#### CHAPTER THREE

### RESULT AND DISSCUSSION

This chapter describes the findings and to analysis the formulated problems presented in the previous chapter of this research. This chapter will discuss about how ROK and Indonesia implement the concept of e-government in their country and how far the program has run from 2012 to 2016, especially in how ROK governments' succeed in implementation of e-government that make a possibility for Indonesia governments' refers about. The content of that will be presented in this chapter in which will be divided in to four sub-chapters to test in-depth the implementation of e-government in each country. The first sub-chapter will discuss about the establishment of e-government in Indonesia and ROK. The second sub-chapter will discuss about the challenges that Indonesia and ROK faced in implementing e-government. The third sub-chapter will discuss about the successful factors in the implementation of e-government in Indonesia and ROK. The last sub-chapter will discuss about the possibility of e-government implementation in Indonesia referring to ROK.

### 3.1. E-Government Status

#### 3.1.1. E-Government Readiness in Indonesia

The development of information and communication technology (ICT) has changed various sectors in human life, especially in government

services which have been impressed by rigid bureaucratic systems (Rokhman, 2016).

In Indonesia, e-government was officially introduced to public administration by Presidential Directive No 6/2001 on Telemetric, which states that the government of Indonesia has to use telemetric technologies to support good governance. Haryono and Widiawardono (2003), implies that there is at least 5 (five) reasons why Indonesia government must implement e-government; (1) as a support for the government change towards a democratic governance practices, (2) to support the application of authority balances between central and local government, (3) as the facilitation for central and local government to communicated, (4) giving an access to the public to gain more openness and as an opportunities for the government to increased the public trust, and (5) as a transformation towards information society era (Haryono & Widiwardono, 2003).

Followed by Presidential Decree No. 3/2003 which mentioned several crucial points regarding to the e-government implementation; (1) government need to develop the reliable and trustworthy services in where affordable for the public, (2) it is a compulsory for the government to be equal in restructuring the management systems and the working processes of e-government in central and local government, (3) government need to optimizing the utilization of information and technology development, (4) government need to improve the numbers of participation of the private or business sectors in the development of e-government, (5) government need

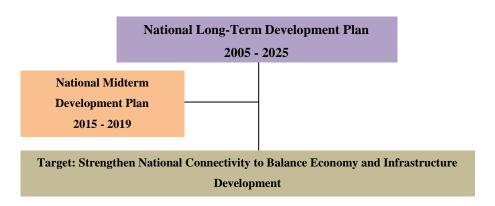
to develop the human resources in the government offices and improving the e-literacy in the communities, and (6) by using systematic approach government need to understand the realistic measurement in aims to develop e-government (Dekrit Presiden, 2003).

Followed by the Ministry of Communication and Informatics (KEKOMINFO) with a guideline that regulated all government agencies both central and local government. The guideline regulates the development of government portal infrastructure, management of government electronic documents, planning development of e-government, ICT training for supporting e-government implementation, and implementation of the local government websites (Kementrian Komunikasi dan Informasi, 2003).

Another policy that regulated e-government is Law No.11/2008, this law focus on; (1) a legal certainty, where written rules are needed in order to implementing the application equally, (2) the information and technology are used as the facility of the peoples, (3) there should be no discrimination in implementing the development of technology (Presiden Republik Indonesia, 2008).

Based on National Long-Term Development Plan 2005 - 2025 and National Midterm Development Plan 2015 – 2019, the targets of the government are to strengthen National Connectivity to Balance Economy and Infrastructure Development (BAPPENAS, 2005).

