

2015

Institute of e-Government, Waseda University

Edited by: Prof. Dr. Toshio OBI

[2015 WASEDA – IAC INTERNATIONAL E-GOVERNMENT RANKING SURVEY]

June 2015, Tokyo

[The Institute of e-Government at Waseda University, Tokyo in cooperation with the International Academy of CIO (IAC) has released the results of its international e-Government rankings survey for 2015.]

Executive Summary

The Institute of e-Government at Waseda University (Director: Prof. Toshio Obi), Tokyo in cooperation with the International Academy of CIO (IAC) has released the results of its international e-Government ranking survey for 2015. This research presents the eleventh consecutive year of monitoring and surveying worldwide e-Government development by the research team of Professor Toshio OBI, Director of the Institute of e-Government and experts with IAC member universities. The result of the survey is that Singapore ranked for the first place, followed by the United States in 2nd, Denmark in 3rd, the United Kingdom in 4th and Korea in 5th place. Japan was in 6th, Australia in 7th, Estonia in 8th, Canada in 9th and Norway ranked 10th.

During this one-year survey, research has been conducted through organizing the workshops and forums and the team has arranged professional meetings and discussions with a variety of international and national organizations to improve oversight and objectivity. These groups include the Organization for Economic Co-operation and Development (OECD), Asia Pacific Economic Cooperation (APEC), the International Telecommunications Union (ITU), the World Bank (WB), United Nations DESA and many other government agencies, think tanks and NGO/NPOs with e-Government responsibilities in their respective countries.

The 2015 ranking is the eleventh year of the Waseda e-Government Ranking, and second year of cooperation with International Academy of CIO (<http://cio-japan.waseda.ac.jp/>). To assess and evaluate the details of e-Government preparedness and to align with new trends in e-Government, 9 main indicators with 32 sub-indicators have been evaluated. The 2015 ranking, which marks the first year the Waseda-IAC e-Government Ranking removed Cambodia, Iran and Uzbekistan from the ranking. These countries were at the bottom of the ranking from 2012 to 2014. In addition, in order to obtain comprehensive findings on the e-Government around the world, this year, five countries are added as subjects of this research: Ireland, Bahrain, Morocco, Costa Rica and Oman. This makes a total of sixty-three surveyed countries compared to sixty-one last year. These selected 63 nations are regarded as the better ICT countries among approx.200 nations in the world.

In order to obtain the latest and the most accurate information and to assess the relevant data, the ranking was conducted by researchers around the world in cooperation with partner universities. Comprehensive data assessment has been conducted by expert groups from George Mason University (USA), United Nations University, Bocconi University (Italy), Turku University (Finland), Peking University (China), Thammasat University (Thailand), De La Salle University (Philippines), Bandung Institute of

Technology (Indonesia), National University of Singapore, Federal Academy National Economy (Russia) as well as main contributor, Waseda University (Japan).

This report contains Chapter 3 [e-Government Indicators], Chapters 4, 5, 6 [e-Government Ranking by Organizations, Populations and Regions] and Chapter 7 [Methodology]. The full text with all 63 countries assessment report [10 years of World e-Government Rankings] will be published by IOS Press (www.iospress.nl), Amsterdam in September, 2015.

An analysis of Waseda – IAC e-Government Ranking Survey 2015 indicates the following eight interesting findings:

- (1) There is lack of ICT human resources development in capacity building, especially e-leaders such as CIO
- (2) Enough finance/funding for e-Government projects is the key for success
- (3) Citizen-engagement as digital inclusion in e-Government initiatives should be more encouraged
- (4) Various applications for online service over the world are progressing in developed countries
- (5) More attention must be paid to local e-Government issues as well as linkage between central and local governments
- (6) The best practices for M-government in developing countries may increase active participation in developing countries with high usage of mobile devices
- (7) Open Government/Open Data should be implemented and shared with big data
- (8) Digital gap has become wider among developing countries in terms of accessibility, usability and affordability

Contact: Institute of e-Government, Waseda University, Japan

Email: obi.waseda@gmail.com

TABLE OF CONTENTS

Executive Summary	ii
List of Tables	v
List of Figures	v
I. Total Ranking 2015	2
II. e-Government Ranking by Indicators	4
1. Network Preparedness/Digital Infrastructure.....	6
2. Management Optimization.....	7
3. Online Services/ Applications	7
4. National Portal/ Homepage	8
5. Government Chief Information Officer (GCIO).....	9
6. e-Government Promotion.....	10
7. E-Participation/ Digital Inclusion	11
8. Open Government Data	12
9. Cyber Security.....	12
III. e-Government Ranking by Organizations	13
1. Ranking of APEC Economies	13
2. Ranking of OECD Countries	14
IV. e-Government Ranking by the Size of Population and GDP	16
1. Ranking in Big Population Countries (higher than 100 million).....	16
2. Ranking in Small Population Countries (Less than 10 million)	18
3. e-Government Ranking in Top 10 Countries with Highest GDP in World.....	20
V. e-Government Ranking by Regions	22
1. Ranking in Asia-Pacific Countries	22
2. Ranking in Americas Countries	23
3. Ranking in European Countries	24
4. Ranking in Africa, Middle East and CIS Countries	26
VI. Methodology	28
VII. Contributors List	30

List of Tables

Table 1: Waseda – IAC e-Government Total Ranking 2015	2
Table 2: The Main Indicators and Sub-Indicators	5
Table 3: Top 10 Countries by 9 Individual Indicators	6
Table 4: e-Government Ranking in APEC Economies	13
Table 5: e-Government Ranking in OECD Countries	15
Table 6: e-Government Ranking in Big Population Countries	16
Table 7: e-Government Ranking in Small Population Countries	19
Table 8: e-Government Ranking with Highest GDP Group	20
Table 9: e-Government Ranking in Asia-Pacific Countries	22
Table 10: e-Government Ranking in Americas Countries	23
Table 11: e-Government Ranking in European Countries	25
Table 12: e-Government Ranking in Africa, Middle East and CIS Countries	26
Table 13: Weighted Scores Method	30

List of Figures

Figure 1: Waseda-IAC Top 10 e-Government Ranking	3
Figure 2: e-Government Development Matrix	4
Figure 3: Top 10 Management Optimization 2014-1015	7
Figure 4: Top 10 Online Service 2014-2015	8
Figure 5: Top 10 National Portal 2014-2015	9
Figure 6: Top 10 Government CIO 2014 – 2015	10
Figure 7: Top 10 e-Government Promotion 2014 – 2015	11
Figure 8: Top 10 E-Participation 2014 – 2015	11
Figure 9: Top 10 Open Government Data 2014 - 2015	12
Figure 10: Top 10 Cyber Security 2014 - 2015	13
Figure 11: Top 10 APEC Economies	14
Figure 12: Top 10 OECD Countries	16
Figure 13: Top 10 Big Population Countries in e-Government	18
Figure 14: e-Government Ranking in Small Population Countries	20
Figure 15: Top 10 e-Government Ranking in Highest GDP Countries	21
Figure 16: Top 10 e-Government Ranking in Asia-Pacific Countries	23
Figure 17: Top 10 e-Government Ranking in Americas Countries	24
Figure 18: Top 10 e-Government Ranking in European Countries	26
Figure 19: Top 10 e-Government Ranking in Africa, Middle-East and CIS Countries	28
Figure 20: Processes Diagram	29

I. Total Ranking 2015

The 2015 ranking marks Singapore's return to first place scoring 0.22 points higher than the USA – the country ranked at second in the total ranking. Denmark ranked for 3rd followed by the UK in 4th, compared to last year, Korea downturned from 3rd to 5th place this year. Japan ranked 6th place. Australia jumped two places and ranked for 7th place in the ranking this year. Estonia and Canada also slipped out of their positions compared to last year and ranked for 8th and 9th place respectively. There was no significant structural change compared to last year in the top ten, except that Norway replaced Sweden and ranked for 10th place, which marks the first time Norway appeared in the top ten during the eleven years of the ranking. This year, the ranking added five new countries: Bahrain, Costa Rica, Iceland, Morocco, and Oman. In this group, only Iceland has a good position ranked for 19th place in the total ranking. Both Oman and Bahrain are in the middle of the ranking and are ranked at 40th and 44th respectively, while Morocco and Costa Rica are tied at the bottom group in the total ranking. In the middle group of the ranking marks a big change in the position of China, compared to last year, China slipped ten steps and is ranked at 49th place.

No	Total Rankings	Score	No	Total Rankings	Score	No	Total Rankings	Score
1	Singapore	93.80	22	Thailand	67.31	43	Brunei	51.06
2	USA	93.58	23	Israel	65.80	44	Bahrain	50.50
3	Denmark	91.25	24	HK SAR	65.24	45	Brazil	50.37
4	UK	90.17	25	Malaysia	64.87	46	Argentina	50.32
5	Korea	89.39	26	Portugal	63.93	47	Colombia	49.36
6	Japan	87.77	27	Czech Republic	63.48	48	South Africa	49.30
7	Australia	86.30	28	Italy	61.30	49	China	48.36
8	Estonia	84.87	29	Indonesia	60.11	50	Kazakhstan	47.73
9	Canada	81.45	30	UAE	58.10	51	Saudi Arabia	47.48
10	Norway	79.63	31	Poland	57.30	52	Peru	46.21
11	Sweden	77.95	32	Spain	57.12	53	Tunisia	45.87
12	Austria	77.26	33	Vietnam	57.03	54	Venezuela	44.65
13	New Zealand	76.66	34	Russia	56.56	55	Uruguay	44.01
14	Finland	76.49	35	India	56.42	56	Morocco	43.13
15	Germany	76.46	36	Macau SAR	56.27	57	Pakistan	42.94
16	France	73.39	37	Chile	53.49	58	Costa Rica	42.06
17	Chinese Taipei	72.76	38	Mexico	53.41	59	Georgia	40.73
18	Belgium	71.69	39	Romania	53.11	60	Nigeria	38.37
19	Iceland	69.73	40	Oman	51.60	61	Fiji	37.54
20	Netherlands	69.53	41	Philippines	51.47	62	Egypt	37.19
21	Switzerland	69.17	42	Turkey	51.31	63	Kenya	32.91

Table 1: Waseda – IAC e-Government Total Ranking 2015

Indonesia had a big jump and is ranked for 29th place compared to 32nd last year. For ASEAN countries (except Singapore which is consistently at the top group), Thailand has a good position in the middle of the ranking, and leads this group in 22nd place, followed by Malaysia ranked at 25th place.

The bottom tier of this ranking still hosts familiar names from last year, such as Nigeria, Fiji, Egypt and Kenya. In this group, Nigeria is the country that had the biggest regression. It ranked for 60th place compared with 45th last year. Egypt also slipped down from 56th place last year to 62nd place in the total ranking this year. Kenya ranked at the bottom of the total ranking.

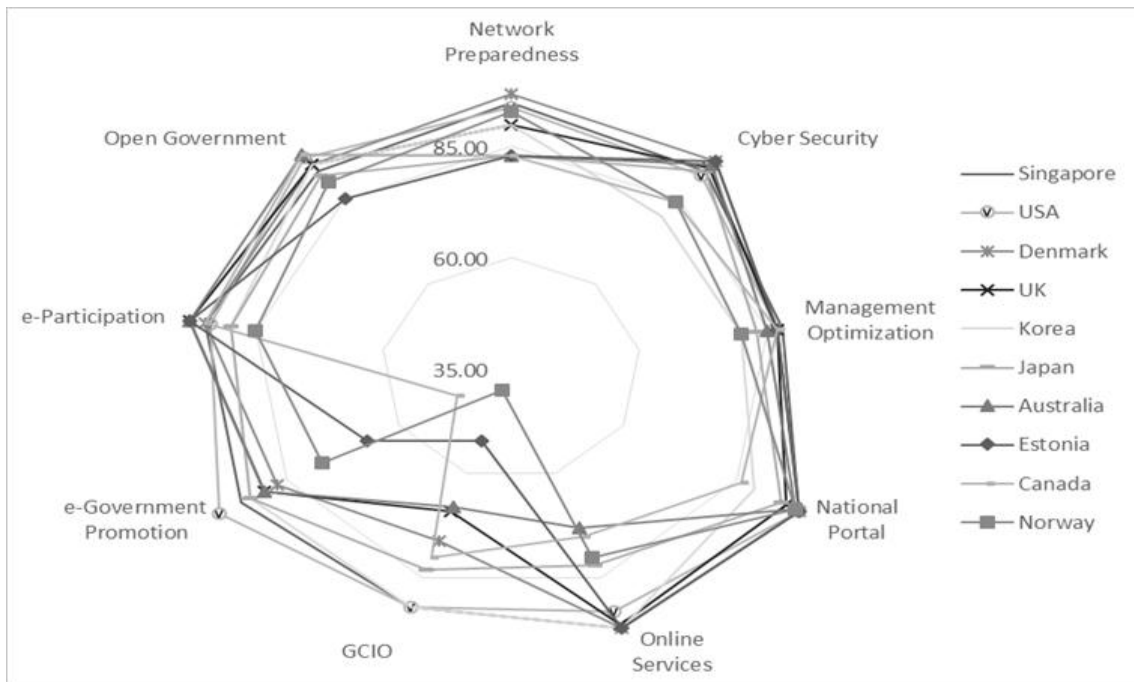


Figure 1: Waseda-IAC Top 10 e-Government Ranking

All top ten countries have held excellent achievement. But, as for GCIO, Norway as the 10th post has poor score on it as well as e-Participation.

