

# **Development and Delivery of Livelihood-based e-Service for ASEAN Women**

**2014**

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Chapter 1

Chapter 2

Chapter 3 Country-wise Analysis

3.1 Brunei Darussalam

3.1.1 Current Status of e-Services

3.1.2 County Specific (Potential) Demand for e-Services

3.1.3 Future Direction of e-Services

3.2 Cambodia

3.3 Indonesia

**Directions**

- ✓ Fill in the blanks in the Basic Information Data Table below,
- ✓ Use the same sub-chapters with Brunei,
- ✓ Per country, at least 20 pages except the statistical tables,
- ✓ Format Detail
  - Margin: Normal
  - Font: Times New Roman, Size 11
  - Line spacing: 1.15

Indicator	Data
<b>Basic Information</b>	
1. Country name	Indonesia
2. Area (km <sup>2</sup> )	<b>1.910.931,32 km<sup>2</sup></b>
3. National population	<b>237.641.326</b>
4. Rural population	<b>49.8%</b>
5. Key Economic Sector(s)	<b>Agriculture Mining and Quarrying Manufacturing Construction Electricity/Gas &amp; Water Transport/Communication Trade/Hotel Finance, Real Estate</b>
6. Industry (%)	
6-1. Agriculture (%)	<b>36.63%</b>
6-2. Fisheries (%)	<b>1.85%</b>
6-3. Livestock industry(%)	<b>2.01%</b>
6-4. Other sector (%)	<b>59.50%</b>
7. GDP per capita	<b>US\$ 4356 (Rp 52.272.200)</b>
8. Employment (%)	<b>66.90%</b>
8-1. Employment - Urban (%)	<b>59.50%</b>
8-2. Employment - Rural (%)	<b>68.60%</b>
<b>Gender</b>	
1. Education(% of female)	<b>88.86%</b>
1-1. Primary education (% of female)	<b>31.27 %</b>
1-2. Secondary education (% of female)	<b>33.43% (Junior + Senior High School)</b>
1-3. Higher education (% of female)	<b>5.12%</b>
2. Literacy (% of female)	<b>88.80%</b>
2-1. Urban (%)	<b>93.24%</b>
2-2. Rural (%)	<b>84.37%</b>
3. Labor Force Participation(% of female)	<b>36.32%</b>
3-1. Labor force in agriculture (% of female)	<b>34.48%</b>
3-2. Labor force in fisheries (% of female)	
3-3. Labor force in livestock industry(% of female)	
3-4. Labor force in other sector(% of female)	<b>65.52%</b>
<b>ICT</b>	
1. Telephone lines (%)	<b>6.31%</b>
1-1. Telephone lines - Urban (%)	<b>10.69%</b>
1-2. Telephone lines - Rural (%)	<b>2%</b>
2. Cell phone subscriptions (%)	<b>83.52%</b>
2-1. Cell phone subscriptions - Urban (%)	<b>90.61%</b>
2-2. Cell phone subscriptions - Rural (%)	<b>76.54%</b>
3. Internet use (%)	<b>14.70%</b>

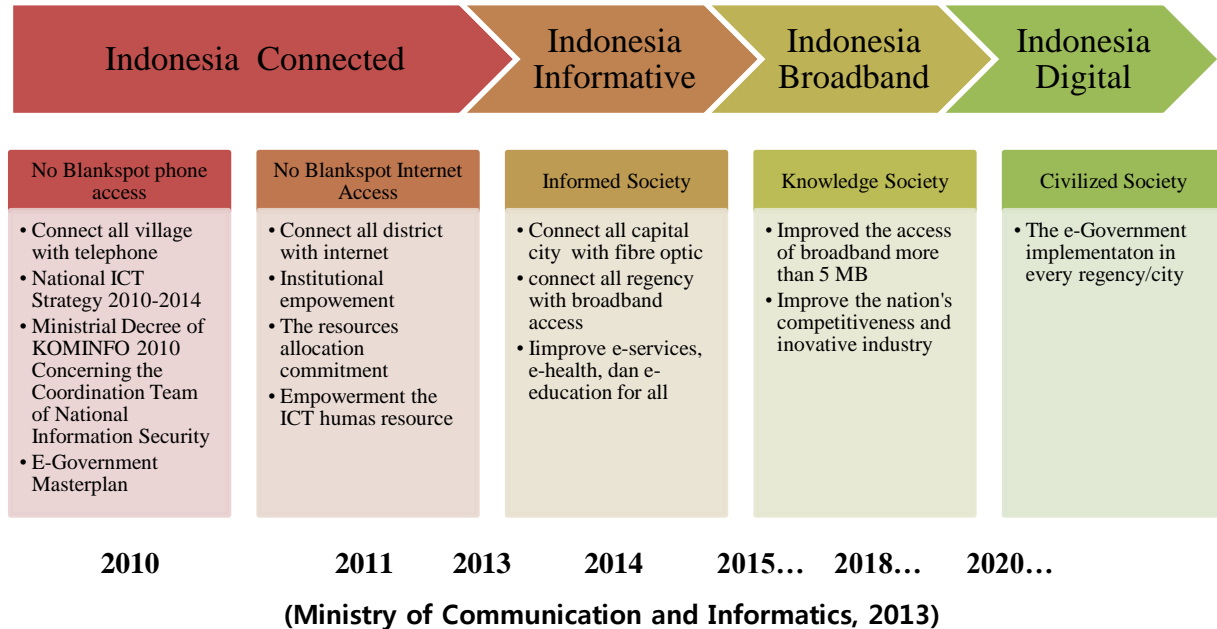
3-1. Internet use - Urban (%)	<b>23.04%</b>
3-2. Internet use - Rural (%)	<b>6.31%</b>
3-3. Internet use - Women (%)	<b>13.06%</b> <b>(Urban 20.39%; Rural 5.69%)</b>
4. Households with internet access	<b>30.66%</b>
4-1. Households with internet access – Urban (%)	<b>45.43%</b>
4-2. Households with internet access – Rural (%)	<b>16.12%</b>
5. Telecenter	<b>10.130 (PLIK, M-PLIK)</b>
5-1. The number of telecenters - Urban	
5-2. The number of telecenters– Rural	



### 3.3.1 Current Status of e-Services

#### 3.3.1.1 National ICT Road Map

**Figure 1 ICT National Development Roadmap**



The importance of information for each citizen has been acknowledged and understood by Indonesian government as a right that should be granted to all citizen. This acknowledgement is constitute in Indonesian Fundamental Constitution (UUD 1945), therefore, Information and Communication infrastructure should be built by Indonesian Government and absolutely Indonesian Government responsibility, as a basic infrastructure for the people to follow the national development. In the future, information is no longer government's domain, but also Public's domain that can be accessed and followed by each individual in Indonesia.

The Institution that has the role and responsibilities to create "Well-Informed Citizen, Civilized and Knowledge Base Individual, is not only Ministry of Communication and Informatics (MCI/KEMKOMINFO), but also all part of society, governmental and non-governmental institution. In this context, KEMKOMINFO has the competence to formulate national constitution, implementation rule, and technical regulation in communication and Information sector.

Based on President Decree number 24 year 2010 regarding Position, Role, Function of KEMKOMINFO has a strategic role, to host all communication and information business in governmental system to help President in running the government. KEMKOMINFO has its strategic role in directing information technology and communication development in Indonesia.

KEMKOMINFO Vision is to actualize informative Indonesia in order to have prosperous society through KEMKOMINFO continous development, that people-friendly and eco-friendly in Unitary State of the Republic of Indonesia (USRI/NKRI) frame.

The objective of KEMKOMINFO in 2010-2014 period is classified into 2 main objectives as follow (only several relevant points that related to the study) :

#### 1. Information and Communication Infrastructure Section

- Provides well-dsitributed communication and information access across Indonesia. (narrowing Digital infrastructure gap)

- Provides communication and information facilities and services and all districts and rural, border areas, furthest islands, rural areas, and the others non commercial areas to reduce the blank spot.
- Provides modern communication and information access.
- Provides Communication and Information access in non commercial areas.
- Constitution, regulation, utilization plan, and radio frequencies spectrum resources engineering.
- Constitution, regulation, spectrum and non spectrum resources optimization plan.
- Constitution, regulation, and license for quantity and quality of post services.
- Constitution, regulation, and license for quantity and quality of telecommunication services.
- Constitution, regulation, and license for quantity and quality of broadcasting.
- Constitution, regulation, technical assisting, and certification of electronic system, application service and content evaluation. Evaluation spectrum and non spectrum resources optimization plan.
- Constitution, regulation, standard, certification, inter-operability post devices, telecommunication and broadcasting. Spectrum and non spectrum resources optimization plan.
- Achieves e-literate society in Indonesia become 50 percent in 2014.
- Provides information and public services that can be accessed via online.
- Industrial and Manufacturer development that support ICT.

