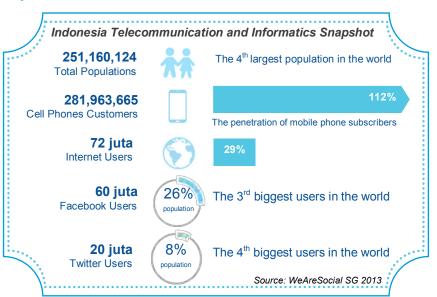
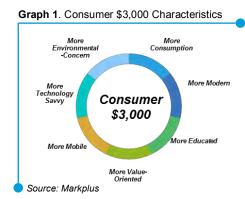
# SMI's Insight - 2<sup>nd</sup> Quarter 2014 **Telecommunication** "Within the last several years, telecommunications infrastructures and services have enjoyed prosperous growth and becoming one of the very attractive sectors in Indonesia"



Indonesia is in "Consumer \$3,000" category, a classification that implies its GDP per capita has reached USD3,000, or possibly more. It is now a fair dream to Indonesia to have similar success story as to South Korea and China, the 11 continuous years of economic booms after they have reached the level.

Within the last several years, telecommunications infrastructures and services have enjoyed prosperous growth. With its enormous population and archipelagic profile, the industry has become one of the very attractive sectors in Indonesia.



### Overview of Indonesia Telecommunications Market and Regulations

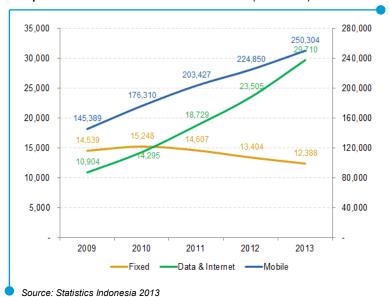
Apart from the social impacts, telecommunications spurs positive economic influence: sales of high-tech gadgets, faster Internet connectivity, game-changer in advertisement business, and increase in commercial etrade. The industry even casts several world's famous billionaires.

Historically, for a certain period, telecommunications was associated with non-optimal industry even with the nation's potential upside such as the amount of population. The condition was indicated by the access to communications that have not fully enjoyed by the entire populations.

The industry has been recovering well as reflected from consumer penetration rate and continuous annual revenue growth of 10-12%. Statistics Indonesia estimated as much of IDR300 trillion revenue was generated in 2014 by the sector.

The market has three main revenue streams: mobile, fixed line, and data-internet. Fixed line revenue is dwindling as cellular system becomes the new norm in society. The condition is also confirmed by the annual growth of mobile and data revenue.

Graph 2. Revenue of Telecommunication Sectors (IDR Million)



Graph 3. Revenue Contribution of Telecommunication Sector to GDP



However, such expansion rate is still lower than other countries with similar economic class. This simply means business opportunity exists to create deeper and broader market penetration in Indonesia.

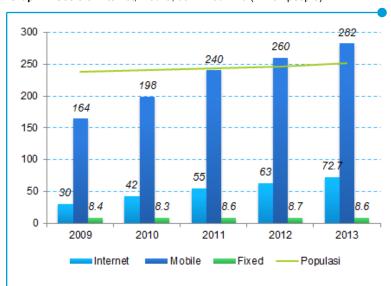
Interestingly, annual income growth from data-internet is the highest of the three. This reflects easier public access to news and information in which speed is the key.

The sector also gives relatively stable contribution to Indonesia GDP and tends to have progressive growth although in just the order of a few basis points.

At the moment, Indonesia is in the transition period from the physical connection into wireless connectivity. The golden era of fixline in 2000s has reached stagnancy with a tendency to move downward as public is moving towards cellular technology that can provide them with higher mobility, faster access to information, better accuracy, and improved level of services.

Cellular telephone and Internet have shown tremendous growth. Within the last two years, cellular users have reached beyond the total population (gathered from the number of SIM card activation).

Graph 4. Users of Internet, Mobile, dan Fixed Line (Million people)



Source: Communication and Information Ministry, 2013

#### Regulations

Government of Indonesia (GOI) passed Information and Electronic Transaction Law No. 11 year 2008 and Telecommunications Law No. 36 year 1999 as the guidelines of the industry. The spirits of the law are: industry liberation (non-monopoly), government facilities for newcomer, and consumer and carriers protection act to support healthy competition in the market.