Figure 2 [e-Government Development Matrix] indicates the positive relationship between network infrastructure and online public services. It is reported that the countries with nice network infrastructure can extend to deploy online public services easily.

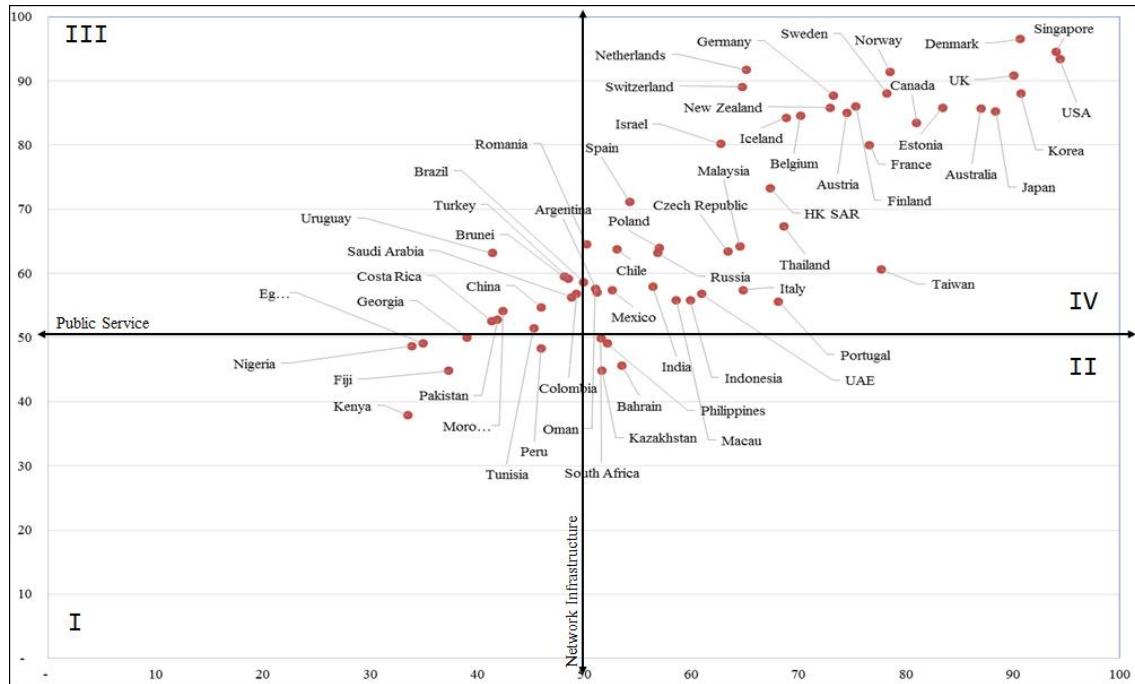


Figure 2: e-Government Development Matrix

II. e-Government Ranking by Indicators

The Waseda – IAC e-Government Ranking contains comprehensive benchmarking indicators in order to obtain an accurate and precise assessment of the latest development of e-Government in the major countries in ICT section. In 2015 Waseda team evaluated nine main indicators. This year’s ranking removed one sub-indicator in Network Preparedness -PC users. Based on the new trends of ICT, citizens may use smartphones, tablets or notebooks to connect with government and make transactions by various tools. Therefore, PC users are not necessary for e-Government development evaluation. Table 3 below shows all 9 indicators and their 32 sub-indicators.

Indicators	Sub-indicators
1. Network Preparedness/Infrastructure	1-1 Internet Users
	1-2 Broadband Subscribers
	1-3 Mobile Cellular Subscribers
2. Management Optimization/ Efficiency	2-1 Optimization Awareness
	2-2 Integrated Enterprise Architecture
	2-3 Administrative and Budgetary Systems
3. Online Services / Functioning Applications	3-1 E-Procurement
	3-2 E-Tax Systems
	3-3 E-Custom Systems
	3-4 E-Health System
	3-5 One-stop service
4. National Portal/Homepage	4-1 Navigation
	4-2 Interactivity
	4-3 Interface
	4-4 Technical Aspects

5. Government CIO	5-1 GCIO Presence 5-2 GCIO Mandate 5-3 CIO Organizations 5-4 CIO Development Programs
6. e-Government Promotion	6-1 Legal Mechanism 6-2 Enabling Mechanism 6-3 Support Mechanism 6-4 Assessment Mechanism
7. E-Participation/Digital Inclusion	7-1 E-Information Mechanisms 7-2 Consultation 7-3 Decision-Making
8. Open Government	8-1 Legal Framework 8-2 Society 8-3 Organization
9. Cyber Security	9-1 Legal Framework 9-2 Cyber Crime Countermeasure 9-3 Internet Security Organization

Table 2: The Main Indicators and Sub-Indicators

This ranking survey analyzes not only the development of national portal and ICT deployment in governments, but also looks into real operations by participating the conferences, workshops and forums, such as management optimization, internal processes, online services, and new trends in e-Government development and the relationship between governments and their stakeholders. The table 3 below shows the top ten e-Government rankings by 9 indicators in 2015:

Network Preparedness		Management Optimization		Online Services		National Portal	
No	Country	No	Country	No	Country	No	Country
1	Netherlands	1	Singapore	1	Denmark	1	Denmark
1	Denmark	2	Canada	1	Estonia	2	Estonia
3	Singapore	2	Denmark	1	Korea	2	Singapore
4	USA	2	Estonia	1	Singapore	2	USA
5	Iceland	2	Netherlands	5	Iceland	5	Australia
5	Norway	2	Switzerland	6	UK	5	Norway
5	Switzerland	2	UK	7	Finland	7	France
8	Finland	2	USA	8	Austria	8	UK
9	France	9	Australia	8	USA	9	Japan
10	Korea	10	France	10	Switzerland	10	Sweden

GCIO		e-Government Promotion		E-Participation		Open Government	
No	Country	No	Country	No	Country	No	Country
1	Singapore	1	Sweden	1	Australia	1	Australia
1	Korea	1	USA	1	Estonia	1	Canada

1	USA	3	Singapore	1	UK	3	USA
4	Japan	4	Korea	4	Canada	4	Denmark
5	Canada	5	Japan	4	Denmark	4	Germany
6	Denmark	6	Australia	4	France	4	Korea
6	New Zealand	6	UK	4	Singapore	4	UK
8	HK SAR	8	Denmark	8	USA	8	Singapore
9	UK	9	Chinese Taipei	9	Israel	9	Japan
10	Thailand	10	Italy	10	Japan	10	Austria

Cyber Security					
No	Country	No	Country	No	Country
1	Denmark	5	UK	8	Germany
1	Estonia	6	Singapore	8	USA
1	New Zealand	6	Japan	11	Canada
4	Australia	8	Austria	11	Norway

Table 3: Top 10 Countries on 9 Individual Indicators

1. Network Preparedness/Digital Infrastructure

Network preparedness is the first indicator in Waseda-IAC ranking and it is the basic infrastructural foundation for effective e-Government implementation. Different stages of infrastructure have long been available in many countries and have become an important tool to connect citizens and enterprises to government.

Infrastructure for e-Government development is no longer confined to Internet users, mobile subscribers or the number of broadband connections. We recognize that the foundation for the development of e-Government in a country depends on a backbone Network system. It is capable of connecting all bureaus and departments together via the core Government Backbone Network.

The ability to connect between local governments and the central government or among local governments is also the trend in the deployment of ICT infrastructure for e-Government development. The ability to share data and synchronize between agencies and government departments is also common in most developed countries. As the new trends in ICT and e-Government development, the platform moves to “cloud computing” and the number of “smartphones” rises daily. Consequently, mobile broadband will become one of the key network preparedness factors. Effective broadband access stimulates citizens to use such services and encourages the deployment of new services.

In the first place of the 2015 ranking for network preparedness are Denmark and the Netherlands. In Denmark, information infrastructure is very widely available, especially Internet with a broadband connection. Since 2010, the Danish government introduced digital signatures. With this digital signature, citizens use the same user ID and the same

password for online banking, government websites and a wide range of private services online. They also launched e-procurement, e-authentication, e-passport and e-payment in the very early stage. In the Netherlands, the backbone of the e-Government architecture is the Netherlands Government Reference Architecture (NORA 3.0). All government agencies have endorsed NORA. Through NORA, they can coordinate the activities within their own organizations.

2. Management Optimization

Management optimization reflects the utilization of ICT for improving government business processes and internal processes (back office in each organization). Based on this survey, we found that most of top ten countries in this indicator ranking have full scores. It means that management optimization is very important indicator on e-Government development, because it is related to the optimization awareness, enterprise architecture and also the administrative management system.

The Waseda – IAC e-Government Ranking considers “Management Optimization” to be a critical business function that underpins the operational, financial, accounting and strategic planning of business, social, health and administrative affairs within the country. In this indicator, European countries are almost dominant with seven countries on the list. Compared to last year, Singapore has a big jump and is ranked at 1st place, followed by seven countries in second place.

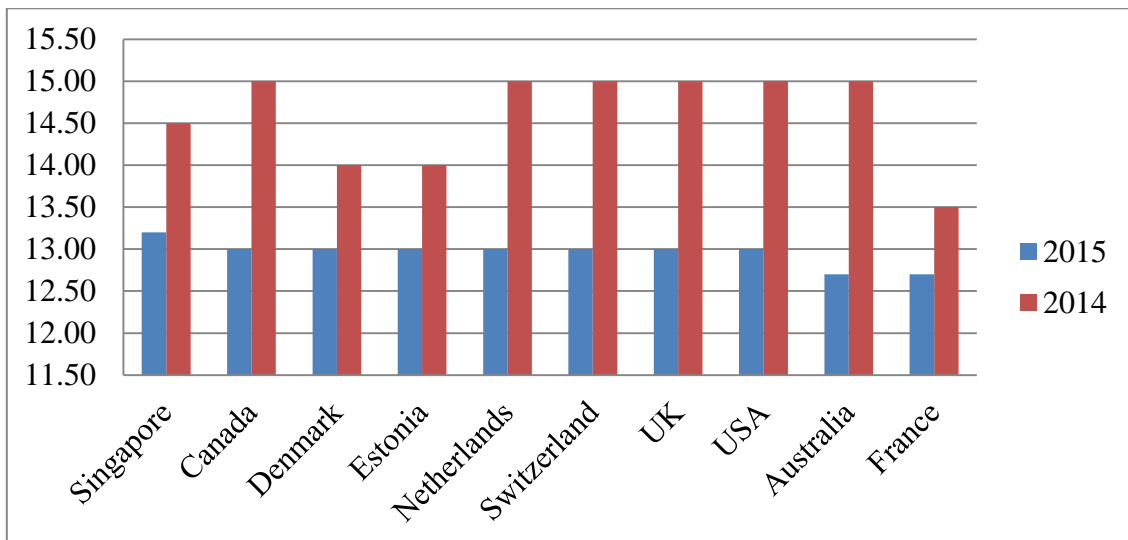


Figure 3: Top 10 Management Optimization 2014-2015

3. Online Services/ Applications

There are many definitions on [e-services]; it is a wide concept which includes services provided by organizations, companies or individuals using an Internet connection. The e-service concept has been used by researchers from the beginning of year 2000, and e-service operations mean that all or part of the interaction between the

service provider and the customer is conducted through the Internet, and e-service has a “front-end” Web-based system and a “back-end” information system.