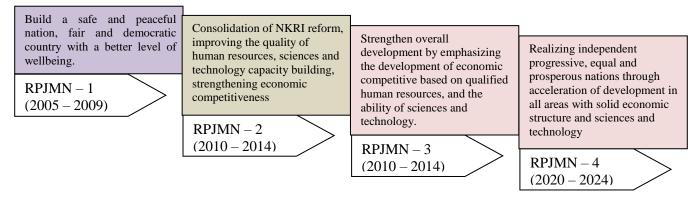
Figure 3.1.1. National Development Plan



Source: Rencana Pembangunan Jangka Panjang Nasional 2005 - 2025 (BAPPENAS, 2005)

National Long-Term Development Plan 2005 – 2025 is divided into National Mid-Term Development Plan 2005 – 2009, National Mid-Term Development Plan 2010 – 2014, National Mid-Term Development Plan 2015 – 2019, and National Mid-Term Development Plan 2020 – 2024. Each of the National Mid-Term Development Plan focussed in different aspects which are made to support the next National Mid-Term Development Program.

Figure 3.1.2. Midterm Stages 2005 - 2025

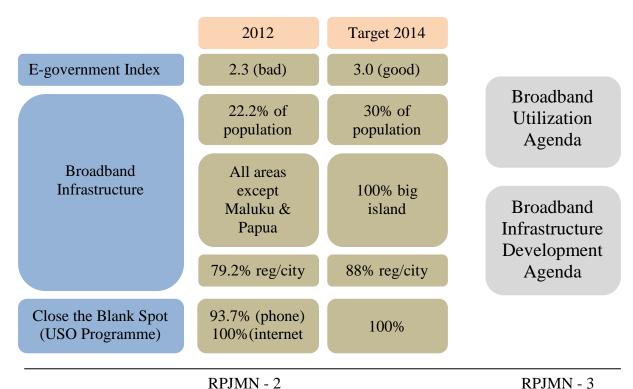


Source: Rencana Pembangunan Jangka Menengah Nasional 2005 – 2025

(BAPPENAS, 2004, 2010, 2015)

Most of broadband infrastructure is expected to be done in Indonesia before the mid of RPJMN -3. In hence, the development of RPJMN -3 is more focused on the level and quality of utilization (Kementrian Komunikasi dan Informasi, 2015a).

Figure 3.1.3. Broadband Development Direction Concept Based on RPJMN 2015-2019



Source: Rencana Pembangunan Jangka Menengah Nasional 2015-2019
(BAPPENAS, 2015)

In realizing the program, Indonesia governments make four targets as stated in National Midterm Plan 2015-2019, there are; (1) Minimizing the

Blankspot by converging 100% of telecommunication and internet access and converging 80% of TV and radio broadcasting, (2) High speed internet access that able to reach 497 district/city capital in optic backbone network, 71% penetration of broadband service (20Mb), and 10% penetration of broadband mobile services (1Mb), (3) Optimizing spectrum frequency use with a 500 Mhz spectrum frequency availability for wireless broadband (LTE), (4) Connecting all of government institution through ICT or making integrated government systems (BAPPENAS, 2015).

According to Ministry of Communication and Information Republic of Indonesia (KEKOMINFO), there are around 950 out of 3150 Higher Education Institutions teach a program related to ICT with around 550.000 students in 2015. In hence, based on KEKOMINFO this numbers was more than enough for the human resources that Indonesia needed in realizing e-government practices in Indonesia. Moreover, the ICT investment is keep growing in aspects of hardware and software, and networking which is focussed in government usage. In term of policy and regulations Indonesia government had develop the content of the policy and regulations, such as; (1) National ICT Council will be focusing in Coordinating ICT Flagship, (2) Ministry of Communication and Information focus in the use of ICT for community access point, (3) Ministry of Education is focus in promoting the use of ICT for teaching and learning (Kementrian Komunikasi dan Informasi, 2015a).

### 3.1.2. E-government Readiness in Republic of Korea

Public sectors are viewed as a rigid establishment with poor service quality and inefficient operations (Moon & Bretschneider, 2002). However, the number of citizens' demands keeps increasing in public services delivery aspect (Salsabila & Purnomo, 2017). The fruition of capabilities is predisposed by the pacing of experience (Eisenhardt & Martin, 2000). Government need to concern about the public ability in absorbing the new information which is very limited and it is very dangerous if the public become overwhelmed because the sudden changes (Cohen & Levinthal, 1990). This reason become one of the obstacles that government mostly need to faces in establishing e-government, in where government needs to re-think about their existing modes of operation in establishing new strategic that initiatives and evolutionary in fast-moving and competitive environment for the public sectors operation based on the current situation (Moon, 2017). In doing so, government can develop their strategy by analyzing and evaluating the current environment (Ho, 2002). To achieve sustainable competitive advantage for organizations for the long period, government and business can use the technology as a resource and better alignment (Jarvenpaa & Leidner, 1998; Salsabila & Purnomo, 2017).