## 2. Information and Communication Section

- Variative operational and distribution of public information and has educational character, enlighten society in NKRI frame.
- People empowerment and partnership development in public information distribution.
- Provides and develop Human Resources in information and Communication section as provider agent, public information operation and distribution.

Performance Reports/Masurement (Results) are presented as follow:

**Table 1 Performance strategic objectives reports in stakeholder perspective**

Strategic Objective	Main Performance Indicator (MIP)	Target	Realization	%
Well-distributed Post, and information facilities development across indonesia. (S1.1)	Communication and information access that is well-distributed across Indonesia.	100%	61%	61%
	Percentage coverage of communication and information in all districts, border area, furthest islands, rural area, and the other non commercial area to reduce blank spot.	50%	68%	136%
	Percentage of penetration access and modern communication and information services that can connect all Indonesian Area.	100%	136%	136%
	Percentage of information and communication access services in non commercial area.	100%	67%	67%
Available factual and balance information to all area for every layer of society in NKRI framework (S1.3)	Percentage of received, utilized, and developed by local government and Social Institution.	75%	100%	133%

(Ministry of Communication and Informatics, 2013)

Result of evaluation and analysis regarding the performance measurement of KEMKOMINFO based on Main Performance Indicator (MIP)

#### 3.3.1.1.1 Provides access through Universal Service Obligation (USO)

Telecommunication Universal Service Obligation (USO) Program is one of the government commitment in KEMKOMINFO to reduce information gap (Digital Divide) that also form of mandat in Law number 36 year 1999 Article 2 about equity and fairness of distribution. Indonesian government has run several programs to strengthen access point across indonesia, has achieved 61% target.

Several built facilities infrastructure as follow:

- (1) Amount of District with Internet Access (DIA/PINTER)
- (2) Amount of district with WiFi services.
- (3) Amount of productive centre and broadened district with internet access (PINTER) and telephone line.
- (4) Amount of Province capital city with Nusantara Internet Exchange (NIX).
- (5) Amount of Province capital city with Internasional Internet Exchange (IIX).

#### 3.3.1.1.2 Subdistric Internet Service Center (SISC/PLIK)

PLIK is a program that aims all subdistrict have Internet service center that channel the access to all vilages. Internet development in subdistrict is not only to provide internet access room, but also to do 'push productive content' and useful content portal. SISC development has started since 2010, it has achieved 5,748 service point.

#### 3.3.1.1.3 Mobile SubdistrictInternet Service Center (MSISC/MPLIK)

Mobile PLIK is the same PLIK with mobility (delivered by cars) to provide a healhy, safe, educative, fast and budget-friendly. It targets to serve other unreachable subdistrict by internet.

#### 3.3.1.1.4 Percentage coverage of communication and information in all districts, boarder area, furthest islands, rural area, and the other non commercial area to reduce blank spot

The performance has achieved 68% from 50% assigned target. The facilities that are built through Base Transmission Station (BTS) telecommunication and information in boarder area, furthest island (Telinfo –Tuntas), provide PLIK and provide telephone line with 'Desa Dering' development.

#### 3.3.1.1.5 Percentage of information and communication access services in non commercial area

From the measurement, it has been achieved 67% out of 100% assigned target. Facilities are built through Broadcasting Institution (LPK), Radio Broadcasting Services in boarder area, and provides operatable M-PLIK.

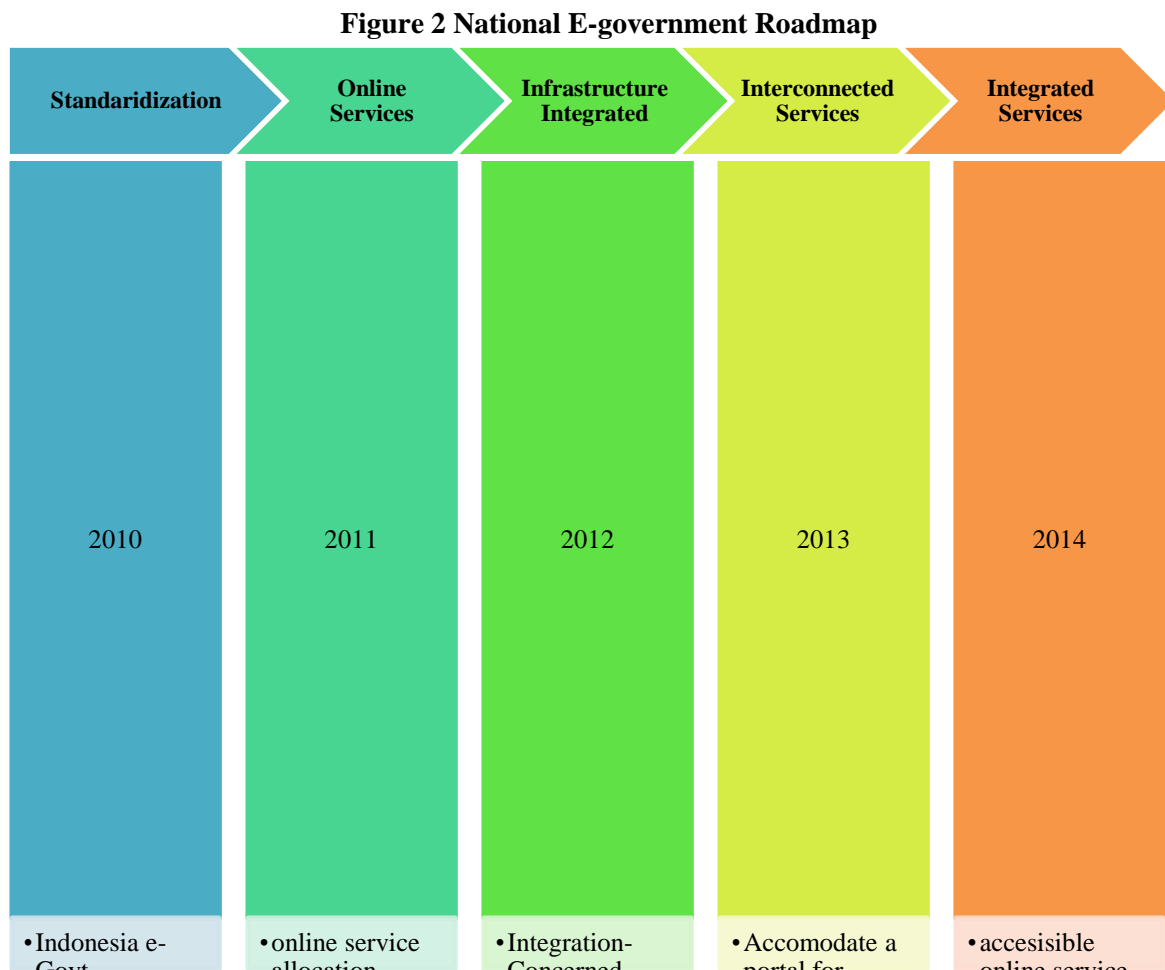
#### 3.3.1.1.6 Provide educative information content services, enlighten and empower society.

**250 schools from five cities/districts in Yogyakarta with e-learning system program,** has been achieved 100%. Those schools provide computer laboratorium, infromation network inter-school,

teaching material with ICT-base, software for teaching material development, and teachers capacity enhancement to teach in ICT-base.

### 3.3.1.2 e-Government Roadmap

Roadmap of *e-government* 2010-2014 will be implemented in several phases, standardization phase related to e-government masterplan development, online services to inform society phase, infrastructure integration by using data center and cloud computing, interconnected services with collaboration capability and integrated services in e-government implementation to push paperless society.



(Ministry of Communication and Informatics, 2013)

#### Objective of e-Government Implementation

- Increasing public service quality by utilizing IT in running the government.
- Create a better government with clean ethic, transparance and can handle changes effectively.
- Re-organize structure, management system, and governmental system.

#### e-Government Development Goals

- Create Information system and public service transaction with better quality and affordable.
- Create interactive relationship with business world to increase and strengthen economy capacity to face changes and competition in international trading
- Create communication mechanism between governmental institutions and also facilities for society participation in running the government.

- Create transparent and efficient budget management system and ease the transaction and services inter-institution.

