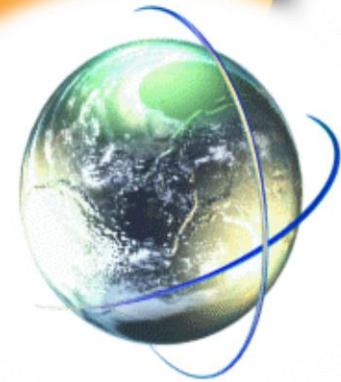




Developing Internet Service in Indonesia : Opportunities and Challenges

Budi S. Purba
VP Carrier Relation & Sales



Contents

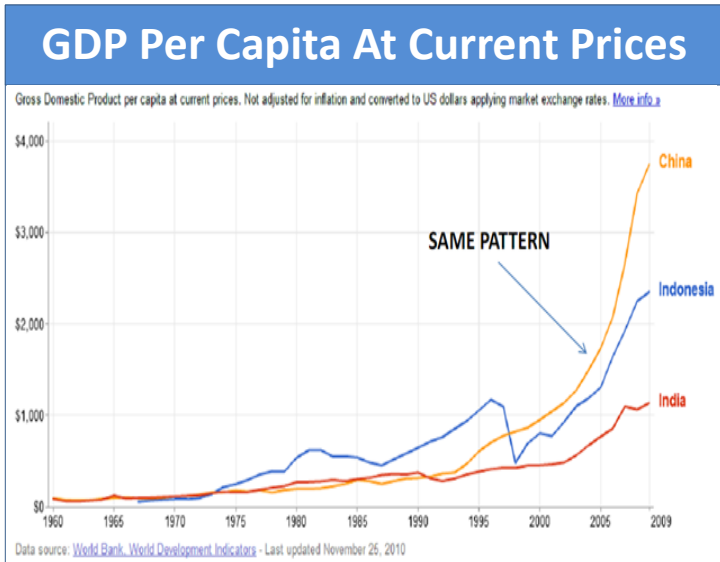


- Indonesia ICT market
- Current Infrastructure
- Opportunities and Key Challenges
- Strategic Development

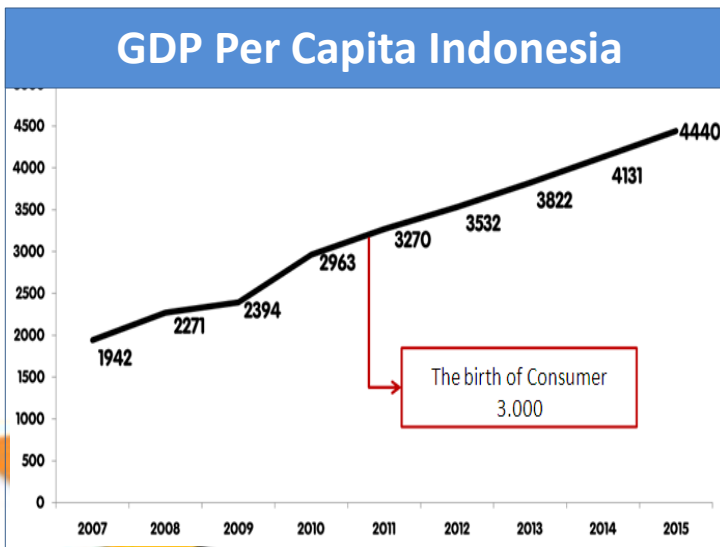
Indonesia ICT Market

General Environment : Economy

Indonesia reach \$ 3000 GDP



- ◆ Estimated, Indonesia will reach per capita GDP \$3.000 in 2011
- ◆ Reaching the \$3,000 per capita GDP level, South Korea experienced surging economic growth for 11 years after achieving that level.
- ◆ The birth of Consumer \$3.000



Characteristics of Customer \$3000

- More Consumption
- More Modern/Global Minded
- More Educated/Knowledgeable/Civilized
- More Value-Oriented
- More Mobile
- More Technology Savvy
- More Environmentally-Concern