In 1986, ROK officially introduced e-government for the first time to the public together with the enactment of Act on Promotion of Information and Communication Network Utilization and Information. However, the establishment and the realization of e-government it-self were started in 1997 under the leadership of President Kim Dae Jung.

In 2014, Ministry of Science, ICT and Future Planning (MSIP) as the ministry who is in charge of ROK's industrial innovation is concentrating on spreading the power of industries under the new vision of creative economy, and promises to open a new possibility for ROKn in the future based on international cooperation with an endless passion and global spirit (Salsabila & Purnomo, 2017). Those five strategies are aims to build a better country where everyone is happy (MSIP, 2014b).

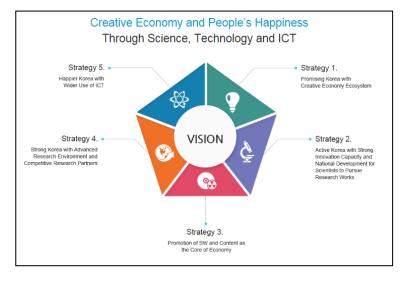


Figure 3.2.1. Ministry of Science, ICT and Future Planning Vision

Source: MSIP (MSIP, 2014b)

Each of the strategies that are made by Ministry of Science, ICT and Future Planning (MISP)'s Vision has different focus and goals, the *first* strategy called as *Establishment of Creative Economy Ecosystem* focused

in encouraging and realizing the public ideas and imaginations since the ROK government believe that a innovation will lead the country to be a better country. In realizing the creative economy ecosystem, MSIP using five techniques; (1) build the Republic of Korea with a full of creativity, ideas, and talents by make national movement of "imagination", cultivation of inter-disciplinary science talents, cultivation of ICT; (2) translating all of the creative ideas into commercialization and entrepreneurship by making a strong commercialization capacity of university and government-funded research institutes, and for supporting the people's ideas; (3) transforming the people's ideas into a new industries and jobs in aims to strengthen existing industries by utilizing S&T and ICT, promoting of internet- related industries, and supporting nationwide information; (4) supporting local industries to become a industry-academia-research community by developing one specifics local industries, fostering of local industries expert, establishing an ecosystem of infrastructure and strengthen the role of local community; and (5) creating, protecting, and utilizing intellectual properties by creating high valuesadded IP, advancement of IP protection system and maximization of use on IP and proper compensation.

The second strategy is National Research Development & Innovation Reinforcement focus in making a strong innovation capacity and national research development for scientist to pursue research works by using 4 techniques; (1) strengthen the fundamental of creative Research &

Development with future oriented Strategic R&D by Open Ecosystem R&D plan, R&D Investment, and improving assessment; (2) fostering and promising future growth engine through smart approach by development of future core technology, i.e., stem cell, brain research, nano-materials and clean energy, space powerhouse with independent technologies, and possession of radiation medical technology & development of nuclear power technology; (3) cultivating government funded research institutes into world's best research institute by re-establishment the role of government-funded research institutes (focusing in the large-scale of public, original technologies, and larger proportion of project support fund in government-funded institutes major project fund), establishing a stable research environment (focusing on a better working environment of nonregular workers, and improving project based system), and spreading of research performance (focus in business activities of research institutes, and expansion of SME technology transfer); (4) building a researchfriendly society for scientist and engineers by doing expansion of reception rate or S&T pension fund, beneficial to patriots and veterans in S&T and implementation of related laws, job creation through promotion and support for cooperative association for scientist and engineers, cultivation and support for female scientist and engineers, and operation of support center for retired scientist and engineers.