### **Government Website Ranking**

Communication and Information Ministry creates ranking on government website, which is called as Pemingkatan e-Government Indonesia (e-Government Indonesia Ranking) or Pe-GI. Pe-GI is aimed to provide reference for ICT development and utilization in government environment, give pushes for improvement of ICT utilization in government environment through complete, balance, and objective evaluation, and also to get condition mapping of ICT utilization in national government environment. Implementation of PeGI in ministry level for 2013 consists of 33 ministries in Indonesia.

There are five dimensions to be assessed, which are policy, institutional, infrastructure, software application, and planning. Each dimension has same points in the assessment because all of them are important, inter-related, and supportive toward each other. Ministry of Finance is on the first rank with average e-Government index of 3.57, also gets very good category. The second rank is taken by Ministry of Education and Culture with average e-Government index of 3.44, and on the third rank is Ministry of Public Works with average e-Government index of 3.21. Those two ministries are in the good category.

The bottom three positions are followed by Ministry of Women Empowerment and Child Protection (1.84), Ministry of Acceleration Development Backward Regions (1.87), and Ministry of Environment (2.08). Those three ministries are in the deficient category. Overall, the number of ministry in the interval of 3.60 to 4.00 with e-Government index ranking category of Very Good is only one ministry (3.03%). There are 19 ministries (57.58%) in the interval of 2.60 to 3.60 with e-Government index ranking category of Good. While the other, which are 13 ministries (39.4%) are in the interval of 1.60 to 2.60 with e-Government index ranking category of Deficient. For 2013 PeGI assessment, there is no ministry that happened to be in the interval of 1.00 to 1.60 with e-Government index ranking category of Very Deficient.

The 2013 PeGI assessment in ministry level is (Ministry of Communication and Informatics, 2013) :

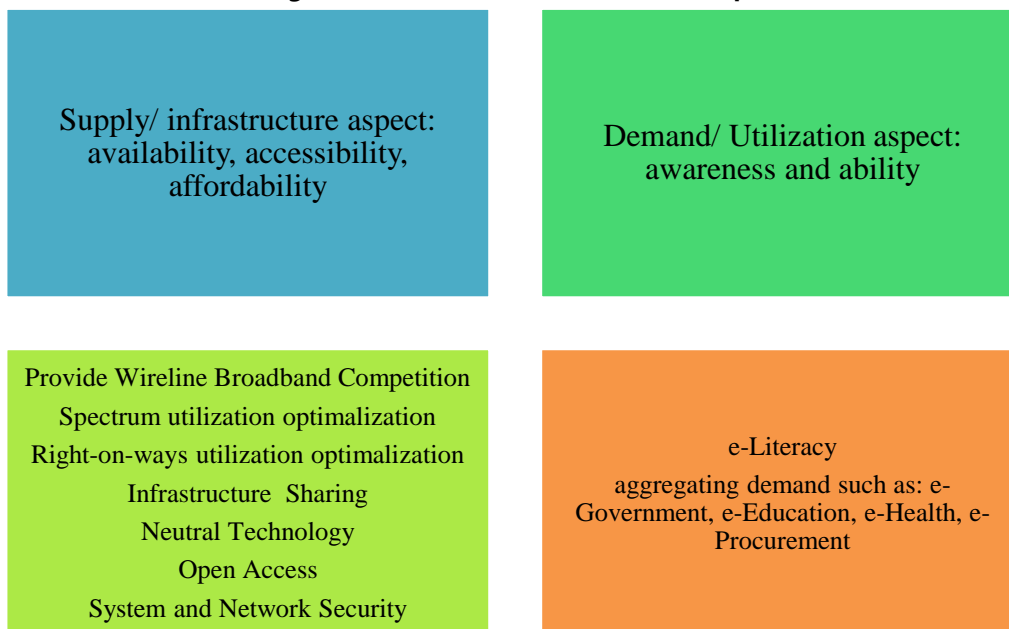
1. Ministry of Finance
2. Ministry of Education and Culture
3. Ministry of Public Works
4. Ministry of Foreign Affairs
5. Ministry of State Secretary
6. Ministry of Communication and Informatics
7. Ministry of Agriculture
8. Ministry of Manpower and Transmigration
9. Ministry of Empowerment of State Apparatus
10. Ministry of Maritime and Fisheries Affairs
11. Coordinating Minister for People Welfare
12. Coordinating Minister for the Economy
13. Ministry of Forestry
14. Ministry of Research and Technology
15. Coordinating Minister for Political, Legal, and Security Affairs
16. Ministry of Tourism and Creative Economy
17. Ministry of Environment
18. Ministry of Acceleration Development Backward Regions
19. Ministry of Women Empowerment and Child Protection

### 3.3.1.3 National Broadband Plan

Main constitution in broadband development is translated into main strategy of broadband development consist of supply/infrastructure aspect through competition and wireline implementation, utilization spectrum optimalization, right of ways utilization optimalization, infrastructure sharing, neutral technology, open access, safe network and system.

Second aspect is demand/utilization aspect and adoption that consist of digital literation, aggregating demand through government, e-education, e-health, e-procurement, e-logistic; and through green with ICT. Both first and second aspect are supported by the third aspect, which is funding aspect through optimalization Universal Service Obligation (USO) budget spending and Government Non Tax Inome in ICT Sector, cooperation with government and private company, and also more efficient and more effective ICT budgeting and planing in National Government Budget (APBN). The fourth aspect also support previous aspects, which is regulation and institution framework, consist of the constitution and regulation framework in order to create condusive investment climate and also institution monitooring and implementation of Indonesia broadband Plan.

**Figure 3 National Broadband Development**



**(Ministry of Communication and Informatics, 2013)**

### 3.3.1.4 Regulation Support DukunganPeraturan

Indonesia already had Law number 14 year 2008 regarding Public information Openess. To support the openess, government institution is obligated to have an official website as a part of facilitation of Public information services responsibilities for society. That point is strengthened by Information Commision Decree number 1 year 2010 regarding Public information service standard.

Information Commision Decree number 1 year 2010 atricle 11 regulates obligatory public information in governmental institutions' websites that at least consist of:

- Institution profile
- On progress Programs and activities Summary
- Institution performance Summary
- Financial Reporting
- Public Information access reports

- Regulation, decision, and constitution that affect public
- Rights and regulation to access public information, and regulation of appeal proposal, information conflict settlement, and responsible party information
- Regulation of miss-conduct report, authorities, and violations done by any parties
- Announcement of goods stocks and services
- Early warning procedure and emergency evacuation in every Public institution office.

In present day, all websites have been provided, but most of it havenot fullfiled all the requirement, even its just basic information. The regulation requiresonly Information need to be provided in government website, not extended services. This also worsens the indonesian e-services development.

### 3.3.1.5 ICT Utilization and Empowerment

#### 3.3.1.5.1 Creative Community Centrer Development

Creative Community Center is e-business service center to facilitate Small and Medium Enterprises (SME) in areas. The development of Creative Community Center is expected to improve economicgrowth in respective areas through acceleration of transformation from conventional business to electronic based business.

Facilities and assistances are provided in the form of training to operate multimedia, basic Office software application, and other e-business related applications, such as blog, online marketing, and product packaging design. Creative Community Center also provides service such as internet access, assistance for SME, and also knowledge and skills improvement.

The objectives of building Creative community Center through eletronic SME:

- (1) Motivate the growth of new opportunities for SME
- (2) Facilitate SME with ICT to convert their manual activity electronic base activity for their business.
- (3) As a media to gather SME Community in developing knowledge and creativity and to exhibit their products.
- (4) East the government to empower SME.

#### 3.3.1.5.2 Information Industry Incubator

Information Industry Incubator is a place designed to foster and accelerate the success of information industry development through series of development program both from business and technical sides. The end purposeof Information Industry Incubator is to prepare the information industry owner to become entrepreneur who is capable to earn profits and to supervise/manage his/her organization and finance well, and also to be sustainable to finally create positive impact for society

Incubation program is commonly aimed to start-up companies or companies that are still in the early phase of starting business. The Information and Communication Technology (ICT)-based industrial development requires more intensive training.This group of industry and business is a little bit different with other types of industry because usually this type of industry is built by personnels who have high education qualification, need big capital, have high technology content and high risk in its marketing. At the incubation phase, the fostered SME (tenant) is given full assistance by consultant team that intensively evaluates and provides consultation to help them become a strong and independent technopreneur. The incubation period is usually one to three years long.