Indonesia Broadband Subscriber Outlook

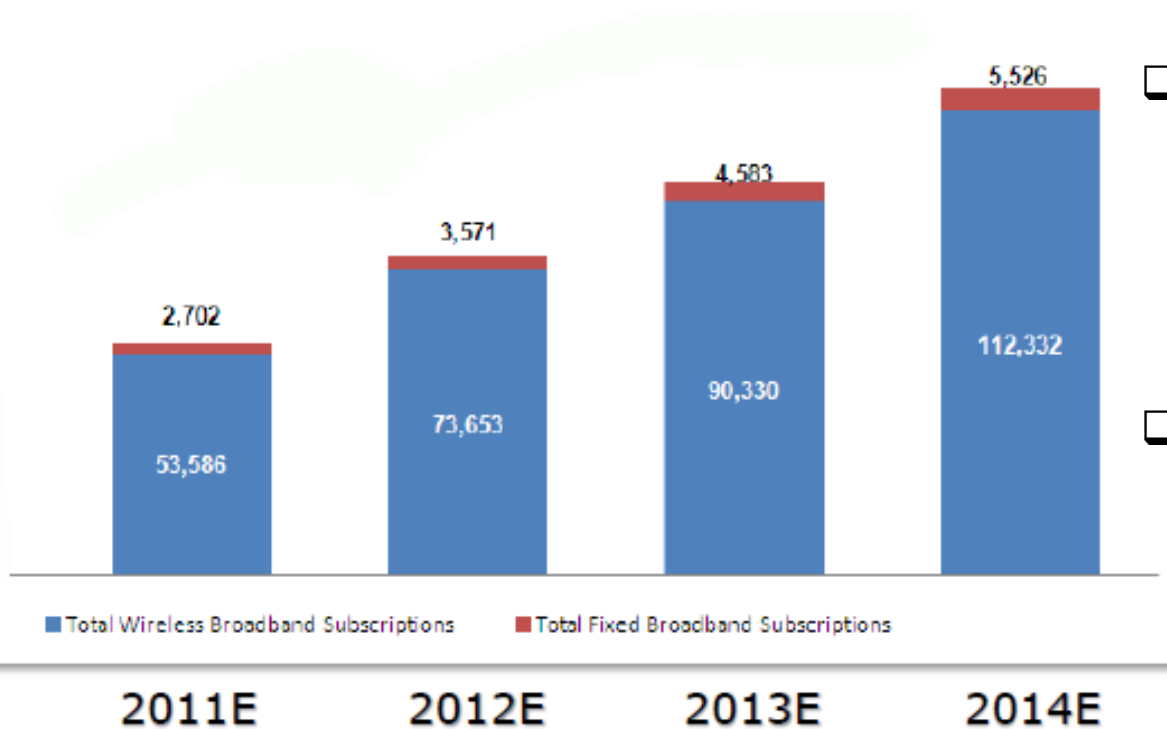


22.9%

31.0%

37.6%

46.2%



- Indonesia has already shown a strong inclination towards smart phone use, with close to 3 M BlackBerry handset users in the market
- 2nd largest “facebook” after the USA and “Twitter” world's highest penetration rate at 20.8% -the demand is huge,



Indonesia Internet User Growth



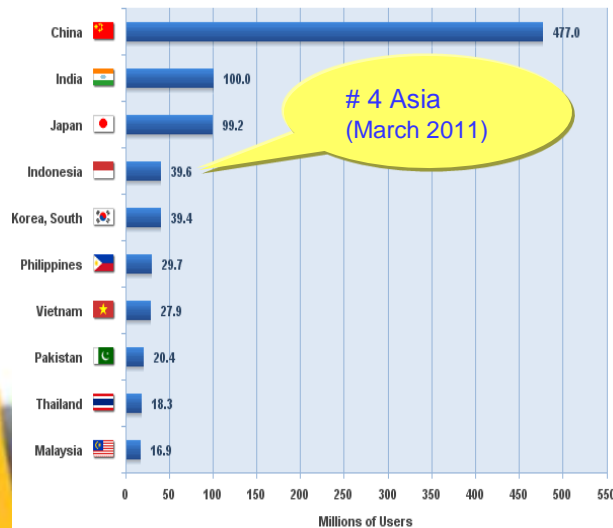
Indonesia Internet users growing very fast but mostly accessing US content

