Network Sharing: Finding the Best Practices

The network sharing program is still going under further talks at the Ministry of Communication and Informatics (Menkominfo). The main issue in the network sharing plan seems to concentrate around how to reach a “win-win solution” agreement among telecommunication operators. The network sharing program provides an enormous potential to increase efficiency and more importantly, to give broadband access to everyone in all areas of the country. As already mentioned at the previous edition of ISSUES, Indonesia’s 51% Internet Penetration rate is relatively small compared to the neighbouring countries (APJII 2016), which is holding back the economy from reaching its full digital economic potential.

Asia Pacific Economic Cooperation (APEC) survey (2011) finds that network sharing promotes competition and reduce costs, which leads to a higher coverage especially in rural areas. Thus, network sharing has the ability to close the communications gap in the vast and spread out Indonesian population. Other benefits network sharing include, according the APEC survey (2011): lower CAPEX (capital expenditures) for operators (based on international case studies), regular annuity income for asset owners, lower OPEX (operational expenditures) due to the sharing of rent, power and fuel costs, higher innovation as investment shifts to focus more on consumer needs, and lastly, a lower barrier to entry that leads to a reduced price for consumers and wider range of services.

However, all the potential benefits stated above could also come with some possible costs. These include: a decreasing market share of established (and dominant) operators, higher monitoring costs in the performance and quality management systems, and a difficulty to find a win-win solution for all operators including CAPEX that needs to be recovered from infrastructures built by incumbent operators. All these costs though, could be minimized through the right regulatory setting and suitable contract/agreement structures.

ISD Views:
The main on-going issues at the Network Sharing program is circulated around the revision of two related government regulations, which were PP 52/2000 (covering telecommunication operators) and PP 53/2000 (the uses of radio frequency spectrum and satellite orbit). It is important to note to the public that network sharing is a common practice in most countries. PP 52/2000 already makes it compulsory for network operators to ensure that interconnection is transparent and non-discriminative, but this PP 52 does not apply to network infrastructure sharing in general.

So far, infrastructure sharing can be arranged through the agreement between business to business only (Permen Kominfo 3/2000), but this could potentially lead to unhealthy competition environment that is hard to observe and manage. The revision of PP 52 and PP 53 is aimed to increase network coverage, industry efficiency, services quality, and the purchasing power of network services for consumers.
The 14th Economic Policy Package contains eight policies, which consist of business funding, taxing, consumer protection, education and manpower, communication and infrastructure, logistics, cyber security, and formation of executive management.

Here is a short summary of the eight packages:

- **The Government will make funding easier through its credit program** “Kredit Usaha Rakyat” for development platforms, business grants for new start-up companies, Universal Service Obligation (USO) Fund for SMEs (small and medium enterprises), angel capital for start-ups experiencing losses, seed capital from Bapak Angkat program (various support incentives from BUMNs to struggling SMEs), and crowd funding, which is alternate funding that compile funding from certain group/community or public.

- The Government will hand out **tax incentives** to local investors who invest in start-ups companies. Additionally, start-ups with a revenue less than IDR4.8 billion will get a lower and more simplified tax rates. And finally, these tax incentives are given for both domestic and foreign start-ups indiscriminately.

- **Consumer protection** through harmonization of regulations involving electronic certificate, accreditation process, mechanism payment policy, protections for both consumers start-up entrepreneurs, settlement dispute scheme, and gradual development national payment gateway.

Network sharing is a sensitive regulation that requires input and collaboration between related Ministries and related stakeholders including state-owned and private operators. The social and economic benefits of network sharing are outweighing its costs. A deeper review in rules and policies in network sharing can further reduce the costs, but more importantly, the Government needs to ensure that the laws are non-discriminatory and contain competitive safeguards. And also, it is critical to have a “cost-based pricing” and “non-discriminatory terms and conditions” regulations. Overall, network sharing should be a priority in order to improve the connectivity and infrastructure of telecommunication, information, and technology because not only that it is a vital service for economic growth but also a compelling case to close the digital divide outside Java.