The facilities provided throughout the incubation period are familiar as 7S Concept, which are:

1. **Space:** Provide place for tenant to develop its business at early stage;

2. **Shared:** Provide office facilities to be used together, such as meeting room, phone, faximile, computer and internet;
3. **Services:** Consist of management and market problem consultation, financial and legal aspects, trading and technology information;
4. **Support:** Support accessibility to research, professional network, technology, and investment;
5. **Skill Development:** Provide technical skill, business plan preparation, management, leadership and other skill(s) training;
6. **Seed Capital:** Provide small-business access to funding sources or financial institutions;
7. **Synergy:** Cooperation with related bodies, such as universities, research institutions, private institutions, professional, and other parts of society.

Work program of Information Industry Incubator in general consists of:

1. Create mentoring or business and technical training;
2. Provide information regarding information industry in general;
3. Companies organization and culture management;
4. Develop marketing strategy;
5. Help with regulation related matters;

Open related networking and networking that's capable to help business development.

The benefits of Information Incubator Program are:

1. Create new job fields, that helps tax income to increase
2. Increase area brand, from governance, social and culture, and technology sides
3. Grow the awareness upon the importance of entrepreneurship, especially in information field
4. Widen business area, by the rise of various startup companies.

### 3.3.1.5.3 Local Content Development

ICT development in Indonesia is executed based on national ICT development roadmap that focuses on ICT infrastructure development with human resources development alignment, ICT service improvement, and ICT improvement that has added value for nation's economic growth with local ICT sector reinforcement. Local ICT sector reinforcement is pushed by local content development that provides avenue for local ICT to describe and strengthen their existence in the middle of ICT global trend. ICT local development also pushes for national independence in terms of utilizing ICT development. One of the examples of this development is through village stalls content development.

### 3.3.1.5.4 Mobile Community Access Point (M-CAP)

Since 2011, Mobile Community Access Point (M-CAP) prototype has been mass produced by KEMKOMINFO to be MPLIK. The functionality of M-CAP is highly influenced by the condition of respective area. For disaster-prone, border, and other heavy domain areas, such as RejangLebong, Bengkulu, and Keerom, Papua, M-CAP is equipped by double gardan.

#### **Objectives of M-CAP:**

1. Provide internet access, phone service access, and information dissemination activity audio-visually
2. Provide Information and Communication Technology based education
3. Reach society that haven't had permanent service
4. Expected to solve digital gap
5. Grow creative communication
6. Provide opportunity for society to increase their income and welfare
7. Provide access for parts of society that haven't had their own education source



In 2012, in order to boarden the scope of information access introduction and e-literacy understanding, in river bank areas in Kalimantan Selatan (South Kalimantan), new prototype has been made, which is Boat-CAP, and to reach out the society in village areas in Bogor, Motor-CAP (three weels) prototype has been made. In 2013, Motor-CAP was made for Difable Society in Surakarta, Jawa Tengah (Central Java). Until 2013, there were 51 units of Mobil-CAP, 1 unit of Boat-CAP, and 2-Units of Motor Cap that had been built.

### 3.3.1.5.5 ICT Volunteers

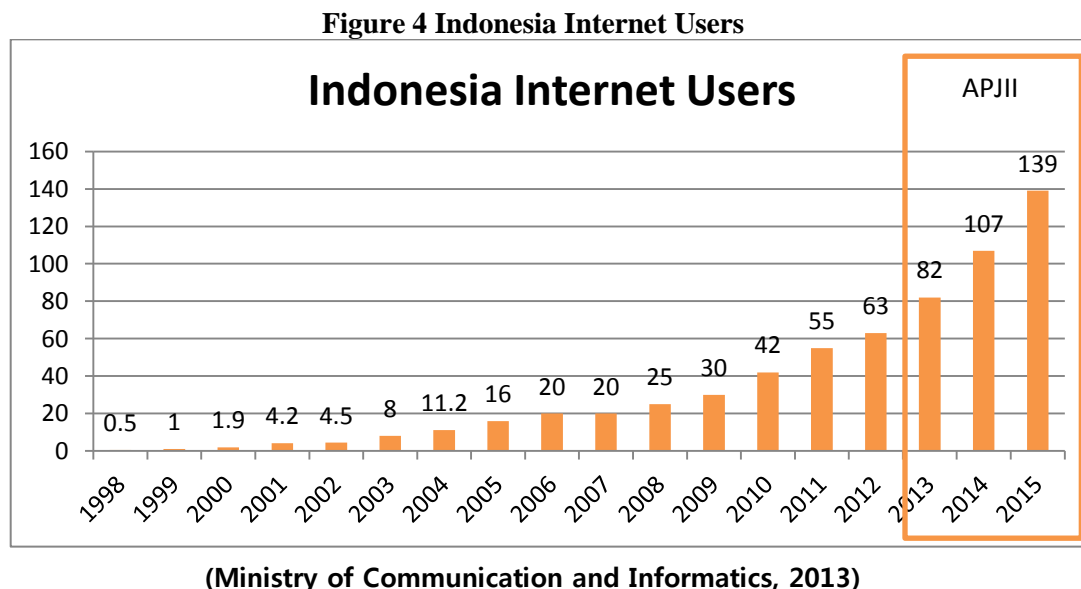
ICT Volunteers were aimed to develop social networking between youth and student figures as the young generation of internet users so that they are protected from negative global culture influence. The creation of ICT Volunteers was made in province, city, and even village level based

### 3.3.1.5.6 e-Learningin Yogyakarta

e-Learning Yogyakarta was an effort to improve education quality that was directed to even distribution of access, through provision of tools and supports that are needed for schools' activities, preparing ICT and networking facilities, and developing e-learning system in 300 elementary schools and 200 junior high schools in Daerah Istimewa Yogyakarta. The purpose is to give contribution to education quality improvement all over Indonesia.

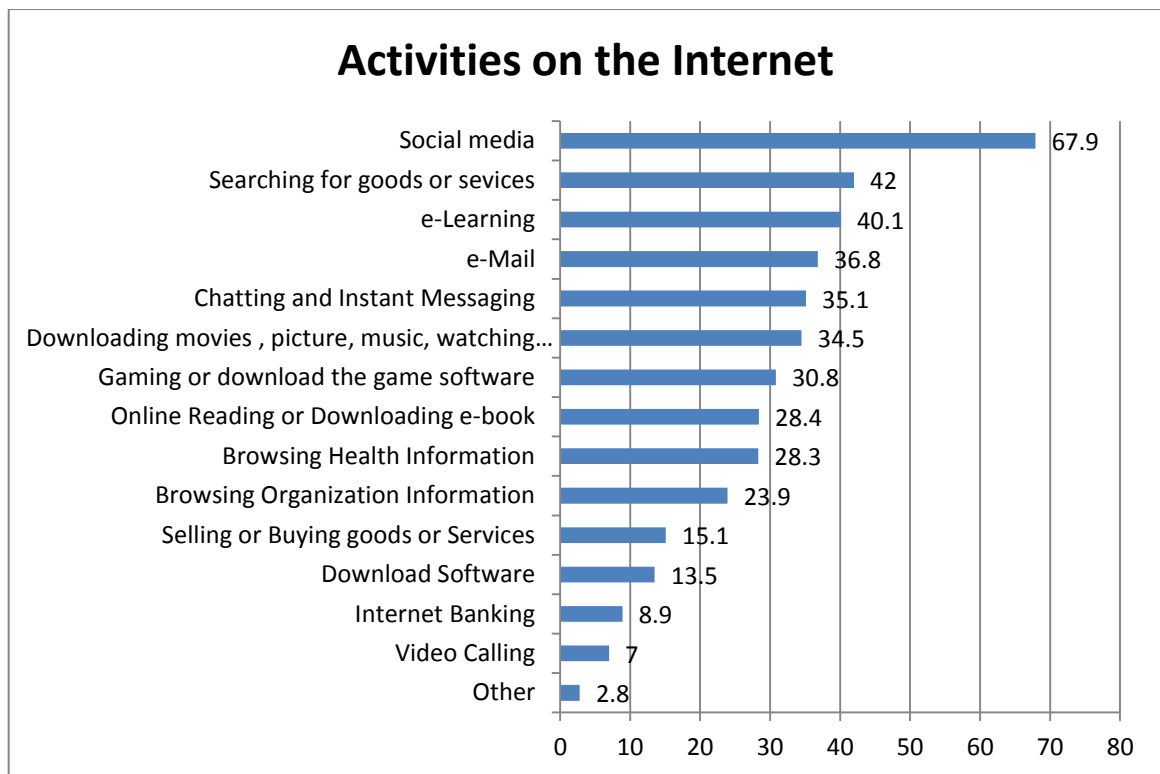
### 3.3.1.6 Behavior of Internet User

Internet users in Indonesia experience increase of usage. A pretty drastic increase of usage happened between 2010 to 2011. In 2013, it's estimated that the number of internet users in Indonesia reach up to 82 millions users. APJII projects that in 2015, the number of internet users will reach up to 139 millions people. Here are presented the results of a survey that has been conducted by KEMKOMINFO regarding the use of ICT in 2013.