In Waseda-IAC e-Government Ranking survey, this indicator refers to the systems of e-procurement, e-tax, e-custom, e-health and one-stop service. When evaluating e-Government development, the most recent trends show that some governments in developing countries have shifted to user-oriented strategies and have developed one-stop service portals. They are also planning to gradually expand and enhance a variety of integrated service delivery.

In general, there are no significant gaps in online service delivery between countries in the top 10. This year witnessed the enhancement of most countries in the top 10, except Estonia, Singapore and Korea which scored slightly lower than they did in 2014. Iceland for the first year being monitored by the ranking system stands in 5th position of the e-service delivery ranking.

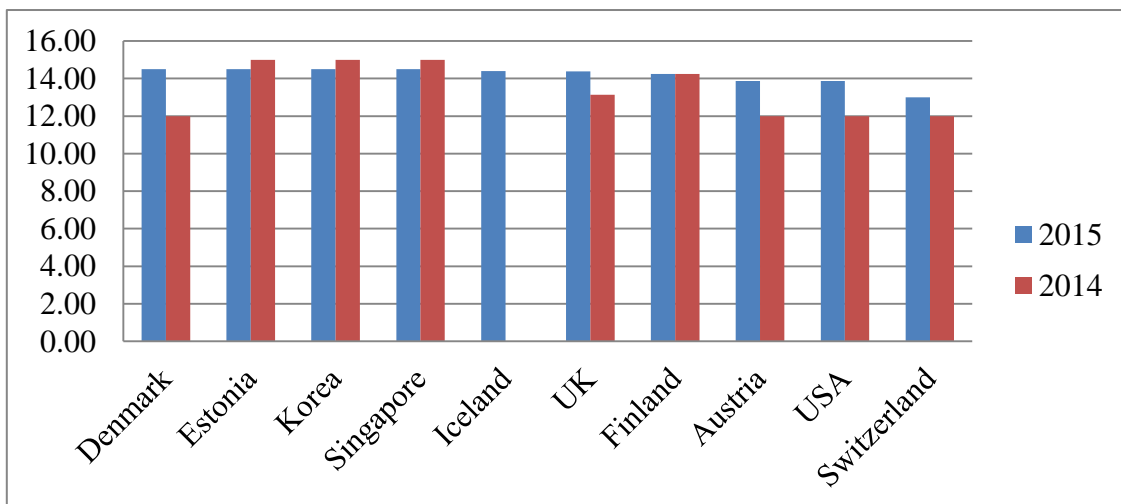


Figure 4: Top 10 Online Service 2014-2015

4. National Portal/ Homepage

National portal or one-stop service is the foundation of e-Government and a basic interface for stakeholders to access government in an electronic way. In public sector, this means that the government makes all services via one portal; in e-Government one-stop service is integrating all services and making them accessible via one gateway. National portal offers many benefits to users for public services—from citizens and businesses to the public administrators themselves—including faster, cheaper and superior services. Throughout eleven years of ranking, we noted that the national portal helps to reduce costs, improves perceptions of government efficiency on the part of citizens and also delivering benefits for both customers and government.

Many nations around the world integrated all services into one portal (national portal or one-stop service). In the public sector, one-stop service is one of the most

promising concepts of service delivery in public administration. Its implementation is included in the e-Government strategies of most countries.

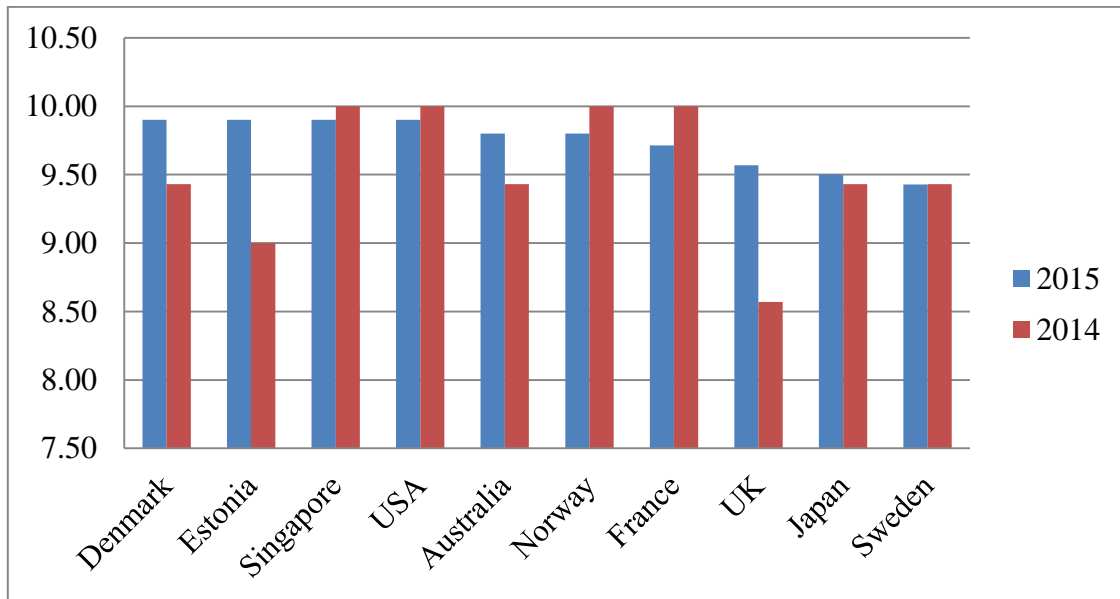


Figure 5: Top 10 National Portal 2014-2015

In this indicator, both Norway and Australia demonstrate a significant improvement in comparison with the years before. Both Estonia and the UK have made a significant improvement for their national portals this year gaining those 2 places in top 10 countries on national portal. Denmark found it in the first position of the national portal ranking together with Estonia, Singapore and the United States. Other countries such as the United States, Singapore, Australia, Norway, France and Sweden secured their positions on the table with little change in comparison with the previous year.

5. Government Chief Information Officer (GCIO)

In the public sector, government CIO plays a very important role and has been recognized worldwide. Since 2005, in the first International e-Government ranking of Waseda institute of e-Government, the important role of CIO for e-Government implementation was well recognized. The CIO is expected to align management strategy with ICT investment in order to achieve the balance among business strategy, organizational reform and management reform; hence, the Government CIO is considered by many governments to be one of the key factors in the success of e-Government implementation.

CIOs are now expected to achieve quantum-leap efficiencies, produce previously unheard-of capabilities, create information out of disparate data sets, and provide citizen services that are so fast, accurate, and user-friendly that the public’s trust in government achieves record heights.



Figure 6: Top 10 Government CIO 2014 – 2015

Striving for improvement GCIO quality, both Denmark and HK SAR have been rewarded for their efforts with the 6th and 9th positions in the top 10, respectively. Despite scoring lower than the previous year, Singapore, Korea, USA, Canada and Japan are still the leaders in this indicator and their positions remain unchanged

6. e-Government Promotion

The “e-Government Promotion” indicator measures the government’s activities toward the promotion of e-Government and distribution of e-services to citizens, businesses and other stakeholders. It includes activities involved in supporting the implementation of e-Government such as legal framework and mechanism (laws, legislations, plans, policies and strategies). In other words, the government carries out these activities in order to support the development of e-Services as well as e-Government as a whole. This indicator is one of main indicators in Waseda-IAC e-Government ranking because it shows the main legal framework in each country.

There are not many changes in the position of top 10 countries regarding e-Government promotion activities, except in the case of Denmark. The country has made a significant improvement in promoting e-Government - 8.67 score for 2015 in comparison with 5.33 as of the previous year - rewarding the country a place in the top 10 this year. By scoring full marks in this indicator, Sweden and the United States secured their positions at 1st and 2nd respectively.

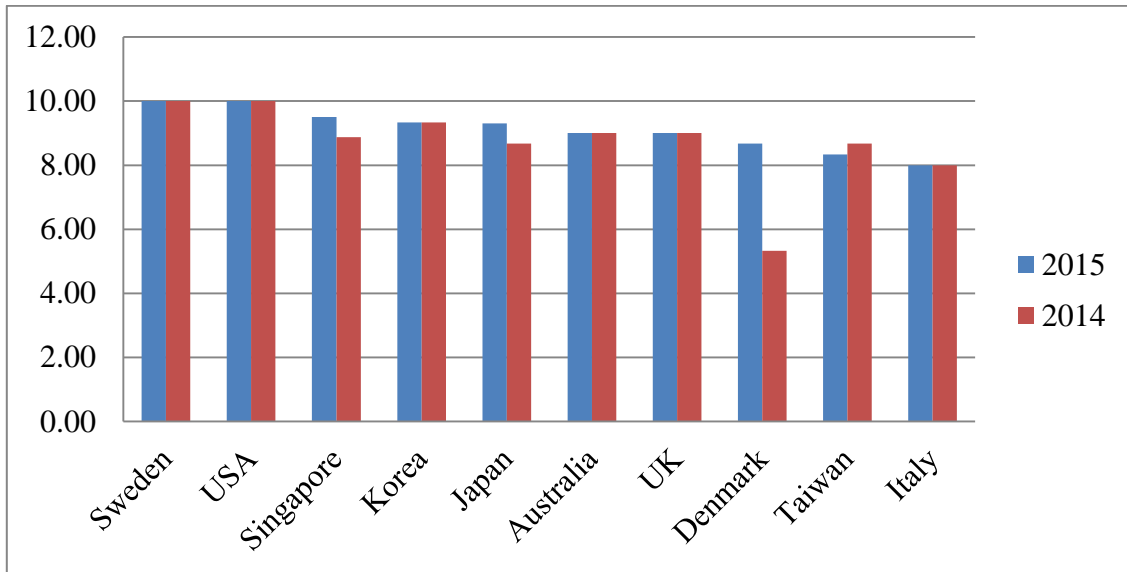


Figure 7: Top 10 e-Government Promotion 2014 – 2015

7. E-Participation/ Digital Inclusion

In Waseda-IAC e-Government Ranking, e-participation refers to ICT-supported participation in government and governance processes. Processes may be concerned administration, service delivery, decision-making and policy-making. Throughout this survey, we found that the participation from both government officers and citizens play an important role in the success of e-Government.

An e-participation indicator is used to take into account the “demand” side of e-Government as well as to see to what degree the people are using e-Government platforms especially in the light of Government 2.0. In this indicator, the Waseda e-Government ranking for digital inclusion uses e-information, interactive and e-decision making process as sub-indicators.

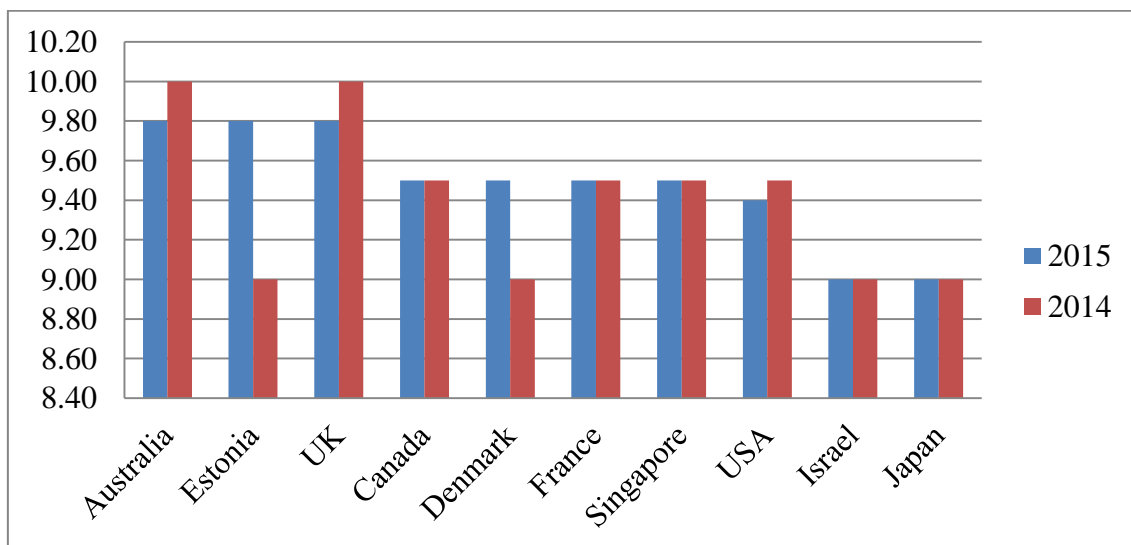


Figure 8: Top 10 E-Participation 2014 – 2015

In figure 8: Australia, Estonia and the UK shared the top position and Estonia has made a significant enhancement to e-participation by increasing its rank from 9th in 2014 to 2nd in 2015. The similar effort could be witnessed in the case of Denmark where the country jumped from 9th position in 2014, surpassing the United States to rank in 4th place for e-participation.