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**e-Commerce Roadmap: Bringing the Market Closer**

The Indonesian Government has recently released its 14th Economic Policy Package *(Paket Kebijakan Ekonomi Jilid 14)*, which contains its first ever e-Commerce Roadmap. This economic package aims to maximize digital opportunities through various supportive economic policies ranging from business grants, lower tax incentives and to e-Commerce education curriculum. The Government hopes that the e-Commerce Roadmap could make the economy with the biggest digital economic capacity in Southeast Asia by 2020. Furthermore, as a country with the largest internet and smartphone users in the region, the e-Commerce Roadmap also targets by 2020 to create 1,000 technopreneurs with US$10 billion business value and an overall e-Commerce market valued at US$130 billion.

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- Consumer protection through harmonization of regulations involving electronic certificate, accreditation process, mechanism payment policy, protections for both consumers start-up entrepreneurs, settlement dispute scheme, and gradual development national payment gateway.
• Increase **e-Commerce awareness** through national incubator program, e-Commerce curriculum, and an overall e-Commerce campaign for consumers, entrepreneurs and law enforcement.

• Increasing **e-Commerce logistics** through the National Logistics System (*Sistem Logistik Nasional* – SISLOGNAS). Moreover, PT Pos Indonesia, as a national postal service, will go through revitalization, restructuring and modernization to increase its capacity and efficiency.

• Increasing **communication infrastructure** through the development of national broadband system to penetrate internet access to cover all areas of the Archipelago.

• The development of **national cyber security system** and as well as public campaign for cybercrime and privacy awareness.

• The forming of **strategic management executive** that has monitoring and evaluation capacity to ensure the effective implementation of the e-Commerce Roadmap.

**ISD Views**

The e-Commerce Roadmap is, without a doubt, a very important policy package that can map the needs of digital opportunities for the economy. It can help path a way for start-ups from their struggles to become profitable. However, there are a couple things to that can be added to this economic policy package:

**Firstly**, there should be a **regulatory framework that allows and encourages a sound and healthy business environment**. This can include, for example, a standardization of competition in order to avoid predatory pricing, which currently is common among start-up companies who have been operating in ‘cash burning’ scheme for a while. A healthy regulatory framework can help build a healthy competition, and encourage start-up companies to be more anticipative for their next phase than and as well as not to burn cash too aggressively before profit comes.

**Secondly**, the Government and e-Commerce stakeholders can together discuss on implementing a **set of strategic guidelines**, to ensure that the start-up’s business model in Indonesia is sustainable. These guidelines could assist start-up companies to avoid being trapped in the short-term financial exuberance and look further ahead to reach for a long-run stable financial condition. Overall, this economic policy package has the potential to bring the digital economy to a greater capacity in Indonesia. This is the most effective regulatory approach so far from the Government in embracing the disruptive yet dynamic digital market. However, the question now is: how effective the implementation of the e-Commerce Roadmap would be?

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**Digitization of Healthcare Services; Opportunities and Challenges**

*A Summary from Executive Roundtable Meeting on the Digitization of Healthcare Services*  
*November 21, 2016.*

**Growing and aging population** will shape the needs of healthcare across the world. Emerging markets such as Indonesia will account for 80% of the world’s elderly by 2050 (Deloitte, 2016). Chronic and non-chronic diseases continue to increase, and this is already (and will still be) an important sector since emerging economies account for 75% of all these deaths. Furthermore, currently 200 of 370 million people with diabetes live in Asia. The main obstacle now is that healthcare infrastructure in emerging markets is concentrated in urban areas. Over 50% of emerging markets in Asia pacific live in rural, while healthcare services concentrated in urban areas (Deloitte, 2016). The world is seeing a growing middle class and 2/3 of world’s middle class will be in Asia Pacific by 2030 (Deloitte, 2016).