### 3.3.1.6.1 Household Users

**Figure 5 Activities on the Internet**



**(Ministry of Communication and Informatics, 2013)**

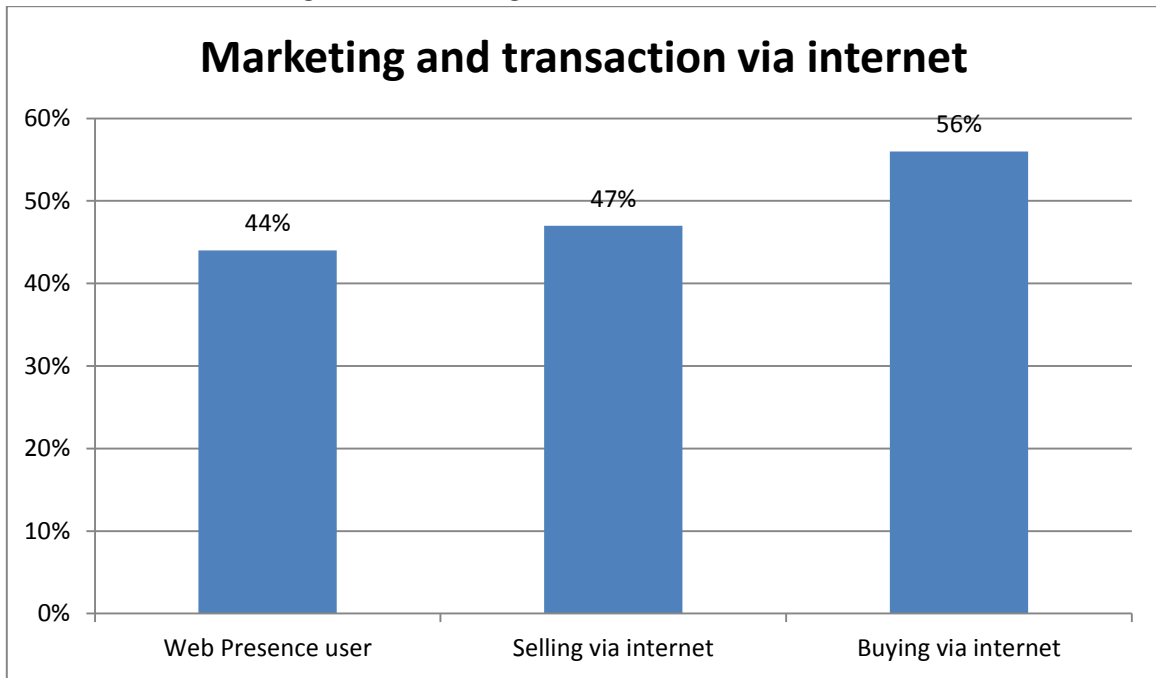
According to the survey, four major activities that are mostly done by individuals when using internet is to open social networking sites (67,9%), look for goods and services information (42%), do study activities (40.1%), and send and receive e-mails (36.8%). While accessing financial services such as internet banking is still low in popularity (8.9%). Most frequent activity done in internet is accessing social media with 67.9%, 42% looking for information regarding goods and services, 40.1% is e-learning, and 36.8% sending/receiving email. But to access financial services with internet banking is only 8.9% respondents.

#### 3.3.1.6.2 User from Business Sector

ICT usage in business sector in doing online marketing and transaction through internet is pretty high in Indonesia. There are 44% companies that have web presence, while for business transaction, there are quite many companies that utilize internet for business transaction.

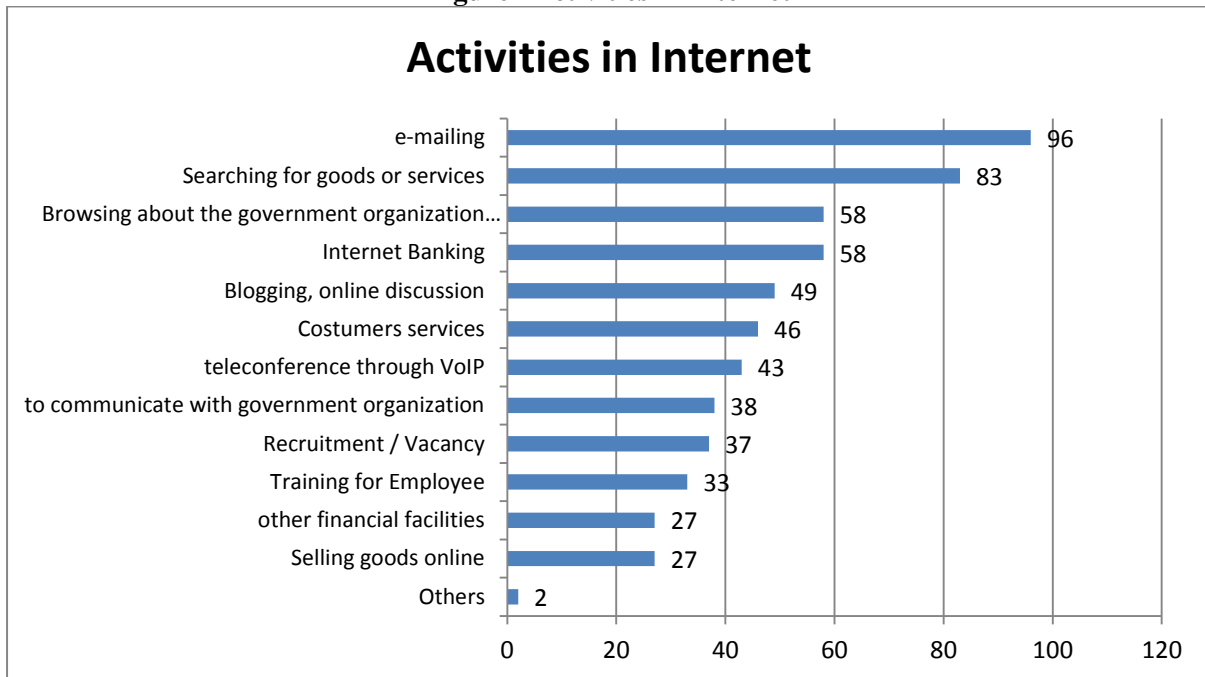
According the surey, most frequent transaction are purchase via internet which takes up to 56%, while sales via internet takes up to 47%. Majority of internet usage activities in business sector is sending and receiving e-mails with 96% of respondent percentage.

**Figure 6 Marketing and transaction via internet**



**(Information and Communication Ministry, 2013)**

**Figure 7 Activities in Internet**



**(Ministry of Communication and Informatics, 2013)**

### 3.3.1.6.3 User in Education Sector

Survey result of ICT usage in education sector shows that mostly schools have already utilized computer and internet for teaching-studying activities. In doing teaching-studying activities, the schools percentage that have already used computer is 73%, while the rest (27%) haven't used computer. Among the schools that have already used computer, only 55% of schools that use internet

for teaching-studying activities. It shows that not all schools are connected to internet, although they have used computer for teaching-studying activities.

Majority of schools in every education level have utilized computer and internet for teaching-studying activities. The higher the education level is, the higher percentage of schools that use computers and internet for teaching-studying activities.

Based on the survey of access and usage of ICT in education sector, more than two third (67%) of schools provide teaching of computer basic skills. There exists correlation between education levels with the percentage of schools that provide teaching of computer basic skills. The higher the education level is, the bigger the percentage of schools that provide computer basic skills. More than half of Elementary Schools (52%) give basic computer teaching, significantly improved up to almost every Junior High Schools (96%) and Senior High Schools (97%).

The survey result also shows that there exists difference between numbers of schools percentage that teach Microsoft Office with other basic computer skills subjects. Almost every school that teaches basic computer skills, teaches Microsoft Office (98%), while schools that teach other basic computer skills are less than 40%. Schools that teach Open Office basic skills are only 36%, graphic design are only 32%. The least (15%) is schools that teach programming.

The ratio of students that access internet are only 0.32, which means, among 100 students, only 32 of them that access internet for studying activities. The rest are not using internet access for studying activities.