#### **Privatization**

The general stumbling block found commonly in developing countries is government inability to sufficiently invest to develop infrastructure, such as telecommunication sector. One of the solutions is through privatization of state-owned companies like Indosat. The rationale behind denationalization was to obtain operational efficiency and gear private investment to develop the industry.

However, for the next period, privatization is not the most appropriate solution for the problems of government inability. For developing countries such as Indonesia, precisely the need for good infrastructure is a necessity in order to continue to promote economic growth. Public Private Partnership scheme could be one solution to the limitations of the government to narrow the gap.

#### **Free Competition**

Develop countries always have regulations made to simplify private investment for both foreign and local investors. They have independent agencies acting as regulators, licensors, and watchdogs to ensure the law is pro-market and non-discriminative thus promote healthy competition among the players. In developed countries for example, they always have special regulations to facilitate foreign or private parties to invest in the telecommunications sector. GOI has followed the same custom by creating BRTI (Badan Regulasi Telekomunikasi Indonesia or Indonesia Telecommunication Regulator Agency).

History of BRTI is quite unique. Usually similar agencies in other countries were established prior to any market liberation or private investments. In Indonesia, BRTI was formed 12 years after the first telecommunication operator company had been operating.



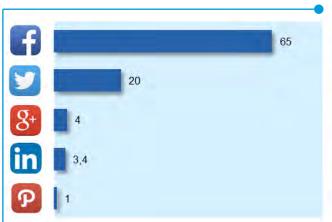
### **Current Telecommunication Market in Indonesia**

There are several main indicators which confirm the expansion of Indonesia telecommunication industry. MarkPlus Reseach Institute named at least three of them: social media evolution, smart phone technological advance, and stronger bargaining power from consumers. One more thing that can be categorized as the major trends; demand for faster and broader data access.

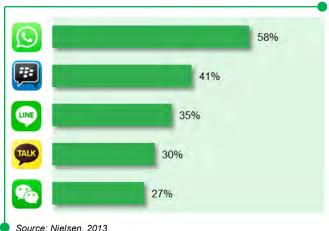
#### **Social Network**

With its huge number of inhabitants and the socially-oriented culture - who likes to interact with the others -, social network usage has grown exponentially in Indonesia. The ability of social network to connect people virtually from anywhere and anytime encourages its widespread use. Indonesia is one of the countries with the most social network users.

Graph 5. Indonesia Social Network Users in 2013 (million)



**Graph 6.** Percentage of Instant Messaging Users from Internet Users in Indonesia in 2013



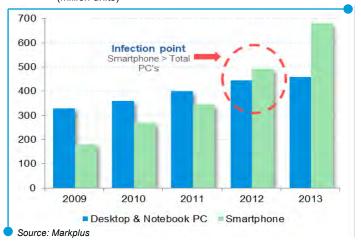
The condition is well exploited by gadget manufacturers by extending their market via smart phone devices embedded with social network applications.

#### **Smart Phones**

Source: Webershandwick.com, 2013

Smart phone penetration is growing fast. With electronic components cost has fallen and demand for the devices has been increasing, vendors could now mass produce smart phones economically. Nielsen Research Institute stated that the penetration of smart phones in Indonesia is estimated at 23%.

**Graph 7.** Comparison of PC and Smart Phone in the World (million units)



Graph 8. Market Share of Indonesia Telecommunication Operator in 2013



The phenomenon is similar globally where smart phone market outgrows computer (desktop and notebook PC), creating evolution in the way people are using Internet.

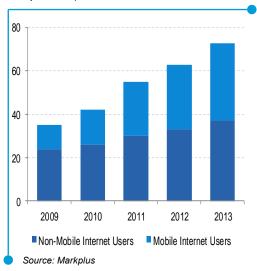
#### **Consumer's Bargaining Power**

The latest influential factor affecting the sector growth in Indonesia is consumer ability to spend more on technology. The market has at least 11 commercial operators (carriers). Therefore, public has a lot of options to choose service packages offered. Factors most considered when consumer is selecting a carrier to another are tariff, signal coverage, and service quality. These aspects are enticed from how people access the Internet, where mobile Internet access has been increasing each year, in line with current lifestyle that demand higher mobility. Therefore, it is predicted that mobile Internet usage proportion will be higher than the conventional access within a few year.

