



**Asia-Pacific
Economic Cooperation**

2013/SOM1/EC/030

Agenda Item: 12

Keynote Speech on ICT Applications for Setting the Priorities of National Agendas on Governance

Purpose: Information

Submitted by: APEC e-Government Research Center



**First Economic Committee Meeting
Jakarta, Indonesia
1-2 February 2013**

APEC EC First Plenary Meeting
Session 「Best Practice for ICT's
Strategy and Public Governance」

2012, February 2 Jakarta

KEY NOTE SPEECH

「ICT Applications for setting the Priorities
of National agendas on Public
Governance」

Prof. Dr. Toshio OBI
Waseda University

1

Prof. Dr. Toshio Obi

@ Director, APEC e-Government
Research Center

➤ **Director and Professor,**
Institute of e-Government
at Waseda University



➤ **Special Envoy of ITU Secretary General for Academia**
➤ **Chair, National e-Government Promotion Council of Japan**
➤ **Member, MIC Minister's ICT Growth Strategy Council**

@PO,APEC-OECD Joint Workshop on ICT Applications for the
people with special needs

➤ **President, International Academy of CIO**

obi.waseda@gmail.com

2

Challenge and Priority Agendas for e- Public Governance (1)

- Industrial Society ⇒ Information Society ⇒ IS + Ageing Society (convergence)
- ICT Accessibility + Availability (increasing Digital Inclusion) + Affordability (reducing price) + Usability (application by innovation)
- Digital Divide ⇒ Digital Opportunity ⇒ Digital Inclusion
- Local – national – Global
- Government-led / initiatives ⇒ Citizen centric / ICT driven by Social Media
- Rural community ⇒ Urbanization (90% of Japanese will live)
- Government ⇒ e-Government plus

3

Challenge and Priority Agendas for Platform for improvement of Public Sector Governance (2)

=Priority=

1. Economic Growth
2. Employment
3. Sustainability
4. Regulatory and Structural reform
5. Competition.
6. Innovation for Applications
7. connectivity

=Improvement =

- 1 Government process (In G) e-administration
- 2 Connecting Citizens (GtoC) e-Citizens, e-Services
- 3 Building external interactions (GtoS) e-Society

4

How Many **Governments** do you need ?

E- government

Digital government

Smart government

Mobile government

Open government

Connected government

U (Ubiquitous)-government

Innovative government

Invented government

Green government

5

Transparency and Public Accountability - creating Open Government-

Characteristics:

1. Agile and friendly **access** of public service
2. Real-time government information /services
3. Applications of **Social Networking** to enhance interactions of both government and the public
4. Utilization of **Open data**
5. **Transparency** of e-Government
6. Need of Global (APEC)**standard**

6

New Innovative ICT Tech- **Cloud Computing**

@ the delivery of computing as a service rather than a product, whereby shared resources, software, and information are provided to computers and other devices as a metered service over a network.

@ Computing clouds provide computation, software, data access, and storage resources without requiring cloud users to know the location and other details of the computing infrastructure.

@ E-Governance with cloud computing offers integration management with automated problem resolution, manages security end to end, and helps budgeting based on actual usage of data.

@ At the global level, cloud architectures can help government reduce duplicate effort and increase effective utilization of resources..

@ Through cloud computing, e-Government can rapidly deploy applications where the underlying technology components can expand and contract with the natural ebb and flow of the business life cycle.

@ Average of **Cost reduction by Cloud services** is 20-30%

7

New Innovative ICT – **Big Data**

@Data that exceeds the processing capacity of conventional database systems.

@ The data is too big, moves too fast, or does not fit the structures of database architectures.

@ In information technology, big data consists of datasets that grow so large that they become awkward to work with using on-hand database management tools.

@ Big data is a term applied to datasets whose size is beyond the ability of commonly used software tools to capture, manage, and process within a tolerable elapsed time.

@ Big data sizes are a currently ranging from a few dozen terabytes to many petabytes of data in a single dataset.