### 3.3.2 Country Specific (potencial) Demand for e-Services

Based on the survey result that was collected, there are three government websites that appear to be mentioned often, which are Ministry of Health, Indonesian National Police, and Ministry of Manpower and Transmigration. Those three websites are considered as e-services that are able to satisfy the needs of society, especially women. In this chapter, each website and its e-services will be discussed further. The general information can be seen in the table below.

**Table 2 Current e-service status**

Current e-Service Status	Case 1	Case 2	Case 3
Basic Information			
e-Service Name	Information Health Archive	Case reporting form	Job Field
Hosting Government Department or Ministry Name	Ministry of Health	Indonesian National Police	Ministry of Manpower and Transmigration
Website Address	<a href="http://www.depkes.go.id/">http://www.depkes.go.id/</a>	<a href="http://www.polri.go.id/">http://www.polri.go.id/</a>	<a href="http://www.depna.kertrans.go.id/?">http://www.depna.kertrans.go.id/?</a>
Start Date			
Contents	Yes/ No/ Others(Please specify)		
Is there e-Service providing women related issues (women's health, education, employment, sexual/domestic violence etc.) managed by ministry in charge of such issues?	N	N	N
What type of information/service the e-Service is providing currently?			
i) Health information (child, maternity, women care)	N	N	N
ii) Education (women, child)	N	N	N
iii) Sexual/domestic violence and abuses including prevention education	N	N	N
iv) Job opportunity, vocational training	N	N	Y

opportunity			
v) Information on micro finance	N	N	N
vi) Livelihood related information (agriculture, fishery, livestock industry etc.)	N	N	N
Does the e-Service provide women related information (such as women NGO directories etc.)?	Y (BKKBN)	N	N
Does the e-Service provide information about job and bidding opportunities?	Y	Y	Y
Does the e-Service feature women talent pool registration?	N	N	N
Functions	Yes/ No/ Others(Please specify)		
Dose the e-Service compile its user statistics?	N	Y	N
Does the e-Service provide user guide (how to use the website)?	N	N	N
Does the e-Service provide e-newsletter service?	Y	Y	Y
Does the e-Service provide audio and/or video files as well as documents?	Y	N	N
Does the e-Service provide online forms/documents for downloading or electronic filing?	Y	N	Y
Does the e-service provide e-participation tools (feedback, polls, bulletin board, Q&A, Ombudsman, satisfaction survey etc.)?	Y	Y	Y
Does the e-Service provide single window link for online petition, citizen proposal and information disclosure request?	Y	N	Y
Does the e-Service provide e-learning (audio, video, document etc.)?	Y	Y	Y
Does the e-Service provide "Search" option (to easily navigate and obtain information)?	Y	Y	Y
Does the e-Service provide contact directory for corresponding department/person in charge of the menus/issues and web manager?	Y	Y	Y
Does the e-Service provide "Contact Us" option where you can directly contact web manager or person in charge and ask questions?	Y	Y	Y
Does the e-Service provide security features such as log in or pin access to protect your personal information?	N	N	N
Does the e-Service provide mobile access option? (Can you access the web service with your cell phone?)	Y	N	N
Does the e-Service provide information in multiple languages?	Y	N	Y
Does the e-Service provide access option for people with disabilities?	Y Not for all field	Y (Not for all field)	Y (Not for all field)

These three websites have followed the standard of most websites. It can be seen from the availability of several standard features although not as a whole, such as multiple language, contact directory, and e-newsletter. These three websites are -similar with the other websites owned by government of Indonesia- yet to provide many e-services that can be utilized directly by society. But at least, there are several embedded e-services in the websites, such as internal service (mail for

Public Servant), internal portal with its relation to e-office, or feature to refer each other's information/document such as library and law catalogs.

### 3.3.2.1 Ministry of Health

e-services that were mentioned are in form of information portal that show specific data. Although it's updated enough, the information management is not set to be used by end user, but for intermediary user, such as hospitals, schools, pharmacies, etc. The delivered data are not directly usable by society. However the website provides persuasion and short tips that can be utilized by society, such as healthy way of living, for example by using soap for hand washing. This website doesn't satisfy the e-service needs from society on educative information, consultation, and specific information for women in health sector.

Already have several e-services embedded in the website, such as:

- e-pharm
- hospital data
- health center data
- diseases information
- health operational fund information
- health manpower data
- total sanitation based of community
- AIDS Digital,
- recommendations of health school, etc.

**Figure 8 e-service Feature in Ministry of health's Website**



**(Ministry of Health, 2013)**

Nowadays, government has issued Government Decree number 46 year 2014 regarding Health Information System. The development of system cannot be known or predicted yet, but referring to the constitution, the system will be the source for decision maker related to health sector. If that so, the users of this system are the stakeholder related to the sector, not society in general.

### 3.3.2.2 Indonesian National Police

Figure 9 e-service Feature in Indonesian National Police Website



(Indonesia National Police, 2013)

This website has embedded legal complaints, case report and incident report form as one of its services. Although in reality POLRI (Police of Republic of Indonesia) has had Women and Children Protection Unit that has the job to receive gender and children base case reports, it's not separated as how the real life structure is, in the form provided in the website. Thus, the cases that enter through the online report will be mixed and it can't be confirmed that the case handling will be addressed to the specific unit.

Aside from reporting function, the need for police website was also based on the need of legality assurance. The website doesn't have information management regarding that yet, which is to educate society regarding the law. It also doesn't have collection/summary of protection assurance regarding gender base violence that actually already exists in Law number 23 year 2004 regarding Elimination Of Violence In Household, Law number 21 year 2007 regarding Elimination of Human Trafficking Crimes, Law number 23 year 2002 Children Protection etc. This website doesn't answer the need of society upon educative information or even for consultation.

### 3.3.2.3 Ministry of Manpower and Transmigration

The public services provided in this website are archive, such as standard guidelines, for example Indonesian labor allocation guideline, and related news. Information management that is used is not set to be consumed by end user but intermediary user, such as Authorized Employment Service Company. Although there are many female labors that are sent abroad, but there is no specific procedure for female labor in the guideline.

The other expectation from society that is gained from the survey is the provision of job vacancy information through the website. That is not found easily inside the website. There is no specific column that provides information regarding rights of female labor. This website doesn't answer the e-service needs from society that need educative information or even consultation.

From those three websites, none of them provides specific e-services for women, nor other e-services that can be directly used by society in general. This is in line with the mandate constituted

in Law number 14 year 2008 regarding Public information Openessthat government websites are obliged to include necessary information, but not obliged to provide electronic public service.

**Figure 10 e-service Feature in Ministry of Manpower and Transmigration Website**



**(Ministry of Manpower and Transmigration, 2013)**

### 3.3.2.4 Kartini Next Gen

From previous 3 explanation, ICT development hasn't used female perspective, therefore, government through KPPPA keep continuing to support women participation in many sectors, one of the way is organizing. This activity is executed in order to celebrate Kartini Day and is a form of cooperation between KEMKOMINFO with BNI Syariah, PT. Telkom Indonesia, Majalah Noor (Noor Magazine), Smartfren, and Federasi Teknologi Informasi Indonesia. In 2012, Kartini Next Generation Appreciation was given to digital women entrepreneurs in goods and services field.

Kartini Next Generation (Kartini Next Gen) in 2013 brought up "Inspiring Woman in ICT" theme. The purpose of this activity was to give appreciation to Indonesian women who have dedicated their talents and become inspiration for the progress of ICT and other fields that use ICT in Indonesia. This event gathered participation of women in the age of 20 to 40 years old from various communities, who utilize ICT to run their activities.

Award Reciever Category Kartini Next Generation Award 2013

1. Inspiring woman in ICT for Education
2. Inspiring woman in ICT for Entrepreneur
3. Inspiring woman in ICT for Creative Media
4. Inspiring woman in ICT for Community Development
5. Special Award for Inspiring Woman in ICT



### 3.3.3 Future Direction of e-Services

Study and research about ICT and its effect over economy development has frequently been done. One of those research is done by world bank concludes that 10 percents broadband penetration growth affect 1.38 percents GDP growth in developing countries and 1.21 percents in developed countries. KEMKOMINFO has done a research about “ICT Investment Influence against Economic growth” in order to understand the influence as a development key in ICT Sector in Indonesia. The research shows that ICT has doubled output in 1,359 in agregat which can be translated that every one trillion IDR ICT sector final demand growth can grows 1.35 Trillion IDR.

Broadband development phase based on National Medium-Term Development Plan (NMTDP/RPJMN) formulated in three main phases, for RPJMN 2010-2014 (connect) with connectifying broadband network target in indonesia and 2014 target is 100% USO area accessed by telephone and internet, 89% in districts accessed by broadband services, broadband penetration level reach 30% of the population, TV Digital penetration reach 35%, and national e-government index reach 3.0 out of 4.0.