8. Open Government Data

Open Government/Data is one of the newest indicators in Waseda-IAC e-Government Ranking. This indicator evaluates an open and transparent of government. The top ranking countries on this indicator have provided the citizens with an application programming interface (API) that could help developers and researchers to create innovative citizen-centric applications. There are a number of small-scale utilization cases and application for smartphone and tablet.

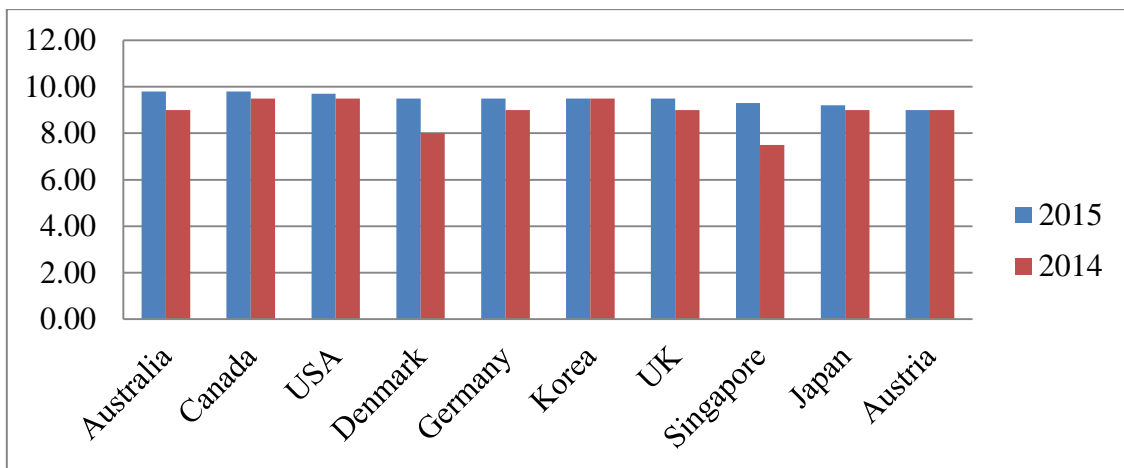


Figure 9: Top 10 Open Government Data 2014 - 2015

The evidence for the presence of Open Data is to review whether the e-Government application provides an RSS Feed, Web API Service, or an equivalent option.

Australia jumped over 4 steps to acquire the top position in Open Government while Singapore made a strike by increasing its position from 18th last year to 8th in 2015. Similar surprising found in the situation of Denmark which gained the 4th place from 14th last year.

9. Cyber Security

The security measures associated with individual e-Government systems are relatively similar to many e-commerce solutions. However, the span of control of e-Government and its unique impact on its user base requires a network that is greater than the sum of each individual system. E-Government faces the same challenges that faced e-business in the private sector.

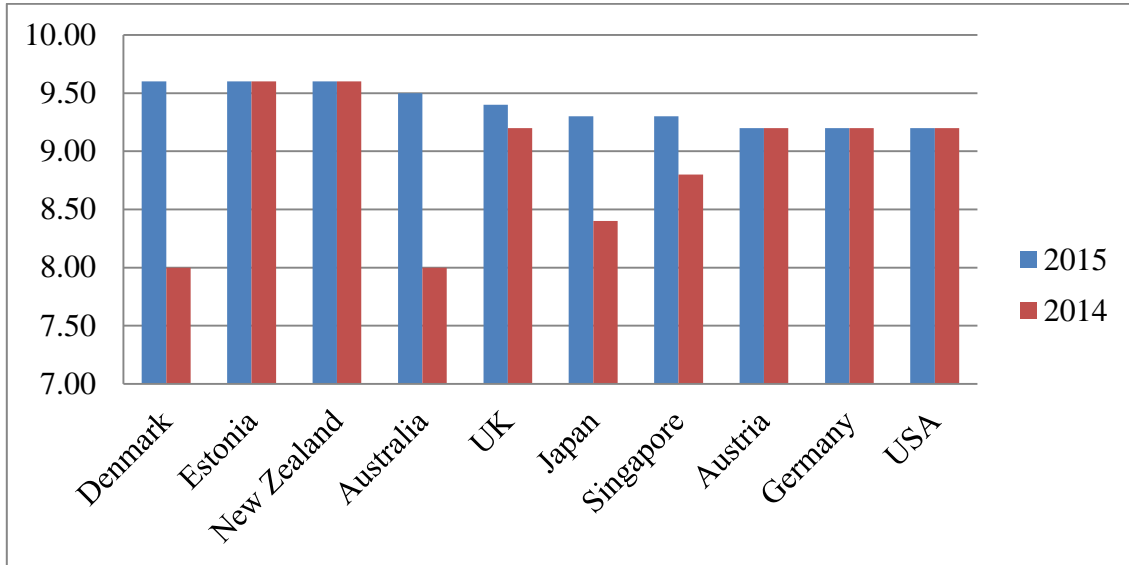


Figure 10: Top 10 Cyber Security 2014 - 2015

Both Denmark and Australia found themselves in the top 10 (1st and 4th respectively) with a huge improvement in the national cyber security score compared with last year. Both Estonia and New Zealand demonstrated their stability in cyber security by sharing the 1st position with Denmark.

III. E-Government Ranking by Organizations

1. Ranking of APEC Economies

APEC Economies			APEC Economies			APEC Economies		
No	Economies	Score	No	Economies	Score	No	Economies	Score
1	Singapore	93.80	8	Chinese Taipei	72.76	15	Chile	53.49
2	USA	93.58	9	Thailand	67.31	16	Mexico	53.41
3	Korea	89.39	10	HK SAR	65.24	17	Philippines	51.47
4	Japan	87.77	11	Malaysia	64.87	18	Brunei	51.06
5	Australia	86.30	12	Indonesia	60.11	19	China	48.36
6	Canada	81.45	13	Vietnam	57.03	20	Peru	46.21
7	New Zealand	76.66	14	Russia	56.56			

Table 4: e-Government Ranking in APEC Economies

This is the fourth consecutive year of monitoring and surveying the development of e-Government by organizations, APEC Economies, OECD countries. APEC Economies includes 21 economy members, Waseda-IAC e-Government ranking covers 20 members. The Institute of e-Government at Waseda University has been responsible for the management of APEC e-Government Research Center since 2005. Leading this

APEC group is Singapore, where government objectives are to fulfill the needs of their users and achieve maximum value for money for the taxpayer in 2015 and focus to the productivity and effectiveness improvement by using ICT. The top six countries in this group are also in the top ten in the total ranking.

There is no significant structural change compared to last year, except that China has slipped down from 16th place to 19th place in this year's ranking while Chile jumped from 19th place in last year's ranking to 15th place. In the 2015 e-Government ranking, Chile is in full swing and one of the top countries in Latin America in terms of Internet access and the Chilean government aims to provide better services as a main goal of e-Government.

Compared to last year, Peru is in the same situation ranked at 20th place, but the total score this year is higher than last year. Peru is still at the early stages of having an integrated e-Government, the Peruvian Government is working steadily to develop e-Government in Peru, but its pace is still slow compared to last year ranking. Figure 11 below shows the top 10 APEC Economies for e-Government development ranking.

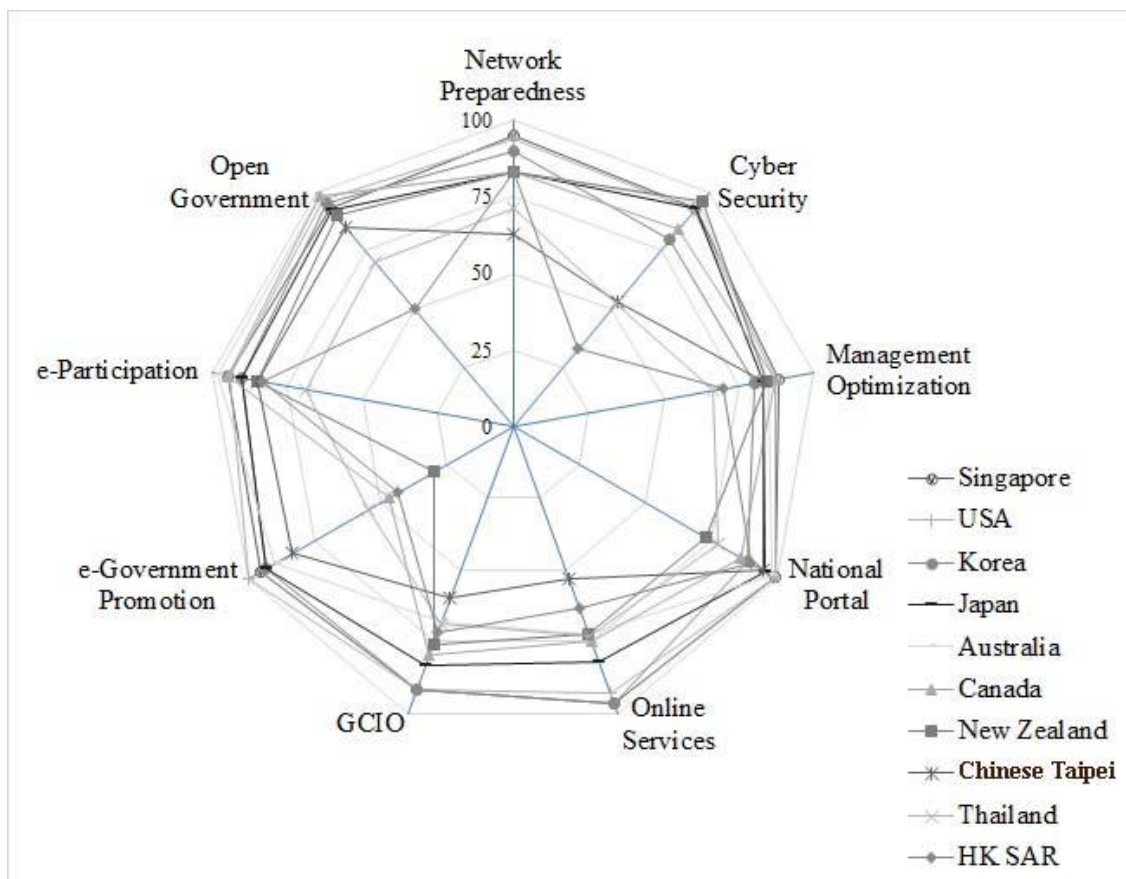


Figure 11: Top 10 APEC Economies

2. Ranking of OECD Countries

OECD Countries			OECD Countries			OECD Countries		
No	Country	Score	No	Country	Score	No	Country	Score
1	USA	93.58	11	Austria	77.26	21	Portugal	63.93
2	Denmark	91.52	12	New Zealand	76.66	22	Czech Republic	63.48
3	UK	90.17	13	Finland	76.49	23	Italy	61.30
4	Korea	89.39	14	Germany	76.46	24	Poland	57.30
5	Japan	87.77	15	France	73.39	25	Spain	57.12
6	Australia	86.30	16	Belgium	71.69	26	Chile	53.49
7	Estonia	84.87	17	Iceland	69.73	27	Mexico	53.41
8	Canada	81.45	18	Netherlands	69.53	28	Turkey	51.31
9	Norway	79.63	19	Switzerland	69.17			
10	Sweden	77.95	20	Israel	65.80			

Table 5: e-Government Ranking in OECD Countries

The 2015 ranking added Iceland as a new country and Iceland is also a member of OECD. Most of the countries in the top ten of this group are also the top countries in the overall world ranking, with the exception of Singapore as it is not an OECD member. The leaders of group are the United States, Denmark, the UK, Korea and Japan. They ranked for 1st, 2nd, 3rd, 4th, and 5th place respectively, followed by Australia at 6th, Estonia at 7th and Canada at 8th. The two last countries in the top ten are Norway and Sweden, both are Nordic countries.

Compared to last year Denmark jumped 9 steps from 10th place to a rank for 2nd place. Denmark has come a long way since it made the decision to establish a modern, robust digital infrastructure for the public sector. As part of its efforts to counter the digital divide, Denmark is promoting the enhanced accessibility of its public websites. In the area of ICT and aging, Denmark has established drop-in centers for the elderly to learn new ICT skills.

