ✓ EU
- ✓ OECD
- ✓ ASEAN

# CONCLUSION

1. **Harmonization** between Central and Local gov. by digital services= Establishment of Inter smart city network
2. Smart digital city by CIO = Solution on new **urban** issues
3. To establish of new agendas on sustainable infrastructure for Citizen's **Quality of Life** for SDGs2030
4. To create **core competencies of CSCO** who handle the strategy on smart city from the aspect of digital solution.

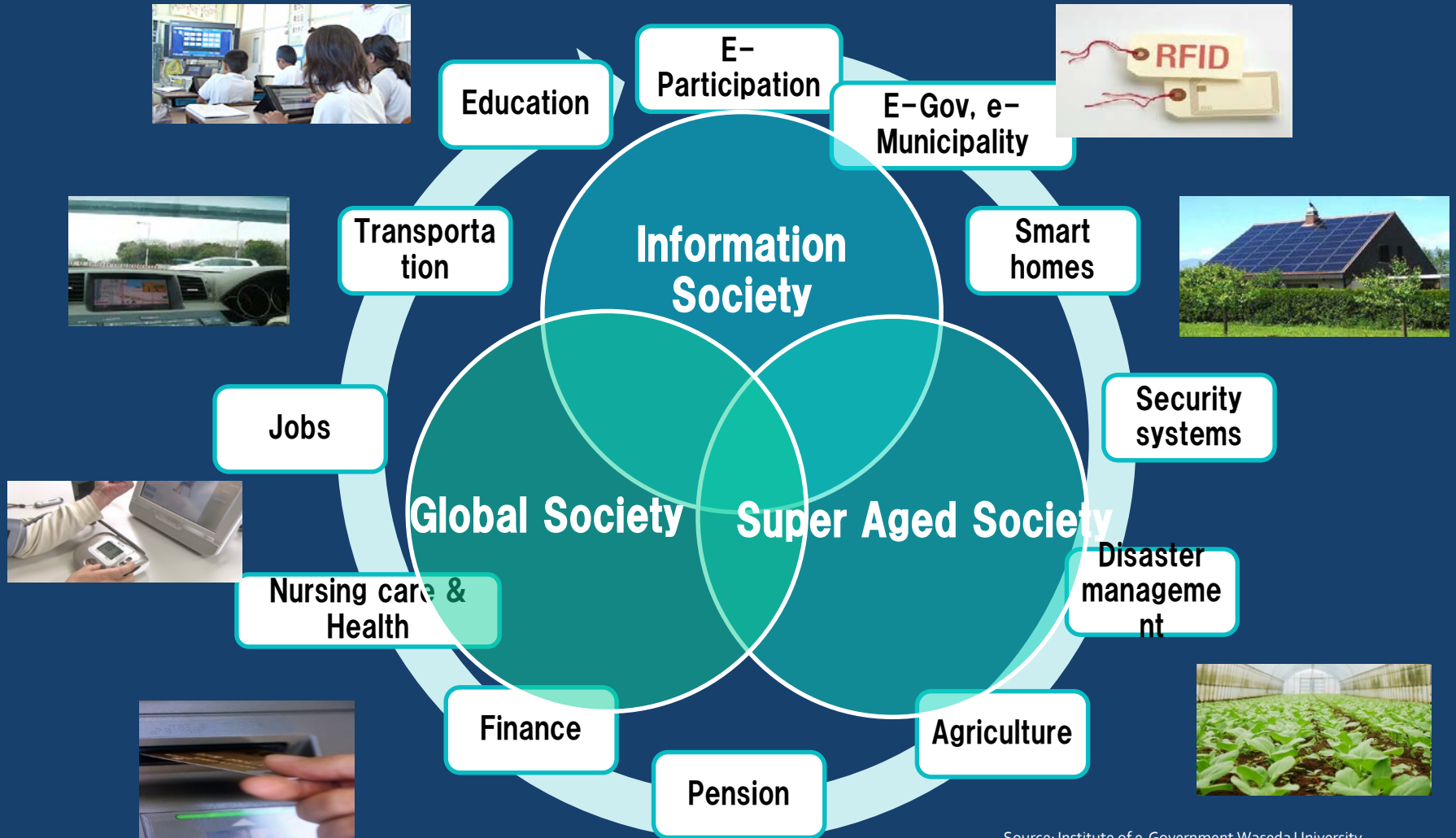
# PROF. DR. TOSHIO OBI

CHAIRMAN, INSTITUTE OF E-GOVERNMENT  
WASEDA UNIVERSITY JAPAN

- (Business Careers) He has worked in the United Nations Development Program (UNDP) as a program officer. He has served visiting researchers at Columbia University and George Mason University (USA), Peking University (China), St. Petersburg State University (Russia), Thammasat University (Thailand) and Essex University (UK)
- He has been a member of various advisory committees of the Japanese Government including: **Chair, National e-Government Promotion Council(now)**, Ministry of Internal Affairs and Communications (MIC)(~now); advisory member of the Prime Minister's IT Strategy Council (2008-9); Director Japan's Ruling Party LDP Thank Tank (1986-2010); President, International Academy of CIOs (2008-2018); Chair, UNESCO/UNITWIN Program on Disaster Management (1994-2015); **President, APEC e-Government Research Center (~now)**; and Special Envoy of the ITU Secretary General for Academia (2010-2018). Speakers at UN Social Development Commission for SDGs 2030 in New York, Feb.2017 and 2018; Affiliated Experts at IT and Innovation Foundation (Washington DC). He has published more than 40 books, including *A Decade of World e-Government Rankings*
- He has received the MIC Minister's Distinguished Award (twice, 2013 and 2015) and an Emperor Blue Ribbon Medal(2012), **Recognition as one of [World ` most Influential 100 people in Digital Government 2018]** by APOLITICAL(UK's ThinkTank)

# New Digital Society 2030

Convergence between Information and Aging Society  
Establishment of mutual connected society



Source; Institute of e-Government Waseda University



# RECOMMENDATION

1. Lessons from **Japan** – Utilization of AI and RPA for Digital Government.
2. To strengthen cyber security
3. Utilization and Evaluation of **disruptive technologies**
4. **Thailand and Japan for ASEAN**