Indonesia Internet Users : #4 in Asia

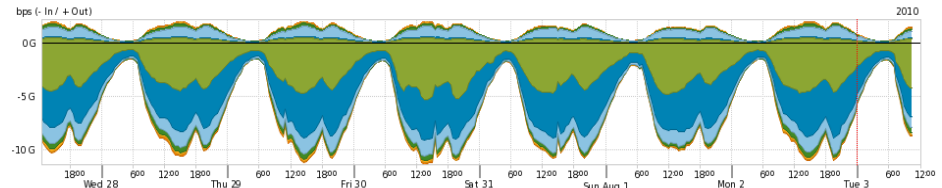
Source : internetworldstats.com

Country	Population	Internet Users (Year 2000)	Internet Users (March 2011)	Penetration (% Population)	User Growth (2000-2011)
China	1,336,718,015	22,500,000	477,000,000	35.7	2,020.0 %
India	1,189,172,906	5,000,000	100,000,000	8.4	1,900.0 %
Japan	126,475,664	47,080,000	99,182,000	78.4	110.7 %
Indonesia	245,613,043	2,000,000	39,600,000	16.1%	1,880%
South Korea	48,754,657	19,040,000	39,440,000	80.9	107.1 %

Asia Top Internet Countries
March 31, 2011



Mostly still accessing US Content: Google, Youtube, Facebook, Yahoo...



AS Name	ASN	Into Network	Out of Network	Total (In + Out)
GOOGLE	15169	5.31 Gbps	559.00 Mbps	5.87 Gbps
YOUTUBE-EU	43515	4.63 Gbps	134.00 Mbps	4.76 Gbps
FACEBOOK	32934	1.55 Gbps	1.09 Gbps	2.64 Gbps
YAHOO-1	10310	503.00 Mbps	284.00 Mbps	787.00 Mbps
YAHOO-SG	10230	242.00 Mbps	130.00 Mbps	372.00 Mbps
YAHOO-SP1	36752	139.00 Mbps	66.00 Mbps	205.00 Mbps

Social Media and Internet Devices

Social Media

Source : Indonesia Finance Today

Face book


- World Face book Users: 645.252.340
- Indonesia Face book Users: 35.174.940
- Penetration of population: 14.48%
- Penetration of online population: 117.25%


Twitter


- World Twitter Users : 200 Million
- Indonesia Twitter Users : 7.6 Million


Blackberry

- World BlackBerry Users : 70 Million
- Indonesia BlackBerry Users : Telkom 2.5 Mio, Indosat 1.5 Mio and XI 1.4 Mio

 **(IDC NMMM 2009)** Indonesia has 25,4 million internet users. Penetration of Mobile Internet in Indonesia is increasing, 63% in 2009, 69,3% in 2010 and expected to reach 73,2% in 2011.

 **(Yahoo & TNV June 2010)** This raise is achieved 26% by mobile internet access, rise from 22% (2009) to 48% (2010). It is driven by the number of content provider in mobile services.

 **(MarkPlus 2010)** 8 of 10 people use mobile internet. In average, each user uses 1-2 gadgets for internet access.

 Medium low users tend to use hand phone for internet access. While the rest use 2 gadgets for internet access; hand phone and laptop.