In the bottom of this group, Chile, Mexico and Turkey are developing countries. Compared to last year, Chile ranked in a higher place and ranked for 26th while Mexico downturn and ranked at 27th place. In Turkey, from the citizen point of view, despite actions already taken, there is still a shortage of enabling services and a lack of e-inclusion which is a barrier to achieving an information society. Therefore, for the 2015 ranking, Turkey ranked at the bottom in OECD countries group. Figure 12 shows the top 10 countries with matrix of 9 indicators in this group.

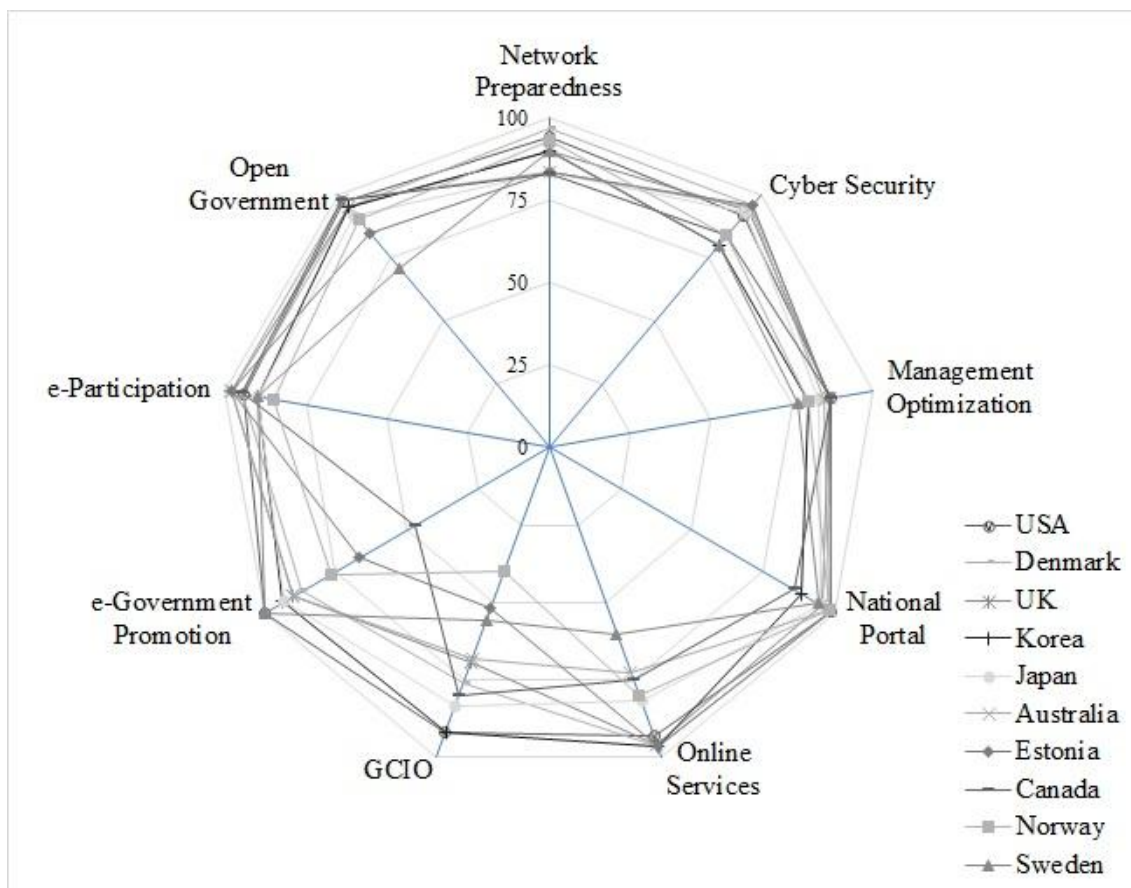


Figure 12: Top 10 OECD Countries

IV. E-Government Ranking by the Size of Population and GDP

1. Ranking in Big Population Countries (higher than 100 million)

Big Population Countries			Big Population Countries			Big Population Countries		
No	Country	Score	No	Country	Score	No	Country	Score
1	USA	93.58	5	India	56.42	9	China	48.36
2	Japan	87.77	6	Mexico	53.41	10	Pakistan	42.94
3	Indonesia	60.11	7	Philippines	51.47	11	Nigeria	38.37
4	Russia	56.56	8	Brazil	50.37			

Table 6: e-Government Ranking in Big Population Countries

In 2015, the Waseda-IAC e-Government Ranking continues to do the ranking by the size of population and GDP. For the size of population, Waseda-IAC selected countries with population higher than 100 million people. Most countries with large population often have a large territory as well. Therefore, these countries face many unique developmental challenges in e-Government, such as building a nationwide

broadband network, and delivering e-services to all citizens. There are eleven countries in this group.

The leaders of this group are the United States, Japan, and Indonesia. They are ranked for 1st, 2nd and 3rd place respectively. The United States is very mature in keeping up development in e-Government. And the Government is committed to delivering public services. The United States' objectives are to fulfill the needs of their users and achieve maximum value for money for the taxpayer. Currently, the focus is shifted to the improvement of productivity and effectiveness by using ICT.

The government has steadily made efforts to expand the utilization of online services as a main part of the e-Government initiative since 1999. In 2005, online applications at the national level covered 96% of all the administrative procedures. The use of this online application was 70% in 2014. To enhance e-Government, the government is making a new action plan to improve online applications for the further promotion of their use.

China, Pakistan and Nigeria are ranked at the bottom of this group. They ranked at 9th, 10th and 11th place. In China, several plans for the Information and Communication Technology (ICT) development had been proposed and some have been implemented already to improve service delivery through utilization of e-Government. Due to the big population and great regional differences in this developing country, the lack of talented government IT managers and integrated service system as well as transparency are still the main factor that restricts the development of e-Government. However, it is obvious that China has been devoting so much to improve e-Government services.

Pakistan is one of the emerging countries in the world which is trying to make a difference by implementing e-Government at fast rate. The Pakistani government believes that Information technology is a vital tool in order to accelerate economic growth, efficient governance and human resources development. The Government of Pakistan focuses on enhancing the government operation by implementing e-Government Strategy. The Government has approved the e-Government Strategy and Plan to implement across all organizations of the government. Pakistan has critical issues in implementing the authentication scheme for full e-Government services, rollout of broadband in Pakistan. Community and citizen engagement initiatives by government, digital divide and digital inclusion projects being managed by government creation and use of digital content data repositories. And the development of digital strategies by government in Pakistan is delayed by the lack of ICT resources all over the country.

Nigeria is a developing country with a rapidly growing telecommunications market. Both internet users and mobile users are increasing. The Government has many strategies and plans to develop and improve e-services to citizens, and there is much

evidence to show that e-services like e-payment and e-health are developing in this country. But if the Nigerian government would like to spread e-services to citizens more, they must have a specific plan to improve these services through effective national portal. Nigeria still needs to improve further on its ICT services and telecommunication systems. All Nigerian states now have some form of mobile coverage, however, there are still millions of Nigerians with limited or no access to ICT services due to lack of network infrastructure.

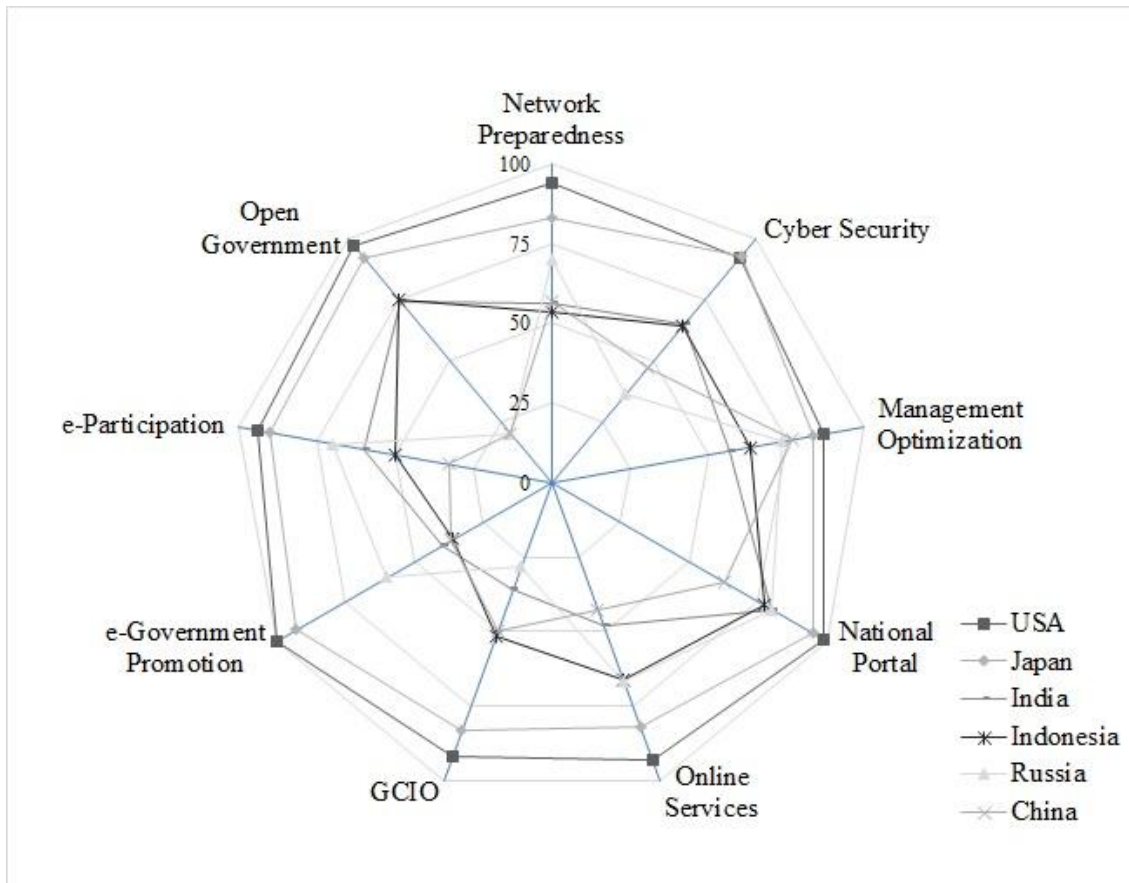


Figure 13: Top 10 Big Population Countries in e-Government

Among the most populous countries, both the U.S. and Japan are the most advanced in e-Government development. They have good positions in all indicators.

2. Ranking in Small Population Countries (Less than 10 million)

Small Population Countries			Small Population Countries			Small Population Countries		
No	Country	Score	No	Country	Score	No	Country	Score
1	Singapore	93.80	8	Finland	76.49	15	Oman	51.60
2	Denmark	91.58	9	Iceland	69.73	16	Brunei	51.06
3	Estonia	84.87	10	Switzerland	69.17	17	Bahrain	50.50
4	Norway	79.63	11	Israel	65.80	18	Uruguay	44.01

5	Sweden	77.95	12	HK SAR	65.24	19	Costa Rica	42.06
6	Austria	77.26	13	UAE	58.10	20	Fiji	37.54
7	New Zealand	76.66	14	Macau	56.27			

Table 7: e-Government Ranking in Small Population Countries

The 2015 ranking selected twenty countries in this group compared only ten countries last year. This group consists of countries with a population fewer than 10 million citizens. Half of top ten countries are developed countries and other half of countries are developing countries. Leading in this group is Singapore, followed by Denmark in 2nd and Estonia in 3rd place. Nordic countries are major players in the top ten of this group. In the bottom of this group are Uruguay, Costa Rica and Fiji. They ranked for 18th, 19th and 20th place respectively.

Singapore has implemented e-Government successful and effectively. This is an excellent case study for the best practices for other countries to learn and apply. Singapore, so called a city-state, has few local government divisions. In order to monitor and manage its e-Government development better, the Singapore government has chosen a centralized approach. The government also owns the entire central ICT infrastructure, and manages all services and policies affecting the life and work of citizens.

Fiji got low position in small population countries group and also near the bottom of overall ranking. The e-Government program of Fiji is at implementing stage to design the infrastructure and provide government services online.

In small population countries, Network preparedness is not a major issue. Also, the indicators for GCIO and e-Government promotion have relatively low attention.