@ There are three trends related to this growth in big data – not only contributing to the growth but also providing part of the solution to managing such large datasets

* **samples of Usage -- e-Health, Space, e-Government, Disaster**

8



Strengthening BCP and Supply chain as disaster management

@A Business Continuity Plan / Disaster Recovery Plan aims to ensure that an organization's critical business functions can continue to be executed in the event of a major disruption or disaster.

@ The organization is more resilient, survives the event and is able to minimize the impacts/damages on its business operations.

@ In the aftermath of terrorism and recent natural disasters such as the earthquake in Japan on 11th March, 2011 and flooding in Bangkok in October, 2011, both government and businesses have recognized more than ever the need of preparedness for natural disasters and cyber terrorism . .

@With the growth of e-Commerce, e-Government and other factors, system availability expectations are driven toward 24x365.

@ To recover all the activities and databases, it is necessary to prepare BCP

Huge human and economic loss by natural disasters and cyber terrorism -3.11 disaster cost \$50 billions

EMERGING TRENDS ON ICT AND E- GOVERNANCE

- | | |
|--|--|
| 1. Cloud computing | 2. Social Media |
| 3. Big data | 4. BCP for Disaster |
| 5. Digital Inclusion | 6. Cyber Security |
| 7. Mobile Government | 8. Open Government /Data |
| 9. Government 3.0-Web application | |
| 10. New ID | 11. ICT Applications for Ageing Society |

11

How ICT will Contribute National Economic Growth

- **Priority for National Agendas Japan Growth Strategy –**
@ macroeconomic policies (Inflation target)
- @ Industrial competitiveness (new growth industries)
- ICT is expected to be available in all fields, will contribute to **economic growth** and play the role of a driving engine in all types — developed, emerging, developing economies
- **ICT industries in Japan**
- ICT = Biggest economic impact on all industries
ICT /GDP 10.8% (Auto 2.1%,Steel 1.2%)
- ICT/ Total Employment 6.8% (7.6 million workers)
- ICT final demand + value added inducement \$10 trillion
- ICT/Total investment among all industries 22%

12

New Economic Growth Strategy

ICT applications for Ageing Society

@One of the problems that many countries are facing today is the aging population i.e.

increase in the proportion of older people (Japan is a typical example) which requires bigger funds for social welfare and the support of government.

@ In this regard, ICT can be applied to solve the issues caused by a rapidly ageing population even in the global context.

@ For instance, ICT can help in providing new and flexible learning opportunities, which connect senior people to each other and to younger generations.

@ Through our past 8-year research, we found that the ICT application for Ageing Society is becoming extremely important.

@ it is an opportunity which must be taken by government in order to have a general solution to fully apply ICT in this issue.

13

Best practices for ICTs Strategy and Public Sector

=Challenges=

ICT Applications for promoting

- Government **efficiency** /responsiveness
- Public **service quality**
- Government **transparency and Public accountability**
- **Open and Smart** government

14

Waseda University, The World e-Government Annual Ranking

- Introduced since 2005, Now with 55 countries
- A measure of evaluating the application of ICT in administration and leadership of each economies government.
- **The aims of survey**
 - To advance the state of ICT practice
 - To identify and facilitate policies for the best practice of e-Government development
 - To improve the quality of life and sustainable community development and Digital Society in the long term goals
 - To learn the lessons and experience on the best practices Of e-Government

15

e-Government by Indicators

Indicators	Sub indicators
1. Network Preparedness	<ul style="list-style-type: none"> • 1-1 Internet Users • 1-2 Broadband Subscribers • 1-3 Mobile Cellular Subscribers • 1-4 PC Users
2. Management Optimization	<ul style="list-style-type: none"> • 2-1 Optimization Awareness • 2-2 Integrated Enterprise Architecture • 2-3 Administrative and Budgetary Systems
3 E-Services	<ul style="list-style-type: none"> • 3-1 Cyber Laws • 3-2 e-Tender Systems; 3-3 e-Tax System; 3-4 e-Payment • 3-5 e-Voting Systems; 3-6 Social Security Service • 3-7 Civil Registration • 3-8 e-Health