The implementation of *Jaminan Kesehatan Nasional* system, which aims to cover the whole population by 2020, has significantly increased people’s access to healthcare services. However, there are gaps between the demand and supply, while we are still struggling in providing sufficient number of infrastructure and human resource. The call for digitization becomes main necessity in order to catch up with the market dynamic. Healthcare digitization could be applied in each segment of the supply chain, including patient administration, vendor procurement, order system (especially in pharmaceuticals), tele-diagnostics, and cloud data storage for Electronic Medical Records or Electronic Health Record (EHR).
How Digital Services Can Help

- High accuracy by electronic medical records because the system will avoid redundancy in medical tasks and prescriptions.
- Electronic medical records brings greater time and cost efficiency for both providers and patients.
- A closer market and broader coverage through e-Pharmacy and e-Consultation. In more advanced countries, around 90% of symptoms can be diagnosed by anamnesis discussion. Thus, the future of healthcare could be done through virtual consultation. Of course, there should be regulation that classifies type of diagnostics could be done virtually.
- Higher control in ethical products distribution. With digitization, the system will be able to control drug distribution and distinguish the purchase of prescribed and non-prescribed medicine.
- Better order system. Digitization can cut the queuing time, simplify the registration, and match the patients with the right physicians suitable with their needs.
- Cost-cutting in healthcare services operation.
- Higher control in reimbursement system with one cloud service. This is already proven by the ability of BPJS in auditing the beneficiaries.

Challenges

Indonesia, in terms of digital healthcare, is relatively behind its neighboring countries such as Singapore, Malaysia, and the Philippines. We identify some major challenges in healthcare digitization:

- **Regulatory Constraint**: Current regulation requires face-to-face meeting, which hampers the implementation of tele-diagnostic. Furthermore, the regulation does not allow cloud storage system (for EHR) to be opened for legitimate users while other countries such as Singapore and the Philippines has started to build national EHR. An experience from Ramsay Hospital points out that in 2003, Electronic Medical Record was already implementable in Indonesia, yet after going through legal evaluation, Permenkes 269/MENKES/PER/III/2008 requires medical records to be done on paper or electronic filing. Implementation of electronic filing will be regulated by an adds-on regulation. However, there has never been a specific regulation covering this issue.

- **Infrastructure**: Internet infrastructure in Indonesia is not sufficient to support healthcare services digitization. There are still a lot of regions without internet access, which means that digitization is probably only feasible in urban areas. Some experience from hospitals show that IT service providers from other countries are more cost efficient than in Indonesia due to better quality of infrastructure.

- **Cultural aspect**: Slow adaption of digital technology because of the lack of awareness and the fact that most of medical practitioners are not tech-savvy. Population still perceive healthcare services as a secondary need. Low awareness of preventive healthcare measures leads to slow moving in healthcare development. That's why some of health startups are promoting the education/awareness of health, particularly by focusing on preventive health, rather than curative.

Ideas

**Firstly**, since we already have a centralized data system in the BPJS Kesehatan, could we leverage this into one secured data center for all legitimate providers such as electronic medical records in other countries? **Secondly**, digital transformation in healthcare should be involved in the Government Digital Roadmap Development. Some practitioners such as GP Farmasi and Digital Healthcare Community has initiated talks and community on healthcare digitization. Therefore, how do we scale up this initiative?

Conclusion and Further Steps

Indonesia needs a **reinforcement in regulatory framework to accelerate digitization in healthcare**. ISD, as a Services Council covering healthcare services sector, will support digitization in healthcare including necessary policy advocacy action through coordination with related stakeholders including healthcare services providers, industry experts, practitioners, and related government body. The result of this discussion will be an initial policy paper of ISD in healthcare digitization and would be circulated to policy makers. ISD opens for further inputs/discussions from or collaboration with participants and other relevant institutions.

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