The third strategy of MSIP is Promotion of SW and Content as the Core of Economy in which, the main idea of 1+1 amount to  $\infty$ , MSIP using

4 techniques in pursuing it; (1) fostering SW, the language of the 21st century (SW education programs for elementary and middle schools/ Onsite SW education for universities and companies, SW-local industry convergence/ SW Convergences Cluster for job creation, SW core technology development, SW research activation, and foundation for fair trades of SW); (2) to go global with Korean-style content by cultivation of Korean-style content, sharing and utilization of original source, and project for shared growth/ calls for participation of content SMEs; (3) to remove regulatory barriers among media industries and nurture new convergence service by make a better regulations on technology convergence service, cutting-edge broadcasting service, and promoting of smart media and advertisement industry; (4) become a world's best network to provide fertile soil for C-P-N-D ecosystem by on setting of nationwide Giga internet era (ensure 90% penetration rate of 1 Giga internet by 2017, promoting of the world's 1st 10 Giga internet service/ tech development by '13, beta service by '14), more free WiFi zones (ensure 90% penetration rate of 1 Giga internet by 2017 from 2000 place into 10000 places), infrastructure for next-generation mobile telecommunication (development of wireless internet service up to 10 times faster than LTE/Spectrum auction for 1.8/2.0 GHz bands).

The *fourth* strategy, *International Cooperation and Globalization*, is focus in making a strong Korea with advanced research environment and competitive research partners with 3 techniques; (1) securing leadership in

the global community; (2) developing international science business belt into a global research base for basic science, promoting creativity of global researchers, improving Future Nobel Laureates in Science Research, and effective business commercializing basic science research outcomes; (3) expanding the scale of K-move by make a strategic placement for advancing into the global market (establishing responsible office for supporting venture companies and increasing the number of IT support centers aboard), Korean ICT talents in the global job markets, Global K-Startup (supporting globalization by encouraging investment).

The *fifth* strategy is *Happier Korea with Wider Use of ICT*, in which, the strategy is focus in making a wider ICT usage by using 4 techniques; (1) ICT as tool to resolve social issues; (2) reducing household communication cost; (3) build a safe and convenient internet environment; and (4) to deliver happiness through post office network (MSIP, 2014b).

It can be from 5 strategies above that the main focus of MSIP are on the infrastructure, especially in education and technology aspect in aims to build a world's best infrastructure in the using of e-government. It also can be seen that ROK ensuring that the plan starting from the root. By performing a variety of ways to realizing the innovation and ideas from its' people into a real program by improving the education from primary school to university, doing a variety of investments to the world of research, and provide adequate facilities and security for scientists and engineers to create a better human resources to be a professional in its own

specialties will build a strengthen the process to achieve its goal. Followed by a contiguous plan as supporting factors so the program run well right after the programs are made or after the infrastructure is ready. Putting a right person in the right place to make it efficient and effective is one of its focuses (Salsabila & Purnomo, 2017).

In realizing this program, the strategy that ROK takes is to change the Closed Ecosystem to Open Ecosystem. The Closed Ecosystem is a system that each of the user institutions and businesses are developing and building application software, platforms, or servers on their own in a closed method, this system causing a low rate of performances development. Meanwhile, the Open Ecosystems is a system that anyone can develop and provide services using an open platform. In such an open innovation ecosystem, ideas are transformed into services, creating the possibility where the potential of each individual (government institution and business) can maximized their performances to give the best public service to the citizens (MSIP, 2014a).

**Old System New System** Method Closed Innovation Open Innovation Service A Service B Service Z Open Platform (Open Test-bed) Concept Government: Government selects pilot services · Government: Government provides an open to be led by the government (decision-making on platform environment for service development and requirements, functions, methods, etc.) → Secure provision (under collaboration with global/large budget and order projects businesses and communication service providers) · Private sector: Private sector obtains order for · Private sector: Private sector transforms ideas into Stages each project (SI provider - small and medium-sized services and provides them (supporting service subcontractor) → Develop/ construct according to development of small and medium-sized venture the requirements of government pilot projects companies)