In second phase of RPJMN 2015-2019 (innovate), focuses on finishing broadband distribution in districts, schools, public facilities, upgrade USO facilities into broadband, finishing TV to TV digital migration and uses digital dividend, integrates data facilities and government information, finishing digital literacy/digital inclusion agenda. RPJMN 2020 – 2025 (Transform) has a vision to create Independent, fair and prosper 2025.

Five Indonesia broadband plan success key aspects (including the effect to broadband economy) can be mapped through “5A + E” aspects, which are access, availability, affordability, ability, awareness, and empowering. In order to reach Informative indonesian Society, can be reached through 3 main factors, well-distributed infrastructure that cover across all indonesia, well-maintained communication services in term of technology as well as content, also empowered society (IT literate) socially and economically.

**Figure 11 Success Key of Indonesia Broadband plan.**

<b>Access</b>	• <b>Infrastructure</b> Telecommunication and Internet
<b>Availability</b>	• <b>Accomodation</b> Device, full coverage, no blank spot
<b>Affordability</b>	• <b>Coverage price/cost device and communication</b>
<b>Ability</b>	• <b>Usage</b> or usability
<b>Awareness</b>	• <b>Awareness</b> of culture, education-based positive-outcome oriented character
<b>Empowering</b>	• <b>Empowering the society to improve</b> their life quality

**(Ministry of Communication and Informatics, 2013)**

Strategic steps to build Broadband Economy are:

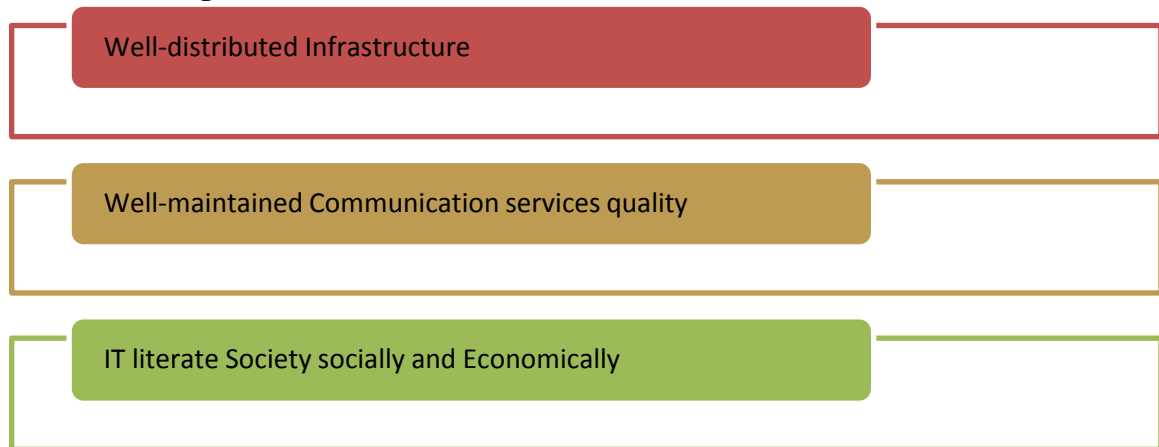
- Empower SME and the activists to be consistently competitive and also more competitive in global economy.

- Give programs that can help society to stay competitive and innovative in 21st century by prioritizing broadband in regional development.
- Help businesses to remove regulatory obstacle for all workers with technology-basis to run their businesses (teleworkers).

In Broadband economy era, information security becomes an ultimate requirement to build trust among businesses and industries in developing their e-commerce/e-business. Strategic and tactical efforts need to be conducted coordinately to enhance nation capabilities, and also widen the awareness and society's culture in information security, in order to anticipate the quantity and quality of cyberthreats&cybercrimes.

Meanwhile, e-leadership in national and local scale is an important factor to determine the guarantee of infrastructure development and broadband ecosystem, and the advantages of broadband economy for all Indonesian in all area.

**Figure 12 Main Factors to Create Informative Indonesian.**



**(Ministry of Communication and Informatics, 2013)**

### 3.3.3.1 Based on HDI

Indonesia's Human Development Index (HDI) value for 2013 is 0.684—in the medium human development category—positioning the country at 108 out of 187 countries and territories. The rank is shared with Kiribati and South Africa. Between 1980 and 2013, Indonesia's HDI value increased from 0.422 to 0.684, an increase of 62 percent.

HDI is composite Index that calculated as simple average of Life Expectancy Index, education Index (literacy and study periods), and Living Standard Index. Even though reach 13 position higher, Indonesian HDI is still below the world's average in 0.702. Indonesia is categorized as "Middle Development Nation" with the other 41 countries. Indonesia's rank is still far below other ASEAN member, including Singapore, Brunei Darussalam, Malaysia, and Thailand. Singapore has the highest HDI among ASEAN Nations with 0.901 in 9th position world-wide. Brunei with 0.8525 HDI in 30th position, Malaysia with 0.772 HDI in 62th position. Thailand is in 89 position with 0.722 HDI. The rest ASEAN member like The Philippines, Vietnam, Laos, and Cambodia are below Indonesia. HDI becomes the basis for this research because it is used globally. (United Nations Development Programme, 2014)

### 3.3.3.1.1 Economy

With earnings per capita around 4000 USD per annum (Ministry of State Secretary, 2010), shows that the needs of better economy condition still become the main reason and motivation for Indonesians to grow. The best approach to introduce technology and e-services to them should start from a guarantee of betterment in economy. Technology and e-services should play a role and give a major impact toward economy betterment. Government should take a role as facilitator and the media where economical transaction between seller and purchaser meet the deal.

The higher transaction loads, the more complex the market will be. Claim of ownership about the product can be a new problem in the future as we can see in current modern market. In this case, government can actively literate all Indonesian about patent right that will be governed by the government. The understanding about law from the Indonesian will ease the market system and increase the economy betterment.

Beside the role as media and law protection, government can also actively involve in the transaction, especially in export-import transaction. E-commerce always close to international transaction, where all people around the globe can directly access the market through internet, the involvement of foreigner in this transaction raises a new problem, the understanding of global language. Indonesia as EFL Country (English as Foreign Language) has a problem of global communication. Entering an global market system requires the global language. Here, government can take a role to provide interpreter and/or teach Indonesian to learn the global language. Understanding a global language is very material to learn e-service, because most information revolves in English. Thus Indonesian need to be equipped with English.

Some of Indonesian women can not comprehend foreign language and less internet literate, therefore, pushing them directly handling website will force a step-backward the needs of fulfilling their daily needs for themselves as well as their family. Moreover, in running their business, they frequently found many problems due to their lack of understanding about Law.

Indonesia as an agricultural country, 82.71% of Indonesian land is agrarian land. Most are for rice fields. So, land cultivating-based job plays important role for Indonesia. Java Island has the highest productivity compared to other islands. This condition provides huge opportunity for the government to improve the agriculture potential.

Indonesian soil is very fertile, its tropical climate is very suitable to be an agrarian country. Meanwhile, Indonesia still has a problem to be independent in fulfilling the needs of the food, proven by the import policy for certain type of food. There are lots of allocation on job vacancies of agriculture, plantation, and poultry, but the volume of crops production are fully depended on the natural conditions. This situation proves that Indonesia still doesn't have qualified human resources to maintain the agriculture. his discrepancy is actually can be solved not only through the supply of agriculture raw materials, but also the transfer of knowledge, such as a manual to rid the pest away, or to adapt with the latest innovation to overcome the challenge of weather, and also to enlarge the market for their products.

Indonesia is an archipelagic country; it has 17.508 islands. 1.85% percent of Indonesian's life depends on the sea. Live and domicile at sea or seashore, work on the sea, they are fisherman, and any job related with sea. It shows that these people will be so much helped if they have more sources to support their job, such as their needs of transferring navigation system, from manual navigation into advance navigation system. Besides navigations, other related innovations and technologies must be transferred too. The source of information also has to be able to show the sea-people how to be independently creative, to overcome the natural problems they found. (Ministry of State Secretary, 2010)

Therefore, e-services is needed for:

- online transaction to supports women's business (help in maintenance, operation, transaction, guarantee of payment, relatively cheap cost, protect small businesses and help developing the quality, and also help in language/communication between the seller and the buyer).
- This forum was started for domestic interest due to the size of indonesia and its different potencies from different area. For example, coast area has fishery potency and higher land has field and farm potency that can complete the local market needs. Online trading can reduce supplier's loss or its surplus in open market condition. Therefore, using local language is absolutely needed in this service.
- Increasing women's capacity to produce e-newsletter, e-learning, FAQ, expert corner for Q&A, etc that can also be an evaluation of their business including about IT with empowerment and Competitiveness objective.
- Certification for several specific skills such as vocational skills that is acknowledged in real employment
- Job fields
- Banking Access
- Government regulations related to society-basedd economy development.
- With Earning per capita around \$4356 per year, thus earning increasing still become the needs for indonesian. Therefore, e-services development should be started from economical development. Government can take a role sa facilitator of e-services as the transactional media, including translation into english for possibilities of international transactions.

