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**Policies and Strategic Initiatives for New ICT Technologies - Emerging new
Technologies, Services and their Impact**

Contact :

Tel:

Email:



Policies and Strategic Initiatives for New ICT Technologies — Emerging New Technologies, Services and Their Impact

APT POLICY & REGULATORY FORUM 2015

Rony Mamur Bishry

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VISION

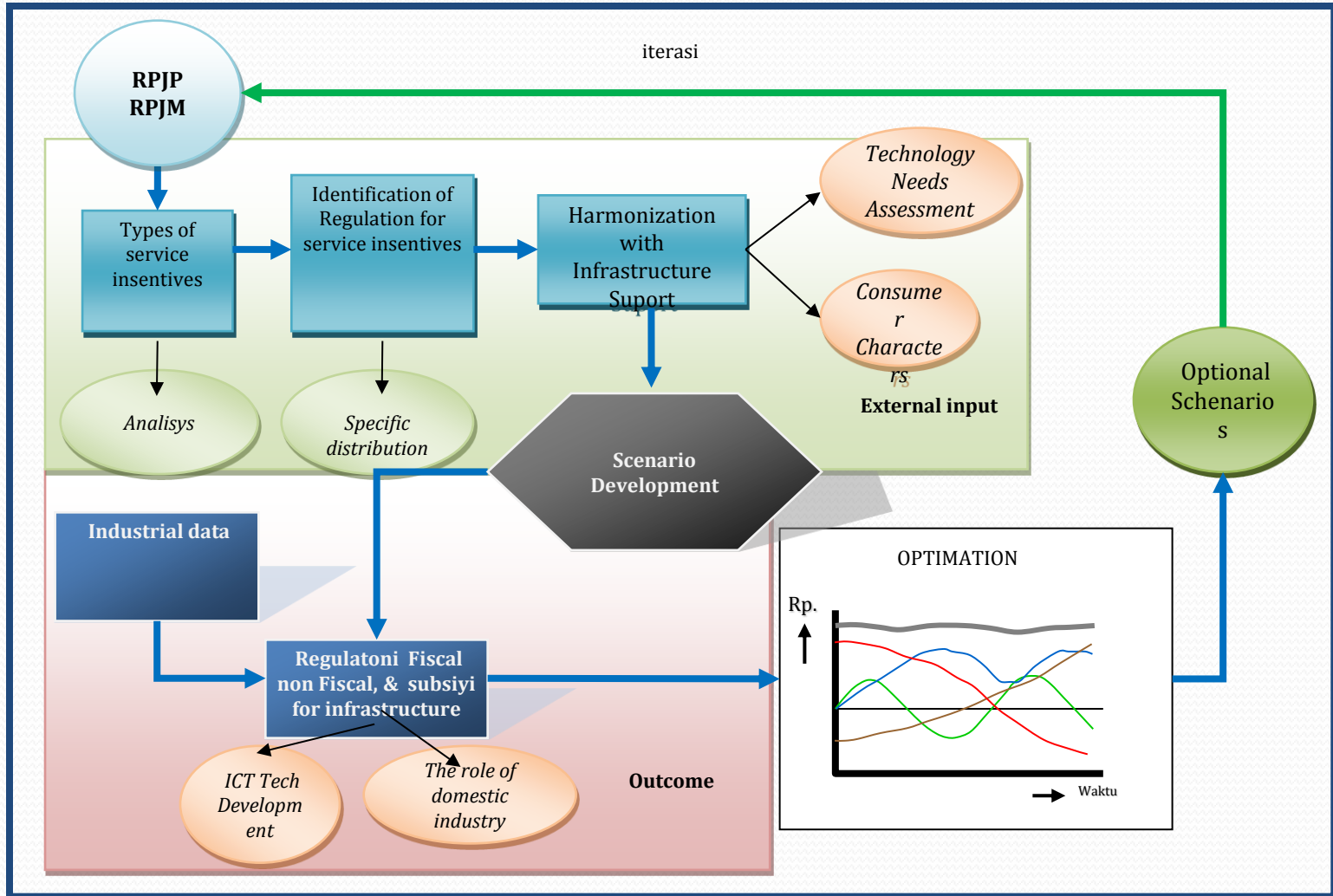


- ICT Technology is a national development program which needs special attention and support
- Tehnological, economic, legal and national security dimensions
- Backed up by appropriate regulation
- Consumer as well as social orientation

Service Incentives for ICT Technology in Indonesia

- Background:
 - Flow of Diagram
 - ICT Technology in Indonesia
- The role of service incentives
- The needs for service incentives
- Technology needs assessment

Service Incentive for ICT Technology



ICT in Indonesia



- ICT technology development has a significant role in the national effort for economic growth and economic equity. ICT technology supports Indonesia's Long Term Development Plan and Maritime national network development;
- Indonesian International trade has net deficit for the previous year of US\$8 billion or Rp100 trillion. IF ICT developments are solely carried out by foreign industries, trade deficit will keep increasing;
- Indonesian ICT technology investment needs approximately Rp 278 trillion or US\$23 billion in 2014-2019 .
- Within 5 years, ICT technology industry is targeted to provide access in urban and rural to the whole population (1 Mbps).
- Network development needs to be developed in the area both viable and non-viable economically.