16

e-Government by Indicators

4. National Portal	<ul style="list-style-type: none"> • 4-1 Navigation • 4-2 Interactivity • 4-3 Interface • 4-4 Technical
5. Government CIO	<ul style="list-style-type: none"> • 5-1 GCIO Presence • 5-2 GCIO Mandate • 5-3 CIO Organizations • 5-4 CIO Development Programs
6. e-Government Promotion	<ul style="list-style-type: none"> • 6-1 Legal Mechanism • 6-2 Enabling Mechanism • 6-3 Support Mechanism • 6-4 Assessment Mechanism
7. e-Participation	<ul style="list-style-type: none"> • 7-1 e-Information and Mechanism • 7-2 Consultation • 7-3 Decision - Making

17

Waseda University World e-Government Ranking 2012

Ranking	Country	Score
1	USA	93.8
1	Singapore	93.8
3	Korea	91.5
4	Finland	88.7
5	Denmark	86.5
6	Sweden	84.1
7	Australia	82.8
8	Japan	81.5
9	UK	81
10	Chinese Taipei	80.1
10	Canada	80.1

18

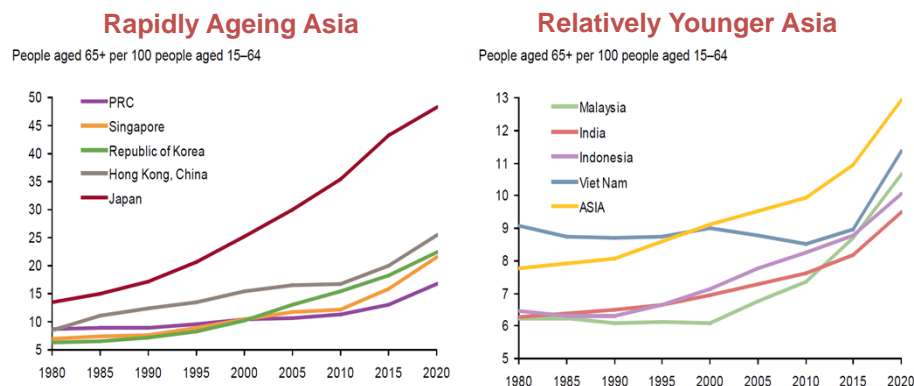
Management Optimization of Government

- Points of Survey
 - E-Gov strategies at national and sub national with well-defined, clear time-line, achieved,
 - National government has a centralized network, architecture framework, metadata standard
 - Centralized or shared administrative system within the national government
 - Linkages between national and Local e-Governments
 - International cooperation - e-Customs,e-passport

19

APEC as an Ageing Region: Challenges and Opportunities

Two-speed ageing process in Asia



Source: Roy, A. "Innovative Approaches to Managing Longevity Risk in Asia: Lessons from the West" in *Social Security in Asia: Lessons and Emerging Issues*. ADBI: Tokyo (Forthcoming book)

20

Slide 20

ADB I 1 pls remove table number and titles.

Rather put: Rapidly Aging Asia (on the left) and Relatively Younger Asia (on the right graph)

ADB I, 8/21/2012

Opportunities and challenges for the ageing society – APEC Funded Project (APECTEL 2012) ICT Applications for the people with Special needs