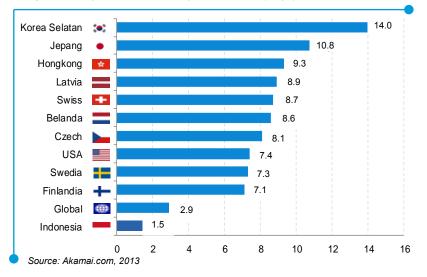
#### **Data Access**

Cheaper and easier Internet access and technology development allow demand for data access services to grow substantially. However, even with such growth, Indonesia is still having relatively low Internet connection when compared to other countries.

Graph 9. Proportion of Internet Users



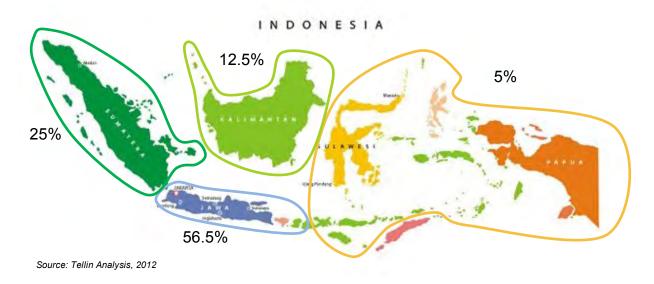
Graph 10. Comparison of Internet Speed Countries (Mbps)



### **Telecommunication Infrastructures**

Although better interconnectivity ratio has been achieved. Indonesia has big disparity in the telecommunication service coverage and infrastructure development with around 56.5% of the national share is in Java, 25% in Sumatera, 12.5% in Kalimantan, with the rest in the eastern part. The inequality is simply a demand-driven phenomenon, especially in Java where consumer's spending ability is the highest.

To deal with such big discrepancy, GOI has a plan to develop service and coverage of its existing Palapa communication satellite and to build national grand project called Palapa Ring. The latter, when finished, is network of approximately 35.000km and 21.000km seabed and land fiber optic cable respectively.



From the operational side, Base Transceiver Station (BTS) infrastructure is crucial to ensure service coverage to consumers. However, this would incur hefty investment if one operator has to build its own tower for its own service. Therefore, to reduce the amount of investment needed, GOI as regulator actively campaigns BTS tower sharing among carriers. Furthermore, regulation is now allowing both foreign and domestic carriers to build their own tower, although currently there is restriction that tower contractor must be local.

Regionally, Indonesia is still falling behind its neighbor for infrastructure development of international cable network. With population over 250 million and international capacity of 600 Gps (gigabyte per second), it is far below Singapore with its 1,500 Gps and population of only 5 million.

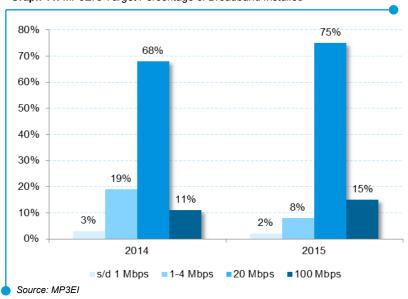
| Country     | Capacity (Gps) | Population (million people) |
|-------------|----------------|-----------------------------|
| Singapore   | 1,500          | 5                           |
| Malaysia    | 1,400          | 30                          |
| Philippines | 1,000          | 92                          |
| Thailand    | 900            | 70                          |
| Indonesia   | 600            | 251                         |

Source: Tellin Analysis, 2012

## **>>>**

#### **Future Trend**

Graph 11. MP3EI's Target Percentage of Broadband Installed



Demand for better telecommunication is at the highest, parallel to public demand of increase in mobility and modern lifestyle. Even with demand for service is growing, Indonesia is still having the lowest Internet access speed among other countries.

Therefore, GOI has a strategy to develop National Broadband Network program. The program

targets higher economic growth by increasing broadband penetration. A World Bank study suggests that when there is a 10% increase in broadband coverage, it will translate directly to 1.38% of economic growth.

At the current stage, Indonesia telecommunication sector has potential to attract more investment and cover broader market segmentation. The condition is supported by the fact that existing carriers are able to offer services for voice communication, pictures, as well as data. Development to the sector is needed to enhance national competitiveness and encourage knowledge-based economy.



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Ms. Astried Swastika Corporate Secretary PT SMI

Tel : +62 21 5785 1313 Fax : +62 21 570 9460

Email: corporatesecretary@ptsmi.co.id

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