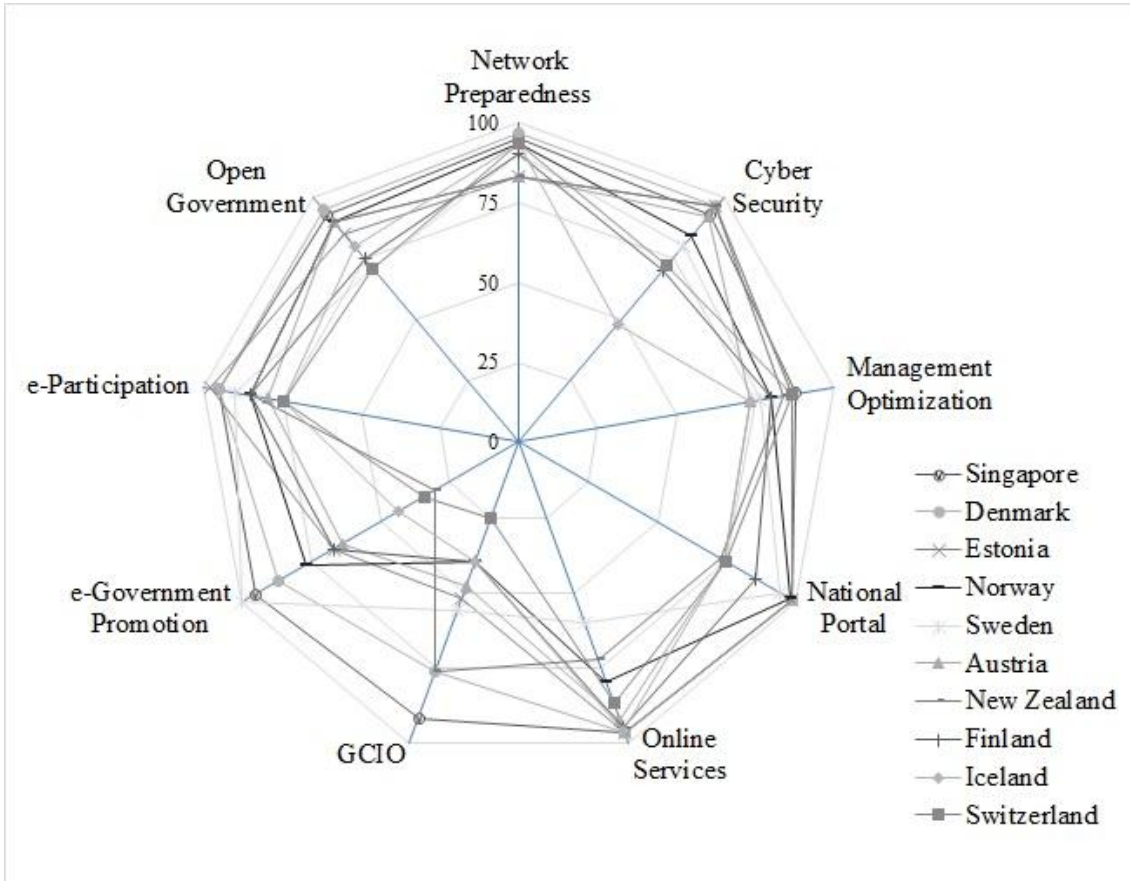


Figure 14: e-Government Ranking in Small Population Countries

3. e-Government Ranking in Top 10 Countries with Highest GDP in World

Highest GDP Group			Highest GDP Group		
No	Country	Score	No	Country	Score
1	USA	93.58	6	France	73.39
2	UK	90.17	7	Italy	61.30
3	Japan	87.77	8	Russia	56.56
4	Canada	81.45	9	Brazil	50.37
5	Germany	76.46	10	China	48.36

Table 8: e-Government Ranking with Highest GDP Group

This year the United States, China and Japan are the biggest economic powers in the world based on size of GDP. In terms of e-Government, the United States and Japan are in first and third place, respectively, while China ranked at the bottom and ranked at 10th place. Followed Japan is Canada ranked at 4th place, the country replaced India compared last year. There are three European countries Germany, France and Italy followed Canada and ranked for 5th, 6th and 7th place respectively. Compare to last year, Russia stands in the same at 8th place.

In Russia, maturity of services provided through one-stop portal is not yet uniformed among the country regions and is expected to be steadily enhanced. The government aims at least 70% of services to be available through the portal by 2018 and E-Health systems are expected to be optimized and integrated expanding the services available through one-stop e-Government portal to include requests of sick-leave certificates, electronic prescriptions and electronic inquiries.

Brazil is now still struggling to improve the efficiency of the public policy and service for societies via e-Government, and tries to improve efficiency and transparency of the management process through giving opportunity for its citizens to access government information and to participate in some political administrative decisions. Brazil is one of the biggest population and territory, therefore to provide the e-services to all citizens are required to setup a good infrastructure, now the situation is low awareness of e-Government services is a barrier preventing its effective use, therefore it can be established that this is also an obstacle to the assessment of citizen demand. In High GDP countries, management optimization has gained the good attention (figure 15)

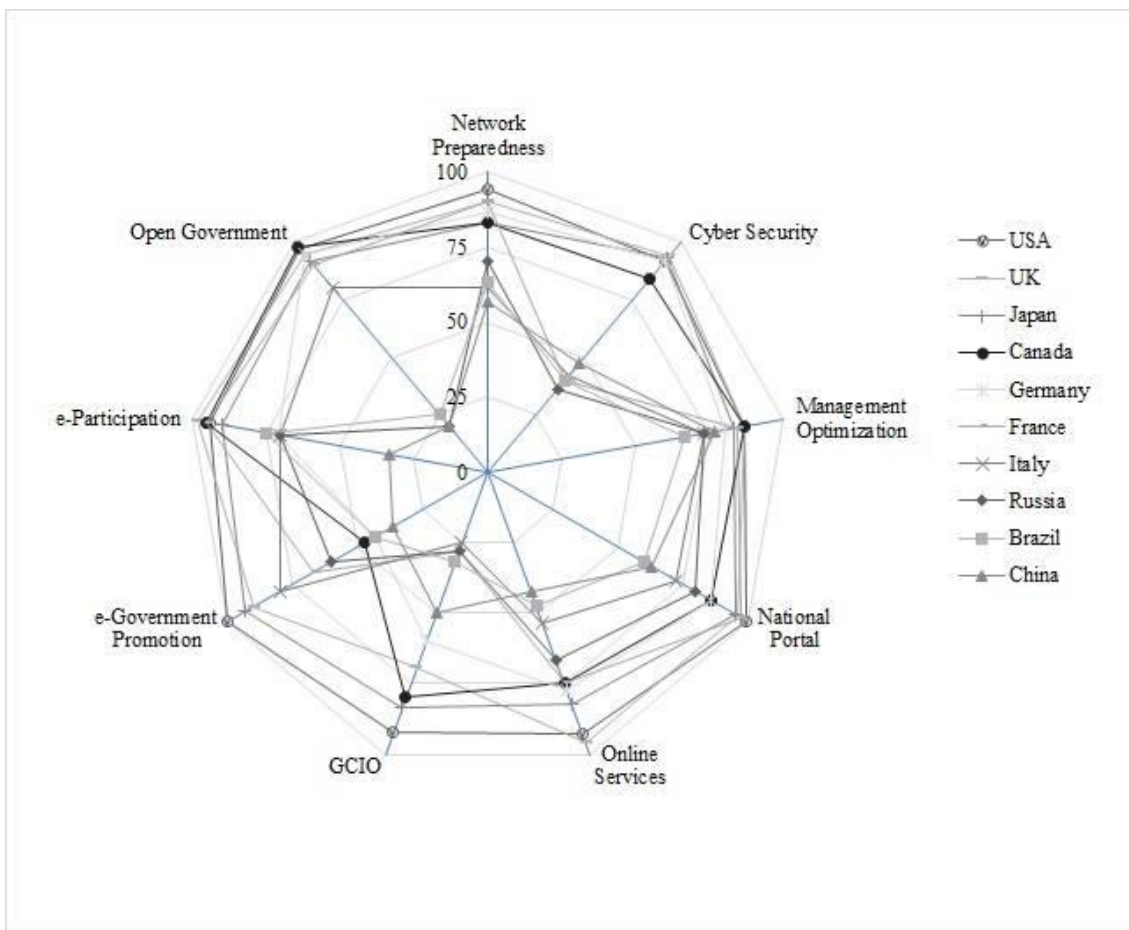


Figure 15: Top 10 e-Government Ranking in Highest GDP Countries

V. e-Government Ranking by Regions

1. Ranking in Asia-Pacific Countries

Asia-Pacific Countries			Asia-Pacific Countries			Asia-Pacific Countries		
No	Country	Score	No	Country	Score	No	Country	Score
1	Singapore	93.80	7	Thailand	67.31	13	Macau	56.27
2	Korea	89.39	8	HK SAR	65.24	14	Philippines	51.47
3	Japan	87.77	9	Malaysia	64.87	15	Brunei	51.06
4	Australia	86.30	10	Indonesia	60.11	16	China	48.36
5	New Zealand	76.66	11	Vietnam	57.03	17	Pakistan	42.94
6	Chinese Taipei	72.76	12	India	56.42	18	Fiji	37.54

Table 9: e-Government Ranking in Asia-Pacific Countries

The Asia-Pacific region consists of fifty-two countries and territories, but this survey covered only eighteen countries, due to Cambodia has been removed for this year of the survey. Compared to last year, there has been no change in the top 9 countries. Both Indonesia and Vietnam got higher positions while India dropped and ranked at 12th place. The bottom of this group is Pakistan and Fiji, they have the same positions compared with last year.

The Korean Government has been expanding the integration of e-Government towards the Smart e-Government promoting the usage of public service and active participation in anytime and anywhere. Currently, the Ministry of Public Administration and Security (MOPAS) is responsible for affairs related to national administration, government organizations, personnel management, and e-Government and disaster safety. Under the slogan of “Moving toward a smaller and more efficient government”, MOPAS actively supports the local government in terms of local administration, finance, and regional development for the promotion of greater local autonomy. In order to perform those strategies, Korean government needs to set up the agenda based on prediction of social and technical changes, and analysis of future needs. Several challenges could be identified along the development journey of Korea e-Government are digital divide, internet addiction, and cyber ethic.

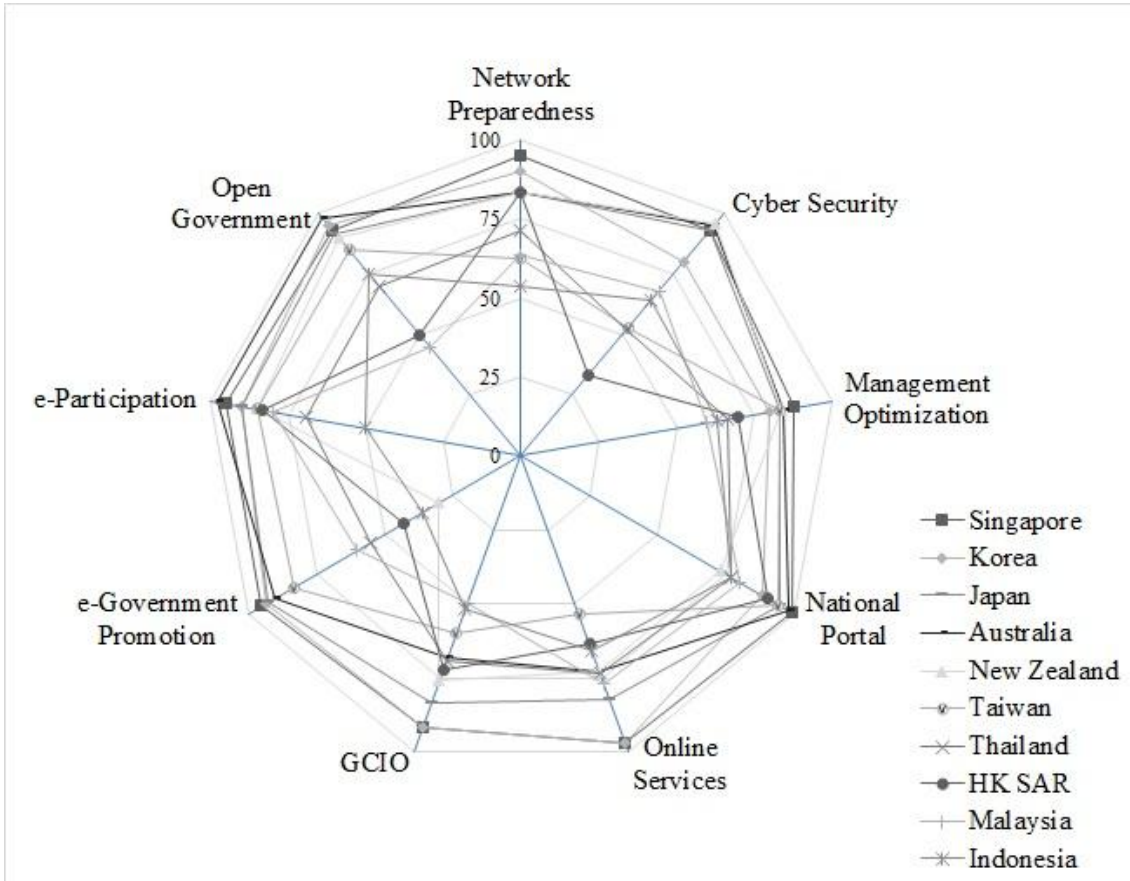


Figure 16: Top 10 e-Governments Ranking in Asia-Pacific Countries

2. Ranking in Americas Countries

Americas Countries			Americas Countries			Americas Countries		
No	Country	Score	No	Country	Score	No	Country	Score
1	USA	93.58	5	Brazil	50.37	9	Venezuela	44.65
2	Canada	81.45	6	Argentina	50.32	10	Uruguay	44.01
3	Chile	53.49	7	Colombia	49.36	11	Costa Rica	42.06
4	Mexico	53.41	8	Peru	46.21			