· Government: Each government institution builds

and uses systems separately

Figure 3.2.2. Open Ecosystem of ROK

· Government: Government purchases and uses

private-sector services

Features

- There is a lack of interoperability between each system as well as redundant system development
- There is a burden of expenses for development, construction, and operation
- It is difficult to respond to environmental changes
- Interoperability is improved and data can be connected and used
- Realization of economies of scale and scope can minimize the cost burden
- Flexible responses are ensured when there are environmental changes

Source: Master Plan for Building the Internet of Things (IoT) (MSIP, 2014a)

In short, referring to Klievink and Janssen (2009), he systems showed that ROK has reach the 4<sup>th</sup> stage models, *Inter-organizational integration*, that is focus on what citizens demand, rather than what individual needs, services should be leading, resulting in inter-organizational integration. This means government, business or private sectors, and others non-governmental organizations that involved in a service-delivery chain need to work together. The various processes involved in carrying out the citizen request are integrated in an overall process or one portal (Salsabila & Purnomo, 2017).

The public services delivery systems are one of the examples that show that ROK government has been integrated. For example is in the permit making process; if the citizen wants to make a permit they just need to visit related institution or administration through internet or homepage. In doing so, the citizens' are only need to fill they personal information which is already stored in government cloud or information systems. In short they just need to log-in and put their security pass-code to confirm their identity. The next step that the citizens' need to do is to go to visit city hall or its branch (kios-k) that located in every small town in ROK or they also able to just come to the

nearest bank for payment submissions. In this case, they are not required to resubmit their personal data requirement. It is because all of the data including income and insurance already tossed in government server which makes it more effective and efficient (Nakamura & Kim, 2018; Salsabila & Purnomo, 2017).

The systems are able to be implemented well because the government works together with the businesses or a private sector in aims to give the best public service delivery to the public. It is started on 2014 the MSIP promote the Open Innovation (MSIP, 2014a).

Although the aloofness of e-government establishment between Indonesia and ROK is 4 years, but Indonesia has been able to reach ROK in term of realizing e-government it is proved by the existence of the Broadband Development Direction Concept 2015 – 2019 as one of the program of National Long-Term Development Plan from the Indonesia. Based on the plan that the government of Indonesia and ROK made, the focuses are merely to develop the infrastructure and also to develop human resources.

Both Indonesia and ROK put a lot of investment to ensuring the establishment of e-government went well. In Indonesia case, the government paid a lot of intention to the development of broadband infrastructure by ensuring that the broadband infrastructures are spread well in all island in Indonesia in 2014, Meanwhile, the numbers of Higher Education Institution that teach ICT is another proved that shows that Indonesia government is serious in establishing e-government by enchanting human resources skills.

The government of ROK also put a lot of efforts in ensuring that the e-government systems that had already introduced e-government 4 years earlier than Indonesia become a sustain plan by the enactment of Creative Economy and People's Happiness Through Science, Technology and ICT plan with 5 strategies in 2014. ROK government put a lot of investment in building the world's best networks by setting of nationwide Giga internet era. In term of educational areas, ROK governments put a lot of investment in funding every research in realizing e-government systems by working together with all of government institutions, non-governmental institutions, citizens, mass media, and others actors that engaged in the establishment of e-government.

In short, both Indonesia and ROK governments are really serious in establishing e-government. Although the time gap between Indonesia and ROK in terms of e-government introduction to the public, it does not make Indonesia government left behind in the establishment of e-government. There are two similarities between Indonesia and ROK in term of e-government development plan. *First*, Indonesia and ROK governments paid a lot of attention in infrastructure in developing ICT and realizing the implementation of e-government. *Second*, Indonesia and ROK governments allocated a lot of budget for education in aims to make sure that the program establish well.

# 3.2. Integrated Government E-government

#### 3.2.1. Integrated Government In Indonesia

In establishing e-government, government need to work really hard and put a lot of effort in ensuring the programs established well. From all of the country around the world, not all of it is able to establish the program. There are some countries that meet some challenges and obstacles in establishing e-government. One of those countries is Indonesia. As it has been mentioned earlier that Indonesia introduce e-government for the first time on 1997 in where the usage of e-government it-self is only for the President since it was launched and used in the White House. Indonesia officially introduce e-government as a public administration tools was in 2001 by the declaration of President Decree on telemetric technologies as an answer for the realization of good governance concept. In the next following years another laws and regulations were made to support the establishment of e-government. Even though there are Presidential Decree, laws, and regulations Indonesia still meet a lot of challenges and obstacles.