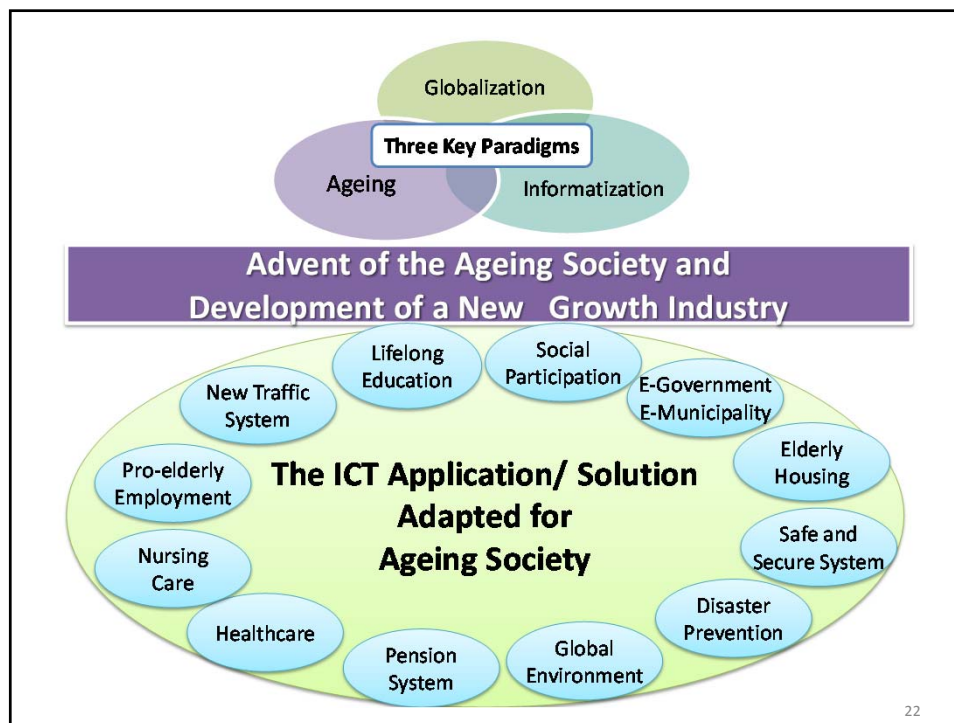
Opportunities

- A rising pool of **knowledge and expertise** due to the rise of the number of the elderly and the role of **technology** in helping the elderly keep an active working life
- **Large senior consumer market** with particular needs and with high **discretionary income**