Internet Devices

Source : OBA

Smart Phone











- Smartphone : 167 Million
- Penetration : 16.7%

Computer

- Computer : 15 Million
 PC : 32.55%
 Laptop : 67.45%
- Penetration : 5%

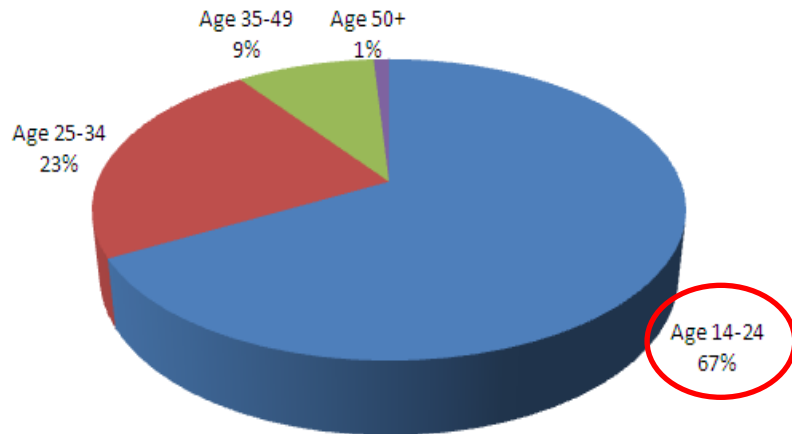


The Digital Habits of Young BRICI users

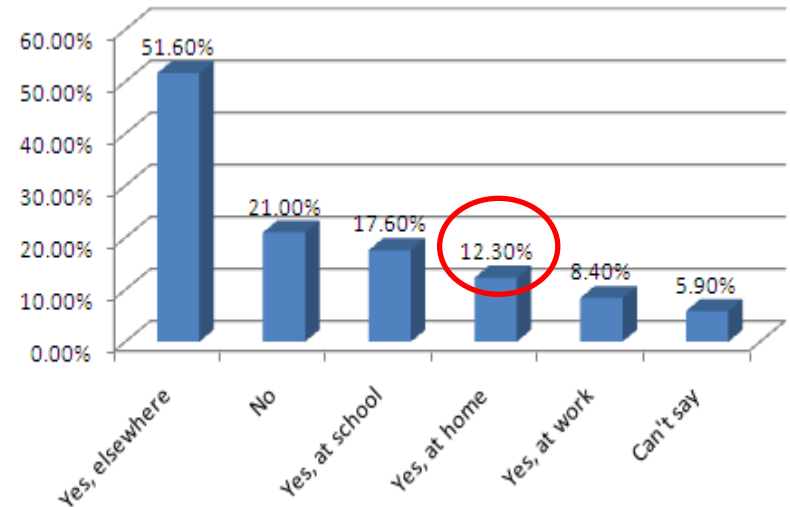
	  China	  India	  Brazil	  Russia	  Indonesia
Background	<ul style="list-style-type: none"> ◇ 14 years old ◇ Junior high school student in Guilin ◇ Only child; lives with his parents 	<ul style="list-style-type: none"> ◇ 18-year-old student in Lucknow ◇ Lives with his parents and elder sister 	<ul style="list-style-type: none"> ◇ 17-year-old student in São Paulo ◇ Lives with his parents ◇ Likes to play <i>futsal</i> (indoor soccer) 	<ul style="list-style-type: none"> ◇ 18-year-old economics student in Moscow ◇ Single ◇ Lives with her parents in an apartment 	<ul style="list-style-type: none"> ◇ 18 years old ◇ High school student living in Jakarta with his parents ◇ Spends one hour per day online
Digital spending	<ul style="list-style-type: none"> ◇ ~\$30 monthly in pocket money ◇ ~30% spent on digital services 	<ul style="list-style-type: none"> ◇ ~\$500 household income ◇ ~10% spent on digital services 	<ul style="list-style-type: none"> ◇ ~\$250 monthly in pocket money ◇ ~50% spent on digital services 	<ul style="list-style-type: none"> ◇ ~\$60 spent on digital services monthly 	<ul style="list-style-type: none"> ◇ ~\$50 monthly in pocket money ◇ ~10% spent on digital services
Attitudes toward digital devices and services	<ul style="list-style-type: none"> ◇ Looking for fun and new friends, with usage focused on instant messaging, games, and social networking sites 	<ul style="list-style-type: none"> ◇ “My PC is like an elder brother to me: it guides me and helps me out all the time.” 	<ul style="list-style-type: none"> ◇ “When I am alone, I usually go online. The Internet is part of my life.” 	<ul style="list-style-type: none"> ◇ “Friends are very important—and the Internet gives me an opportunity to be connected with them.” 	<ul style="list-style-type: none"> ◇ “Without a mobile phone, I would feel like I was back in primitive times—I would feel so out of touch.”

Source: BCG research.

Internet Users by Age



Do you have internet connections?



- Net citizen in Indonesia is dominated by “Teen & Youth” (14th-24th) 67% and 25th-34th 23%, 90% in total.
- Only 12,30% of Teen & Youth has fixed internet line at home
- (Yahoo & TNS 2010), Jakarta has the fastest internet growth in Indonesia. Followed by Semarang (11%), Palembang (10%) and Makassar (12%).

Internet penetration in Indonesia is much lower than other countries in Asia with similar economic level. There is a huge business opportunity to increase penetration.