Ministry of Communication and Information Indonesia (2010) indicated there are 7 (seven) challenges that need to be considered by the government. First is a *convergence law*, a convergence applications and services every sector (broadcasting, telecommunication, internet) regulated by separated law and will using one licensing approach and should be integrated by develop convergence law. Second, *infrastructure*,

telecommunication infrastructure need to be upgrade to introduce convergence application and upgrading only could be done by expanding capacity of access and backbone in several cities. Third, *content and application*, due the high demand on digital access channel that able to be accessed by the public in easy way to be understand. Fourth, *local industries*, where is the involvement of local industries in development of the program are very important. Fifth, *Cyber Crime*, Indonesian still faces carding case on online transaction and misuse of information to manipulate business and transaction. Sixth, *a free flow information* that focus on how to enrichment domestic cultural (way of life) with global information where pornography still a one of big issue. Seventh, *children and women protection*, an abuse of child and woman on internet and human transaction on internet is another issue that Indonesia government need to face (Kementrian Komunikasi dan Informasi, 2010).

In 2015, Ministry of Communication and Information Technology (KEKOMINFO) revealed the newest issues that Indonesia government meet in establishment of e-government, such as; (1) Infrastructure Gap, (2) Low Information Literacy, (3) Inefficient Spectrum Frequency Use, (4) Expensive Broadband Service, (4) Cybercrime, and (5) Not-Connected Government Network (Kementrian Komunikasi dan Informasi, 2015a). These fact shows that there is no significant changes in the development of e-government. It can be seen from the issues that Indonesia's government meets the same problems for the past 5 years.

Regarding to United Nations E-Government Knowledge Database, Indonesia e-government index is keep decreasing from 2012 until 2016. The data shows that in 2012 Indonesia e-government index was in the 97<sup>th</sup> position, in 2014 Indonesia e-government index position was decrease to 106<sup>th</sup> position, and in 2016 Indonesia e-government index position was decrease to 116<sup>th</sup> position (United Nations, 2014a). The data shows that the realization of the program is not working well yet.

The World Economic Forum revealed an unexpected data from 143 countries in 2015 and the data from 139 countries in 2016 around the world regarding to the country readiness based on the infrastructure, human resources skill and the usage of program (The World Economic Forum, 2015).

Table 3.2.1.1. Indonesia E-Government Readiness Index Position

Index		Infrastucture	Skill of HR	Usage*
No.	Year	Rank	Rank	Rank
1	2015	98	63	77
2	2016	105	65	78

\*Based on: Individual, Business, and Government Usage Source: The Global Information Technology Report (The World Economic Forum, 2015, 2016)

In Indonesia case, until nowadays infrastructure are not spread well yet. The infrastructures were well build and established only in the big cities such as Jakarta, Surabaya, Yogyakarta, Bandung, Medan and etc. but not in the small cities either border area (Haryono & Widiwardono, 2003).

Those are the biggest problems that Indonesia governments need to solve as stated in the Presidential Decree that the development of infrastructure and technologies need to be done equally.

In addition to various those poor conditions as described above, the development of e-government in Indonesia is proof that an understanding of the potential of telecommunication particularly is still low. Utilization of e-government to reduce the occurrence of events of fraud, criminal, until the terror that originated from identity fraud such as identity cards and passports are still not showing signs of improvement. Similarly, the various cases of smuggling and abuse of customs documents are even more prevalent and increasingly advanced modes of operation.