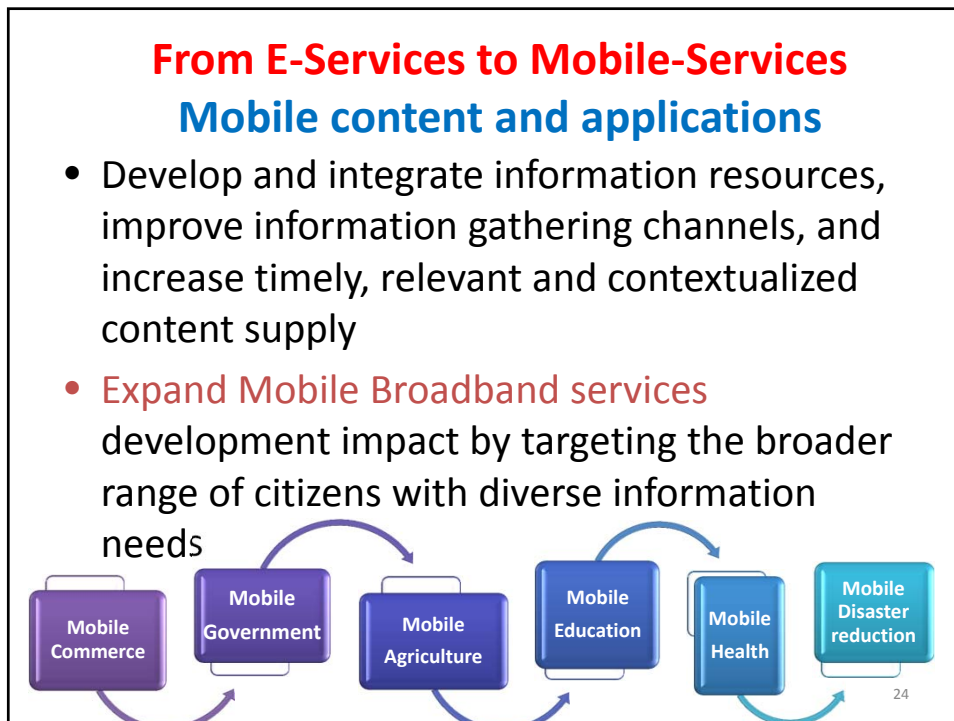
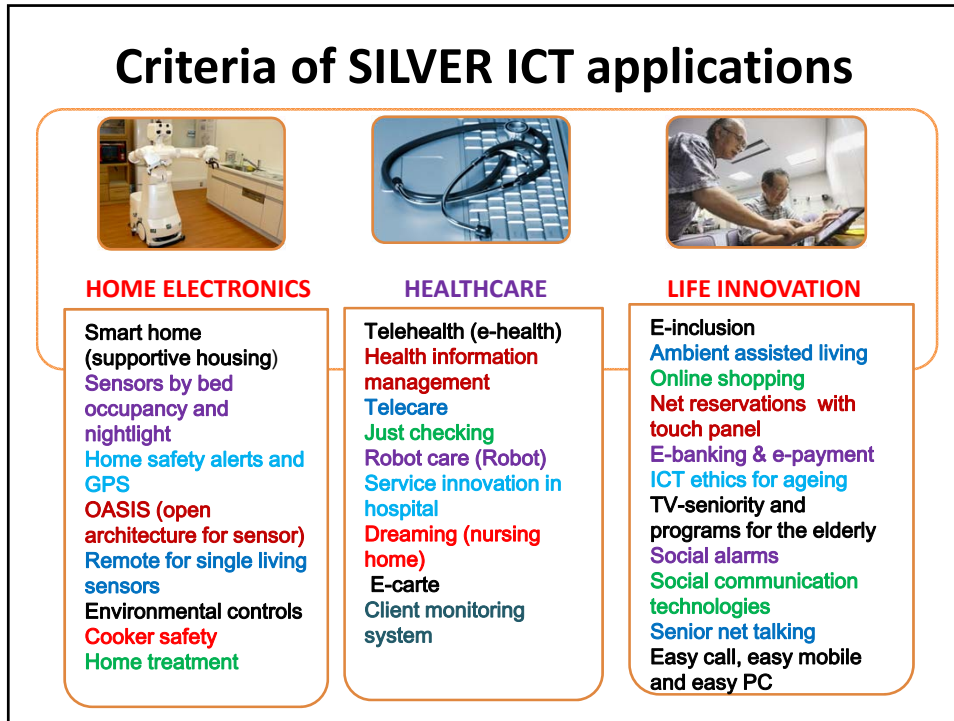
Challenges

- **Social security** and future **fiscal burden** from the aging population
- **Increase of social cost** for caring seniors and people in special needs in the society

21



22



ICT Gap in APEC is serious challenge

- Japan may be able to afford sophisticated ICT applications for the elderly as becoming the **only Super-aged Society** in the world (one-third of population in 2020)
- Proper **adaptation** to local needs by universal design, resource endowment (such as labor supply), and **cultural setting** are important
- Technological ,user and service innovations are the key for solution and sustainability

25

Policy Implications and lessons learnt from ICT for Public Governance

1

- The both connection and HRD of CIOs and ICT directors in APEC are not enough. They are required to obtain the prominent competencies such as transformational leadership and responsiveness to innovative governance

2

- Excellent Public Services is well characterized by the increasing importance of Innovative/strategic ICT management as well as Regulatory reform and Competition for the benefits of citizens and users

3

- Both Silver ICT and U(biquitous)-Government will be recommended to highlight on the priority agendas at APEC as emerging economic growth strategy

26

recommendation for future action

4

- Ageing /elderly/senior people will be approx. 2 billions and spend 1 trillion US dollars in 2045 in the world. 60 % of the population/consumption will be in APEC region

5

- APEC Economic Committee, E-Commerce ,TEL and other related groups will be requested to work together and organize the joint workshop on ICT applications on Silver Innovation to create comprehensive plan and economic models for new silver industries

27

Thank you !!

Dr. Toshio Obi

Professor, Waseda University, Japan



28