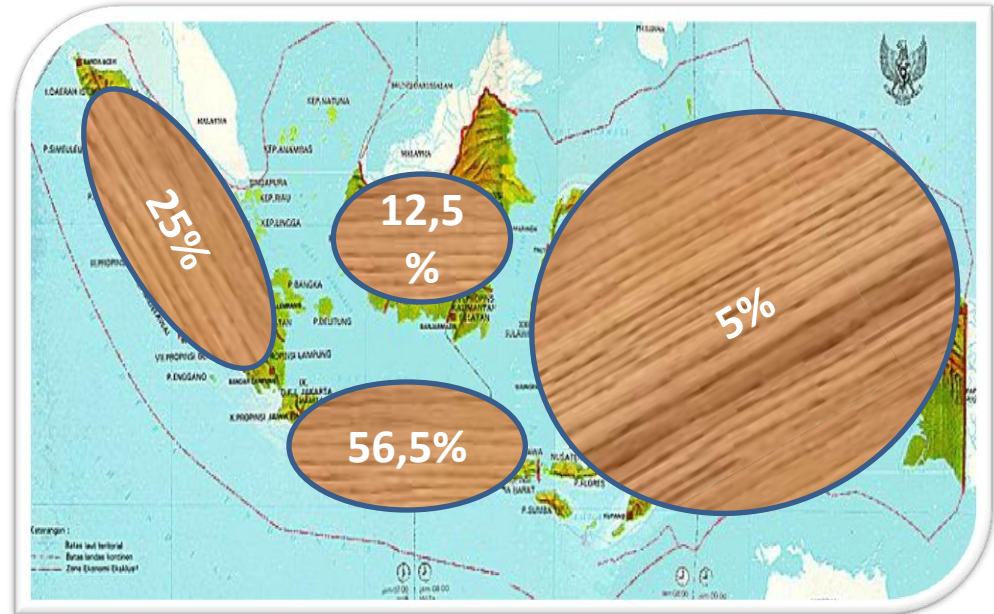
The market is promising

Current Infrastructure

Indonesia ICT Profile

- Archipelago of 17,504 islands. Some of Indonesia's larger islands (Sumatra and Java for example) have large interior mountains.
- Total Area : 1,910,931 km²
- 33 provinces :
 - 502 Regencies/Cities
 - 6,633 Sub-Districts
 - 76,155 Villages
- Population : 237,556,363 (2010). The people are spread out in more than 6000 islands.
- 62 M household`

Network Infrastructure and Access Gap



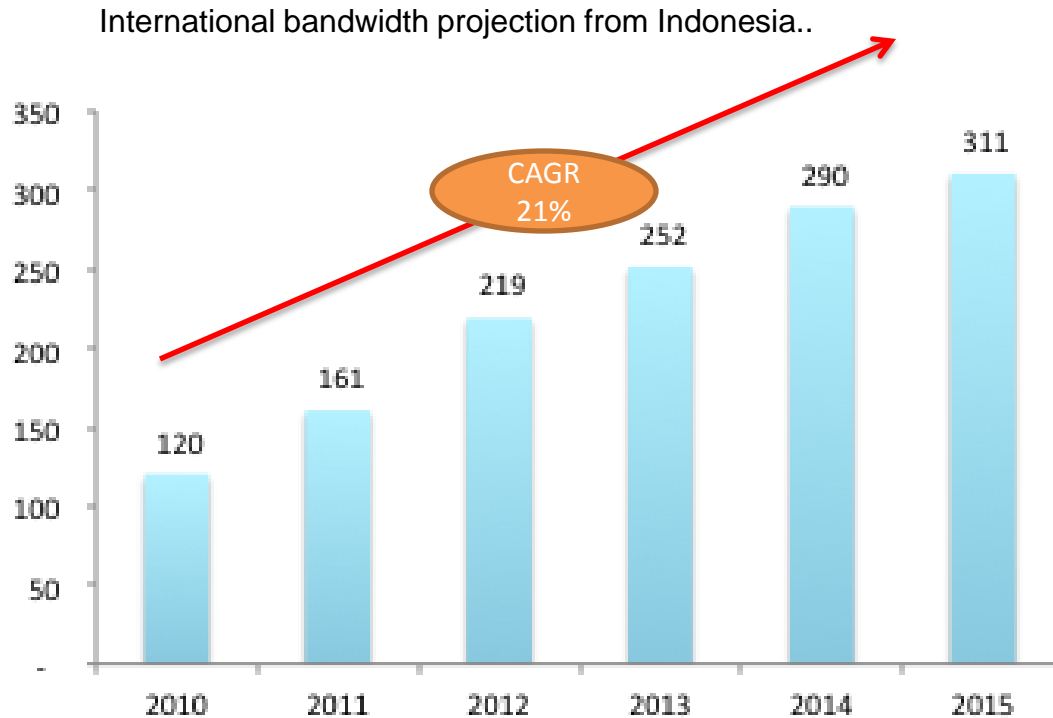
Broadband Services Today :

- LIS Broadband : 5,552,457
 - Wire line : 34%
 - Wireless : 66%
- Coverage : Urban / Sub Urban
- Technology : HSPA, EVDO, WIMAX, DSL, MSAN, GPON, HFC`



Bandwidth needs

Growth of internet users require higher international bandwidth.....