Head of Legal Bureau, Communication and Public Information Ministry of Administrative Reform and Bureaucracy Reform of Indonesia, Herman Suryatman in Kompas (2016) revealed that one of the obstacles in the implementation of e-government in Indonesia is because of the limited regulation that able to be the legal protection. Currently, there is no regulation that really explains in details the mechanism of e-government implementation. The absence of an integrated e-government policy tailored to the needs of each institution is one of the problems encountered by the Indonesian government in the implementing e-government (Bayu, 2016). Herman added that un-integrated government is another problem that Indonesia government needs to faces. For the examples, data centers in each government agency have different format, there is no specific

standard that being offered by the government. These situations make another reason why it is so hard to establish e-government in Indonesia. Uneven infrastructure and lack of human resources are also the problems that occurs in the establishment of e-government in Indonesia (Bayu, 2016).

Thus conditions mentioned above are contradiction with the plan that has been made by Indonesia governments in form of National Mid-Term Development Plan 2014-2019 in National Long-Term Development Plan 2005-2025. In the RPJMN – 2, it is clearly stated that Indonesia Broadband Infrastructure should be reach every island in Indonesia in 2014. The data from WEF and United nations also showing that there are big differences between the plan and the reality.

In hence, it can be conclude that Indonesia government are still not able to practice e-government yet even though the master plan is already made, Therefore, an adequate infrastructure, a lack of understanding, vision and mission that inconsistent and not conducive regulatory rules and policies across sectors has made the achievement of the e-government program Indonesia has not achieve its' goals yet. Since, there is the government in Indonesia is not integrated yet. It is proven by the absences of the strong regulation that supposed to be made by the strong relationship between the government institutions.

## 3.2.2. Integrated Government in Republic of Korea

Republic of Korea as known as ROK is marked as the best country in establishing e-government. ROK keeps making a significant development in e-government. It is proven by the e-government index score that ROK gain each year. As reported in the e-government development index by United Nations, ROK was in the 1<sup>st</sup> position in term of e-government development index from 2012 until 2014 (United Nations, 2014b). However, in 2016 ROK e-government index decreased that causing ROK to move to the 3<sup>rd</sup> position. This condition merely happened because the political issues that occurs in 2016 that makes the level of public trust to the government was decreased (The World Economic Forum, 2016).

Table 3.2.2.1. ROK E-Government Readiness Index Position

	Index	Infrastucture	Skill of HR	Usage*
No.	Year	Rank	Rank	Rank
1	2015	11	39	6
2	2016	5	35	6

\*Based on: Individual, Business, and Government Usage

Source: The Global Information Technology Report (The World Economic Forum, 2015, 2016)

The data shows that ROK success in developing their e-government development index, especially in infrastructure and human resources sectors. However, the successful of ROK in establishing e-government does not happen in sudden. It is all start in 1997 when President Kim Dae Jung giving an instruction to carry out administrative reforms by

establishing e-government. Since the beginning of the establishing the program, e-government in ROK was encouraged by the government informatization which coincided with a gradual shift of the administrative system of government from authoritarian to democratic era. Besides, the strength of the external pressure with the economic crisis that hit the country at that time demanded an increased transparency and efficiency by the government supported by a very rapid spread of internet technology (P. S. Kim, 2000).

Hyun Seok Kim in Tatang Muttaqin (2017), argues that there are four factors that sustain e-government success in ROK. First, the approach of the changing management based on a solid commitment that is supported either by political infrastructure and technical infrastructure. Second, e-government as a joint project was led by the President which makes it possible to make an integrated government organization with the private sectors including the synergy of planning and budgeting. Third, government was focused in developing collective agreements that involving the government, mass media, business, community, and nongovernmental organization in aims to generate a public support. Fourth, a solid cooperation between institutions so it is able to resolve internal conflicts and get an external support from International Organization by prioritizing the strategic planning process which is able to integrate the performance of implementation monitoring and support the basis legitimacy by the establishment of e-government (Muttaqin, 2017).

In conclusion, regarding to the Ministry of Science, ICT and Future Planning plan, ROK government is already able to achieve their plan. It is proven by the data that being reported by The World Economic Foundation. ROK able to realizing the plan into the reality are due the strong leadership, a solid government organization, an integrate performance between all actors that engaged in the implementation of e-government, and a strong determination and consistency of the government. An integrated government that exist in ROK become the successful factors that make ROK keep leading in e-government implementation and remarked as the best country that establishing good practice of e-government.