Pricing



- The appropriate pricing is aimed to rationalize **producer surpluses** and it should take **affordability and industry sustainability** into account.
- **Per capita income** (2012)
 - National per capita income: Rp30.89 million or Rp2.57 million per month
 - Household spending for education Rp24.679, health Rp19.599 and electricity is between Rp90.000 – 110.000,-
 - the cheapest connection of 512 Kbps is Rp 600.000 or 23% of the income per capita per month. **Internet spending is generally higher than household spending for other basic needs.**
- *Affordable ICT technology* is needed, which means reasonable price for sustainable industry
- Interconnection cost, price of OFF-net vs. On net should also closed.

The policies and strategic initiatives for new ICT technologies

- creating efficient and accessible digital services;
- establishing digital economy;
- establishing information, data and archives management; and
- developing information security and privacy of individuals.

Net Neutrality???

- Accessibility
- Affordability
- Appropriate speed
- Equity between rural and urban,
- Equity between east and west
- Ratio on net and off net.
- High capex does not support high price
- Affordability vs. Industry Sustainability

Objectives

- 1) Efficient digital services;
 - 2) ICT as-a-service; and
 - 3) ICT innovation.
- The main objective of the ICT industry is to attain transformed and capable workforce.

Target

- Information is easily accessible and visible across government and private sectors enabling government to derive greater value from its information.
- With simple and fast licensing process, information is easily accessible, visible and available for reuse by the public, including businesses, researchers and individuals.
- Information is free to the public (except if the charge is statutory or cost recovery has a clear net benefit for the community)
- Information is made available in a timely and relevant manner, unless it is restricted for reasons of privacy, public safety, security, commercial confidentiality or compliance with the law.
- To nurture and accelerate innovation in the state of and deliver economic benefits to the community.

Target for Security

- Contract arrangements contain provisions for information security and privacy protection;
- Improved information security governance with greater alignment to recognised industry standards;
- Security practices and risk mitigation investment strategies are driven by business needs;
- Privacy of sensitive information is maintained while enabling information interoperability;
- Improved service delivery and cybersecurity for online services;
- The private and personal information remain confidential and secure.

Impact

- Government Sector
- Private Sector
- Society

IMPACT TO THE GOVERNMENT

- make it easier for industry to do business with the government through *e-logistik (logistic)*, and *e-pengadaan (procurement)* with government reducing costs and increasing productivity in both the public and private sectors;
- provide online participation by society to the national ICT network to improve access to health, education, job opportunities, and other government service through *e-health, e-education, e-govt and e-job*.
- enable health and aged-care services for remote and rural patients through online access to physicians through *e-health*;
- develop innovative and flexible education services to extend online learning resources to households and businesses through *e-education*;
- easier access for the majority to choose to access government through the Internet and other digital services through *e-govt*.

Impact to Private Sectors

- The level of ICT used in a company depends significantly on variables such as the scale and type of activity.
- Small industry typically uses a fairly limited ICT. Most of them use both fixed-line and cellular telephone in their activities. While the cellular phone is initially meant only for personal use, but in practice it is also widely used for business in the small industry.

Impacts to Private Sectors (Cont'd)

- Medium industry uses ICT more intensively, associated with more equipments and tools compared to the small industry;
- The medium industry also uses other types of ICT such as fax machine, computer and Internet, printer and copying machine.
- The equipments are use not only in relation to clients or customers but are also used in dealing with suppliers, distributors, agents, etc. The medium industry uses computer and Internet more intensively than the small industry.

Impacts to Private Sectors (cont'd)

- Large industry has an even more intensive use of ICT. That fact is of no surprise since this kind of industry is equipped with more apparatus. The types of equipment are not too much different from those used by the medium industry, for example the telephone, fax, computer and Internet. In the large industry, Internet and e-mail are also used for gathering information about different things, browsing to and networking with foreign counterparts.

Impacts to the Society

- enable online participation by households to the national ICT network to improve access to health, education, government services and job opportunities through e-health, e-education, e-govt and e-job;
- develop new innovative service delivery mechanisms (government and non-government) through e-trade;
- Has greater access to the global information;
- Increasing economic activities through e-commerce;
- *Public participation in policy/regulation making, i.e. public comments on the drafts of ministerial regulations posted on the web;*
- *Increasing participatory and sharing culture (user-generated contents) that fosters creativity and innovation.*

Conclusion



- ICT Technology Development should become National Development plan;
- Service incentive should be oriented toward consumer and society;
- Regulation should gear towards net neutrality;
- Target should support economic, social and security objectives;
- Greater impacts to the government, private sectors and society.



Thank You