Table 10: e-Government Ranking in Americas Countries

The 2015 ranking marks the new comer-Costa Rica has been added into the ranking survey, it makes the total of countries in Americas becomes eleven members. The US ranked for 2nd place in overall ranking but in this group, the US leads all countries and ranked at 1st place, followed by Canada ranked for 2nd, Chile, Mexico and Brazil ranked for 3rd, 4th, and 5th place respectively. Venezuela, Uruguay and Costa Rica stood at the bottom of this group and ranked for 9th, 10th, and 11th place.

In 2014, Canadian government has launched [Digital Canada 150]. The Digital Canada 150 is aimed to take the full benefit of digital opportunity for Canadian. It is

expected that in 2017, in a 150th anniversary of Canada, Canada will thrive the digital Canada which accentuates five pillars; connecting Canadians, protecting Canadians, economic opportunities, digital government, and Canadian content. E-Government implementation is quite advanced in Canada with most of its services being not just informational but also transactional. With the continuation of support from the government, Canada is likely to continue to be one of the top leaders of e-Government in the world. By introducing the Digital Canada 150, Canada has shifted its e-Government to the digital government.

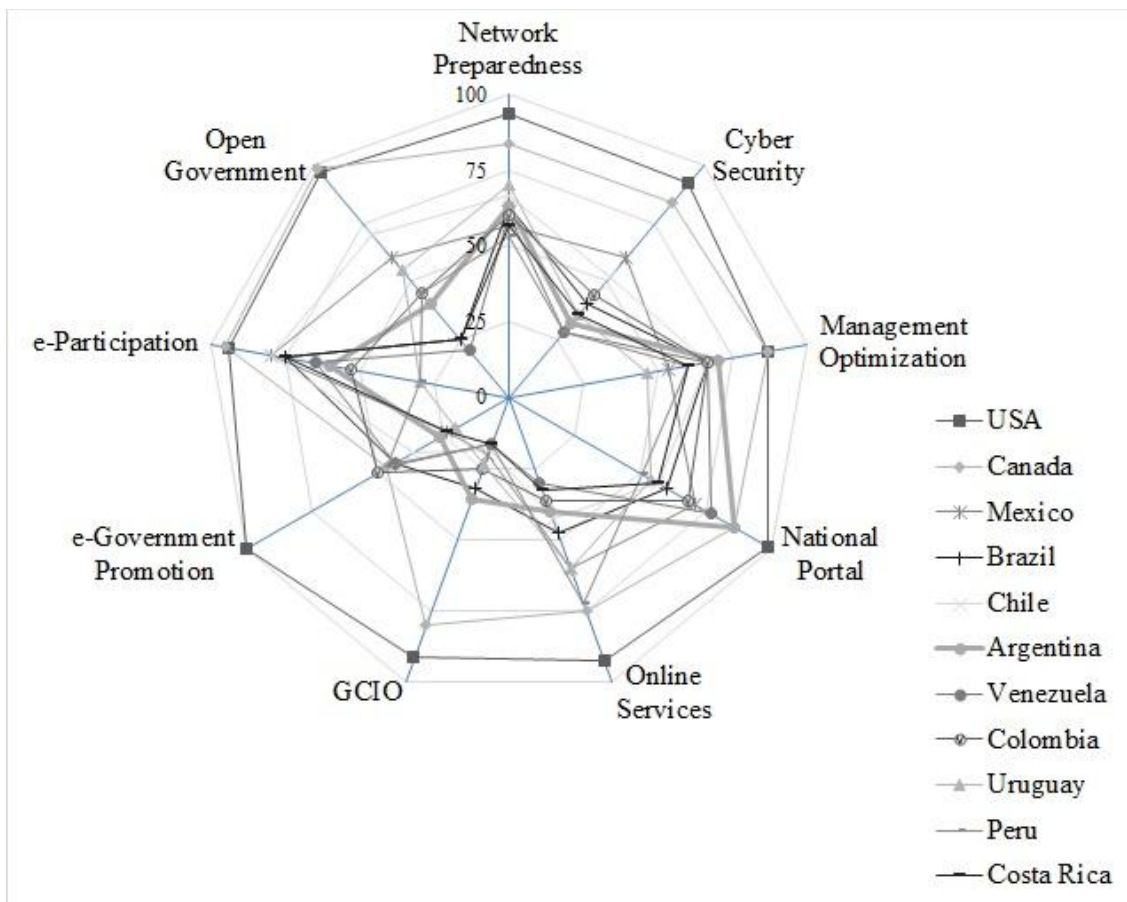


Figure 17: Top 10 e-Government Ranking in Americas Countries

3. Ranking in European Countries

EU Countries			EU Countries			EU Countries		
No	Country	Score	No	Country	Score	No	Country	Score
1	Denmark	91.52	8	Germany	76.46	15	Czech Republic	63.48
2	UK	90.17	9	France	73.39	16	Italy	61.30
3	Estonia	84.87	10	Belgium	71.69	17	Poland	57.30
4	Norway	79.63	11	Iceland	69.73	18	Spain	57.12
5	Sweden	77.95	12	Netherlands	69.53	19	Romania	53.11

6	Austria	77.26	13	Switzerland	69.17
7	Finland	76.49	14	Portugal	63.93

Table 11: e-Government Ranking in European Countries

EU countries are encouraged to deploy advanced technologies, institute better governance and e-services while simultaneously pursuing greater transparency, efficiency and inclusion.

This year, the new comer is Iceland, despite of the first time in the ranking. Iceland got a high position and ranked in middle of this group. Compared to the last year, Denmark replaced the UK to rank for first place, followed by the UK and Estonia ranked in 2nd, and 3rd place. In this group Finland declined 4 steps and ranked at 7th this year, same with Finland, Italy also slipped 4 steps and ranked for 16th place. In the bottom is Romania, the country has not changed position compared last year survey.

The UK is very mature in keeping up development in e-Government. And the government is committed to delivering public services. The UK's objectives are to fulfill the needs of their users and achieve maximum value for money for the taxpayer. Currently, the focus is shifted to the productivity and effectiveness improvement by using ICT. New strategy was already set up in 2011 to implement this idea.

Italy recently launched an advance mobile application for people with rheumatoid arthritis, called the Rheumatoid Arthritis App. Electronic health records have been also implemented in all of Italy's autonomous regions and provinces by December 2013, with digital prescriptions introduced in the country subsequently. Furthermore, in a country burdened by paperwork, the new decree opens up the possibility of registering births and deaths, and payments to public administrations online, through a simplified system.

Since the beginning of the decade, Romania has passed fundamental ICT-related laws, planned and implemented the first steps towards an Informational Society but there is still much that needs improvement. Romania has the advantage of good ICT infrastructure in place and of the great availability of IT professionals. The e-Romania project has yet to be implemented. Local e-Government initiatives are underway in several regions but there are big differences among regions. A government oversight board would be necessary. E-participation also needs to be enhanced.

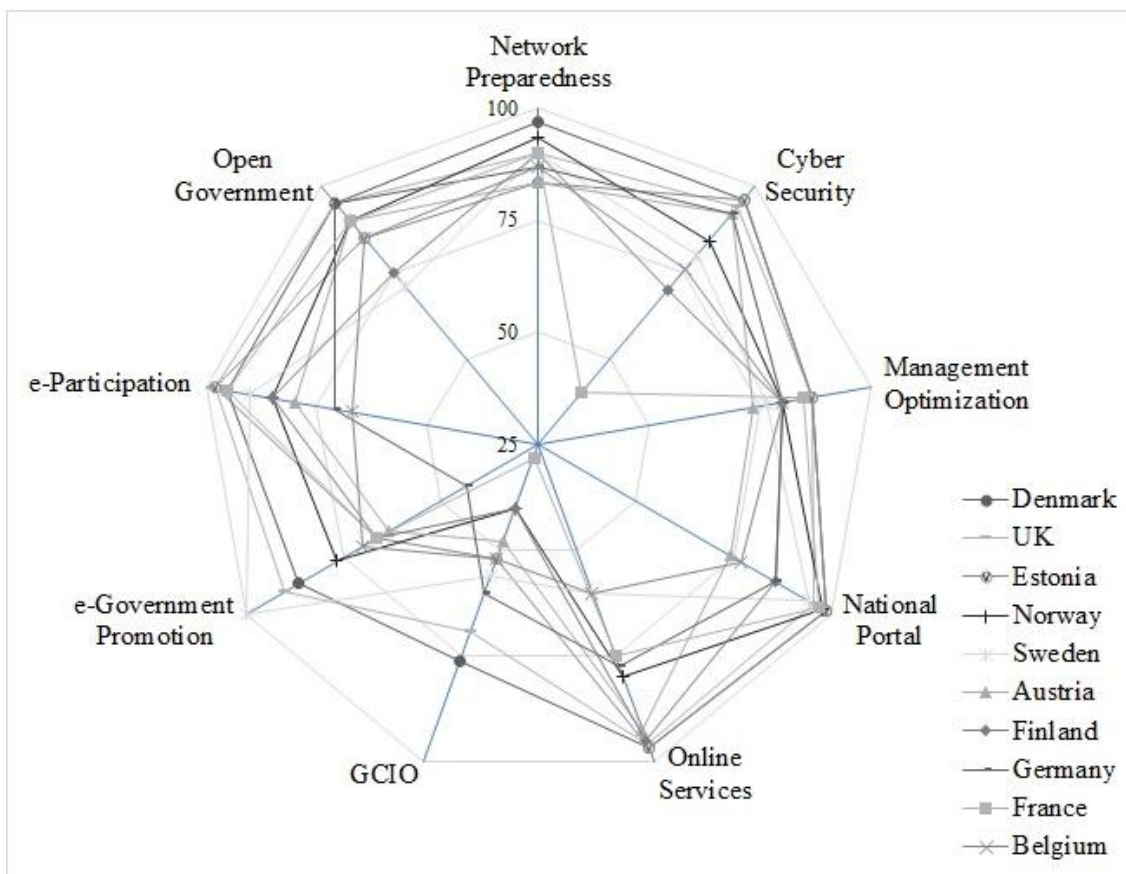


Figure 18: Top 10 e-Governments Ranking in European Countries

4. Ranking in Africa, Middle East and CIS Countries

Africa, Middle East & CIS			Africa, Middle East & CIS			Africa, Middle East & CIS		
No	Country	Score	No	Country	Score	No	Country	Score
1	Israel	65.80	6	Bahrain	50.50	11	Morocco	43.13
2	UAE	58.10	7	South Africa	49.30	12	Georgia	40.73
3	Russia	56.56	8	Kazakhstan	47.73	13	Nigeria	38.37
4	Oman	51.60	9	Saudi Arabia	47.48	14	Egypt	37.19
5	Turkey	51.31	10	Tunisia	45.87	15	Kenya	32.91

Table 12: e-Government Ranking in Africa, Middle East and CIS Countries

This group includes countries from Africa, Middle East and CIS, included new countries – Bahrain, Oman, and Morocco, the 2015 ranking marks Uzbekistan and Iran have been removed from ranking survey. In total this group ranking has fifteen countries. Israel ranked in the 1st place, followed by UAE in 2nd and Russia in 3rd. The bottom of this group is also the same countries in the overall ranking. They are Nigeria, Egypt and Kenya.