### 3.3. Public Service Delivery Model

Information and Communication Technologies (ICT) have been seen as a miracle medicine for curing a nation from distress of corruption, mismanagement governance, inflation, monopolies, business stagnation, illiteracy and so important aspect concerns development and implementation of ICTs for Governance (Ghayur, 2006). The e-government in short is tool governance - transparency, participation, regulations and accountability (Ghayur, 2006).

In this case ROK is leading in implementing good governance by using ICT.

Korea make a significant development of IT education environment and rapidly extend the information and communication infrastructure and thus also to keep rapidity with multimedia learning environment so that you can implement quickly

oriented education in pursuit of the constitution that has been changed (Jeong, C., & Ahn, 2014).

In comparison, according to The World Economic Forum (WEF), Indonesia currently in 98<sup>th</sup> position (ROK is in 11<sup>th</sup> position) in case of infrastructure, for the skill of its human resources is in 63<sup>rd</sup> position (ROK is in 39<sup>th</sup> position), and 77<sup>th</sup> position for the usage of the program (ROK is in 6<sup>th</sup> position). Based on that data we can see there are a big distance between Indonesia condition and ROK conditions.

The others differences in the human resources skill, in ROK government tries to develop citizen education in the sectors of technology (Nakamura & Kim, 2018). From those data proving that the human resources skill will affect usage of the programs. It is not going to be easy for Indonesia in establishing a good practice of e-government as ROK did. The culture differences and also structural differences will make it impossible for Indonesia to copy the establishment of e-government in ROK. Moreover, the others differences are about the steps that government takes in establishing e-government.

Figure 3.3.1. Indonesia's Steps in E-Government



Source: Rencana Pembangunan Jangka Menengah Nasional 2005 – 2025
(BAPPENAS, 2004, 2010, 2015)

Figure 3.3.2. ROK's Steps in E-Government

Making a Regulation

Cultivating the Ideas from Its' People

Making a Master Plan based on the People's Ideas

Implementing the Program to the Society

Various Sectors

Source: MSIP (MSIP, 2014b)

From that analysis it can be seen that the other problem is because the government does not consider public ability and the environment in absorbing the new regulations or programs in this matter is e-government systems. This action that government made will affect a lot in the establishment of e-government as stated by Cohen and Levinthal (Cohen & Levinthal, 1990)

In other hand, there is a possibility of Indonesia government to establishing good practice of e-government by referring to ROK e-government systems by considering several contexts. The first is government need to consider and focus on the public demand, so the regulations and the program will run well.

Moreover, it can be seen that in term of public service delivery model, nowadays, Indonesia is in its way to develop from Integrated Organization Model to Nationwide Portal model. Meanwhile South Korea is now moving from Inter-organizational Integration Model to Demand-driven model or Joined Government Model. In aims to implement a good practice of e-government in Indonesia, government needs to consider four important point, such as;

- 1. The government needs to prepare a strong regulations that able to regulate all of the details of the implementation so the program able to be executed well.
- Government needs to make a blue print and the stages of implementation in line with the governmental structure and culture that already exist in Indonesia in hence to make the implementation structured and controlled well.
- 3. A solid team work that able to manage and able to combine the top-down and bottom-up approach, and also expanding the support from all of ministries, governmental institutions, non-government institutions, local government, private sectors, public, and mass media.
- 4. Government need to consider to make a collaboration with international organization such as World Bank to reduce the risk of the establishment of e-government (Muttaqin, 2017).

There is a huge possibility for Indonesia government to establishing a food practice of e-government remembering that the Indonesia already have the master plan which might be measured as equal as ROK's. However, the master plan or the program will not run properly without any support from the President and the consistency of the government. A strong leader ship is one of the main factors in realizing a program. By the existence of a strong leadership will bring a huge effect in the decision making process in which will affect the regulations it-self. A strong leader will make the regulations will run properly

and with a massive monitoring the program will accordance with the regulations.