### 3.3.3.1.2 Education and Knowledge

Internet distribution needs to be use in Human Resources development. The low HDI can also be affected by the short period of experiencing formal education. Eventhough number of indonesian participation in elementary school is quite high, it is about 98.36%, but the dropped-out potency as the effect of poverty is still influancing, some of indonesian children help their family financially and stop their study, therefore only 19.97% of people can reach University level (Statistics Indonesia, 2013).

Educational development can also be one of the advantage from e-services development in form of more daily applicable e-learning. At first, it can provides information about life survivability, like foods, wheather, disaster, etc. Women with more knowledge about foods survivability can use basic ingredient in their surrounding as nutrient-full foods for their family. Women with knowledge about economy can handle financial crisis.

The further development can aim in adding more economical value, for example information about better farming, agriculture, better fishing, or even about how to get innitial capital to start a business or banking access, or financial management. Women with better financial knowledge are able to empower themselves and their surrounding that dependent to them finaccially like financially incapable husbands, or single whinebreather husbands.

The third development can target formal educations, online education. A well-prepared system is needed to make the knowledge be more useful, bigger system form educational system itself, certification, standardization, and employment system that can employ this education system's graduates. In the future, better knowledge from this people can be expected to bring society with better quality. Women with sufficient knowledge for herself, with better education can shape a better family, which become the foundation of e better support system for the nation.

Therefore, e-services is need to:

- provide basic knowledge regarding life survival, disaster handling, law and human rights, civil rights, baby and senior citizen sitting technic, etc. It also includes basic knowledge regarding

reproduction, basic knowledge about family needs like foods (how to process better meal from basic ingredient), rights and obligations under the law (legal married under the law, not only under the religion) which results a clear rights and obligations in family system.

- Knowledge that can help political life, modern culture (in order to shorten the gap between modern world from local culture), Family financial management, reproduction capacity. With all these knowledges, women can empower themselves and also their surrounding.
- both will be delivered in various local language, audio and visually, also in several specific language for group with special needs.
- forum discussion, that knowledge can be shared easier when its delivered in simpler language and from a two-ways conversation.
- expert corner, is not only to produce information, but also to correct some informations among the users in order to give the right direction of informations.

### 3.3.3.1.3 Health

Women life expectancy is longer than men but is not followed by guarantee and protection (Statistics Indonesia, 2013). Only since 1 January 2014 Indonesian government released national health insurance program named BPJS. This program is manifestation of health constitution. Basically, it is an effort to increase public services from handling to prevention, which actually been so long needed by society. Before it existed, healthcare insurance was only given to public servants, but BPJS came to serve all Indonesian.

In the future, it can be more than just prevention insurance, but also to enhance the understanding about health in general. Society can be invited to be more aware about their health condition as their aging. For example a mother should aware when her child need vaccination, or senior citizen understand their need when they age and their declining health, things they need to avoid and how to take care of themselves. Not only age, knowledge about health can also be categorized by sex, which women has different needs for reproduction health compare to men. By the increasing of awareness about how important health is for each individual, therefore making society stronger and able to work well and not become a burden of anyother.

Therefore, e-services is needed for:

- Providing basic knowledge to prevent transmitted diseases, disstranmitted diseases, healthy lifestyle, and contraception.
- knowledge and handling certain disease, baby sitting and also senior citizen needs
- Knowledge about emergency condition like animal attack, extreme wheather and extreme diseases.
- calculating ideal condition like body mass index, nutrient, blood presure, compare to other specific condition like age, etc.
- access to closest medic, including insurancce procedure.

### 3.3.3.2 GDI Basis

The Gender Inequality Index (GII) reflects gender-based inequalities in three dimensions – reproductive health, empowerment, and economic activity. Reproductive health is measured by maternal mortality and adolescent fertility rates; empowerment is measured by the share of parliamentary seats held by each gender and attainment at secondary and higher education by each gender; and economic activity is measured by the labour market participation rate for each gender.

Indonesia has a GII value of 0.494, ranking it 106 out of 148 countries in the 2012 index. In Indonesia, 18.2 percent of parliamentary seats are held by women, and 36.2 percent of adult women have reached a secondary or higher level of education compared to 46.8 percent of their male counterparts. For every 100,000 live births, 220 women die from pregnancy related causes; and the adolescent fertility rate is 42.3 births per 1000 live births. Female participation in the labour market is 51.2 percent compared to 84.2 for men (UNDP, 2013).

**Table 3 Indonesia's GII for 2012 relative to selected countries and groups**

	GII Value	GII Rank	Maternal Mortality Ratio	Adolescent Fertility Rate	Female Seats in Parliament (%)	Population with at least secondary education (%)		Labour force participation rate (%)	
						Female	Male	Female	Male
Indonesia	0.494	106	220	42.3	18.2	36.2	46.8	51.2	84.2
Medium HDI	0.457	-	121	44.7	18.2	42.1	58.8	50.5	79.0

(UNDP, 2013)

E-services dashboard is necessary for all sector that inform GII condition and its component to related sectors, and also gender policy and related regulations in order to make gender equality as mainstream idea in all sectors in national context. For example, mother mortality number is not only supported by Ministry of Health, but also Ministry of Public Works to provide easier health and medication access, Social Ministry can provide social workers for grassroot maternal health problem. Furthermore, indirect substance related to women, like civil rights for new born baby. Or issue about women quota in parliament, which involve education ministry to let simple politic education in formal education, Ministry of domestic affairs, Ministry of Religion, Ministry of State Secretary to prepare women candidates in parliament.

### 3.3.3.3 Culture

Culture is a collective "faith" in a community, it is treated sacredly by the members. Therefore, as a member of a group, women (and also men) rarely criticize the culture ritual in their livinghood. It complicates the filtration of useful habit from habits that hinder women life betterment. Most of local culture in indonesia are patriachal which become the source of gender baseharashment.

E-service in cultural sector can be useful for:

1. Registration of local wisdom and property, it can create e-library about this information. Then this information can be processed, selected base on specific information system to be analyzed the impact for the society.
2. Using the positive culture for women, as well as to clarify the culture that distriminate women.

Clarification that will be used must be wise and proper in order to avoid society resistance. Building women strengths via e-services. For example, registering pregnancy condition in order to get special facility like additional nutrient for pregnant women, and emergency access. It will also build an awareness about women for men as spouses, mothers, daughters or even outside family interaction like in working environment as subordinates or in general interaction. This awareness and understanding from men will help women to strengthen their perspective about themselves.

### 3.3.3.4 Human Resources Development

Beside the e-services future direction, it is also important to have skilled-Human resources to deliver the technology development to all area. People will become the agent of change for development.

In the last five years, Indonesia has implemented Information Communication and Technology (ICT) in its education curriculum. This curriculum teaches basic understanding about Information System such as tools introduction, understanding tools' function and capacity, and guidance of implementation. Schools are perceived as the best media to introduce students to technology. This curriculum aims to make students understand the uses and the advantages of IT tools. By habituating students close to technology at school builds their curiosity about technology. This habituation leads to explore technology further, especially when they start implement technology in their activities such as school assignments and self-learning for examination preparation. This deep understanding about technology in early age will deliver more gen Y especially in rural area.

These students with understanding of technology are expected to be the "agent of Change" in their area. Living in rural area will show them the contrast between what they learn from technology with what they see in their area. They will understand what is incomplete in their place. The bond that they have with their place will be the foundation for them to initiate the change in their rural. They will be the first hand to deliver a change and understanding to the locals about technology. Local will start to learn and internalize technology when they bring technology to their daily activities. The needs of knowing about technology will grow parallel with their needs about betterment.

3.3.4 Lao PDR

3.3.5 Malaysia

3.3.6 Myanmar

3.3.7 Philippines

3.3.8 Singapore

3.3.9 Thailand

3.3.10 Viet Nam

Chapter 4

Chapter 5



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