In terms of e-Government, Israel is an advanced country within the region. E-Government in Israel is well matured and widely used in administration implemented using the five Layer model of e-Government. The overall e-Government strategy places enhanced information access and integration. A strategic solution enabling the government as a whole to perfectly harness information and knowledge resources in order to achieve an order of magnitude improvements in effectiveness, efficiency and service delivery.

The new trends of e-Government in UAE are interesting for the rest of the region. The next phase for the UAE – which is seeking to establish itself as smart government leader in the region – will be to win users over to the latest apps and building m-government to help citizens have a better channel to apply for their services. The future is going to be about interconnecting government to government, and more collaboration on the government to citizen side.

The development of e-Government in Egypt has progressed hand in hand with Egyptian efforts to establish public sector reforms and encourage the development of the information society. These two trends constitute important existing drivers for e-Government. Following the uprisings that culminated in the revolution led to the ongoing transition process, a third e-Government driver has emerged, centered on the needs of the citizens and the civil society.

Kenya as well as other developing countries is developing the e-Government agenda with the assistance of other countries and international organizations. The Kenyan e-Government master plan was developed by the Kenya ICT Authority, and is anchored in the constitution of Kenya.

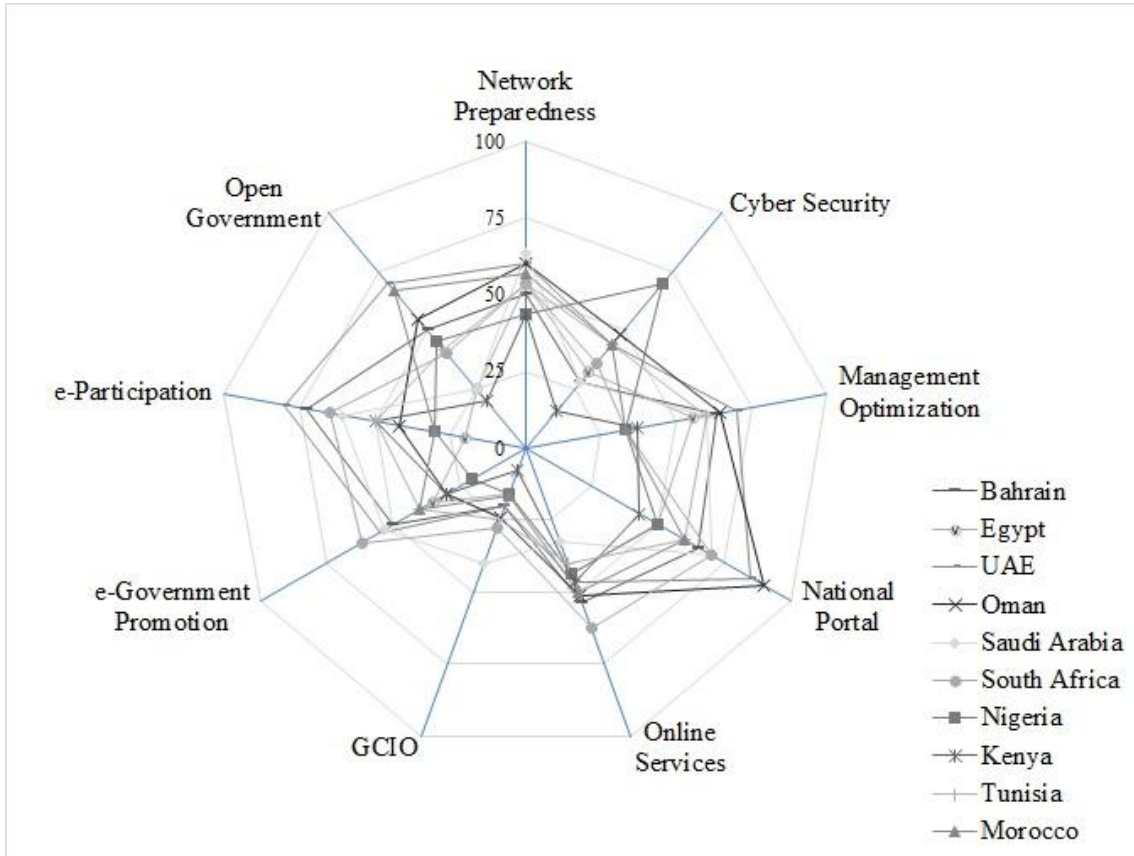


Figure 19: Top 10 e-Government Ranking in Africa, Middle-East and CIS Countries

VI. Methodology

The Waseda – IAC e-Government Ranking survey is based on analyzing the development of mainly 9 major indicators and 32 sub-indicators in the public sector, as well as the relationship between governments and their stakeholders. They include: (1) Network Preparedness; (2) Management Optimization; (3) Online Service; (4) National Portal/ Homepage; (5) Government Chief Information Officer; (6) e-Government Promotion; (7) E-Participation/ Digital Inclusion; (8) Open Government/ Data and (9) Cyber Security. To evaluate data, this survey is based on the following flowchart:

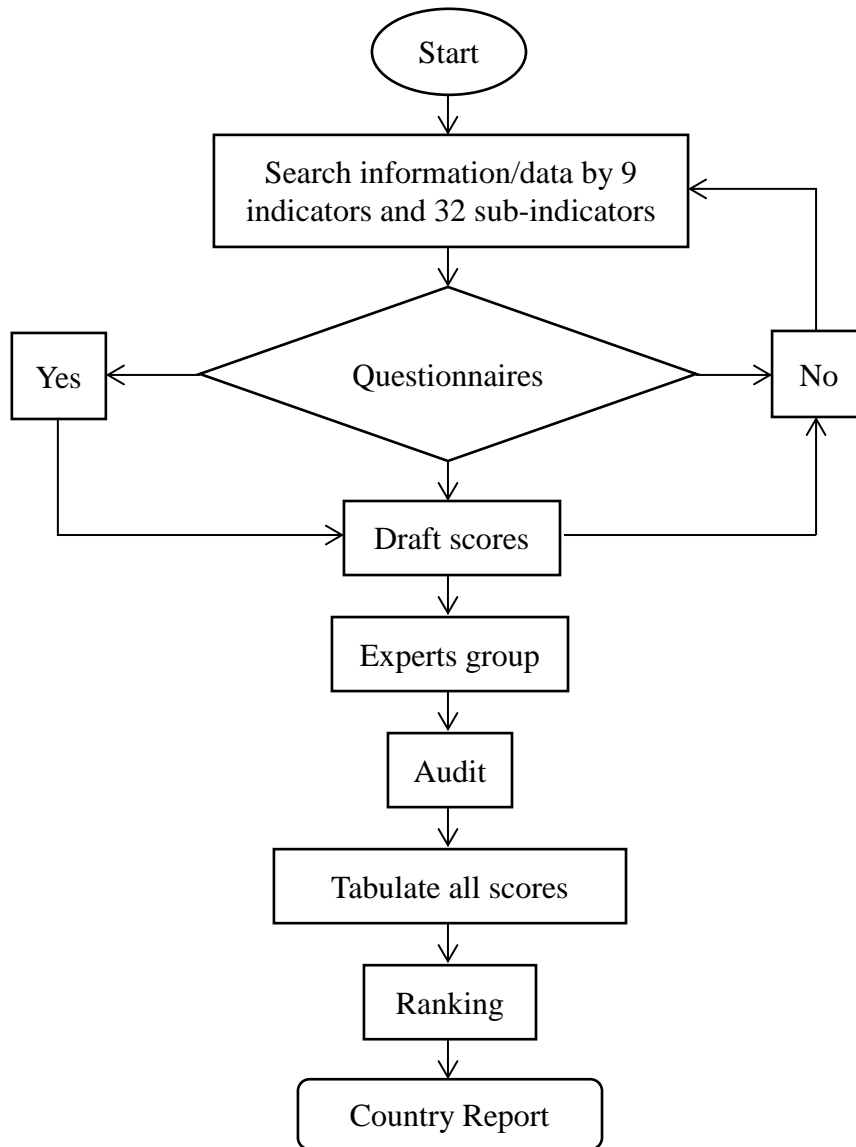


Figure 20: Processes Diagram

In addition to the research team of Institute of e-Government, Waseda University. There are 12 prominent academia from 12 world class universities in 12 countries under the umbrella of IAC who have served as global experts group for advising and monitoring the survey

For evaluating the framework of researches, to check and review the methodology, indicators and targeted countries as well as monitoring 63 country reports for 2015 edition, two global Experts group meetings have been organized by Institute of e-Government, Waseda University and IAC in Singapore in June and in Guimaraes City, Portugal in October 2014. Also, Researchers have attended many international meetings/workshops/forums in Bangkok, Jakarta, Brussels, Geneva, New York and Paris as well as Tokyo as home ground in 2014/15.

Mathematically, Statistics of the Waseda – IAC e-Government Ranking is a weighted average of the nine indicators scores. The scores are based on the table below:

No	Indicators	Raw score	Max raw score	Max weighted score	Scoring parameters	Final score
1	Network Preparedness	A	30	5%=W1	$W1/30*100 = X1$	$A*X1$
2	Management Optimization	B	15	12%=W2	$W2/15*100 = X2$	$B*X2$
3	Online Service	C	40	15%=W3	$W3/40*100 = X3$	$C*X3$
4	National Portal	D	35	8%=W4	$W4/35*100 = X4$	$D*X4$
5	Government CIO	E	25	12%=W5	$W5/25*100 = X5$	$E*X5$
6	e-Government Promotion	F	30	10%=W6	$W6/30*100 = X6$	$F*X6$
7	E-Participation	G	20	10%=W7	$W7/20*100 = X7$	$G*X7$
8	Open Government	H	20	10%=W8	$W7/20*100 = X8$	$H*X8$
9	Cyber Security	I	25	10%=W9	$W7/20*100 = X9$	$I*X9$
Total score:						Σ

Table 13: Weighted Scores Method

VII. Contributors List (● indicate group leader)

1. List of Global Experts Group

- Prof. Dr. Toshio Obi, Director, Institute of e-Government, Waseda University, Japan, President, International Academy of CIO, Director APEC e-Gov Research Center.
- Prof. Dr. J.P Auffret, Chair, MOT/CIO Program of George Mason University, USA.
- Prof. Dr. Lim Swee Cheang, Director, Institute of Systems Science, National University of Singapore.
- Prof. Dr. Luca Buccoliero, Marketing Department Bocconi University, Italy.
- Dr. Elsa Estevez, Senior researcher, United National University, Portugal.
- Prof. Dr. Suhono Harso Supangkat, Bandung Institute of Technology, Indonesia.
- Prof. Dr. Francisco Magno, Director, Institute of Governance De La Salle University, Philippines.

- Prof. Fang Chun Yang, Dean, Academy of e-Government, Peking University, China.
- Associate Prof. Dr. Jirapon Sunkpho, Thammasat University, Thailand.
- Prof. Dr. Alexander Ryzhov, School of IT management, Federal Academy of National Economy, Russia.
- Prof. Dr. Brabec Zdenek, Czech Technical University in Praha, Czech Republic.
- Prof. Dr. Tomi Dahlberg, Information System, University of Turku, Finland.

2. List of Professors and Experts at Institute of e-Government, Waseda University

- Prof. Dr. Naoko Iwasaki, Waseda University - Prof. Dr. Takashi Kobayashi, Tokai University
- Prof. Dr. Tatsuyuki Negoro, Waseda University - Prof. Dr. Yoshio Tozawa, University of Industrial and Science
- Prof. Dr. Kiyoshi Nakamura, Waseda University - Mr. Keiichi Iwata, Manager NTT Data
- Prof. Kiyohide Higuchi, Waseda University - LLC Naoko Mizukoshi, Lawyer
- Prof. Dr. Hiroko Kudo, Chuo University - Mr. Akira Watari, ex-Director of IT, Toyota Motors

3. List of Researchers and Research Assistants at Institute of e-Government, Waseda University

- Mr. Nguyen Manh Hien - Mr. Pingky Dezar Zulkarnain
- Mr. Bandaxay Lovanxay - Mr. James Giguere
- Mr. Nguyen Ngoc Anh - Ms. Yang Yao
- Dr. Diana Ishmatova - Dr. Nguyen Thi Thanh Hai