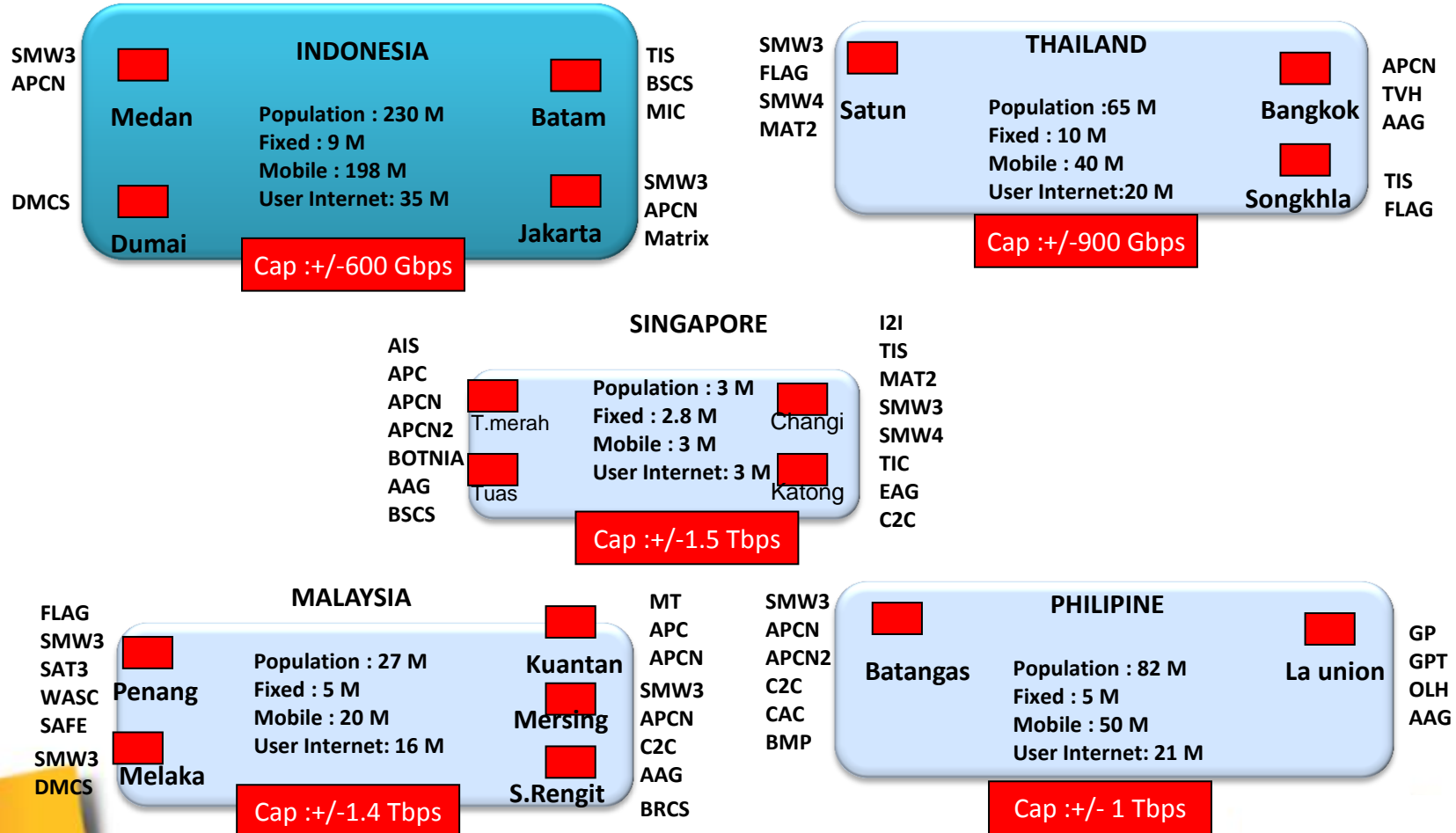
Bandwidth growth already consider cache efficiency up to 35%..

Source Data : AT Kearney & Telin Analysis



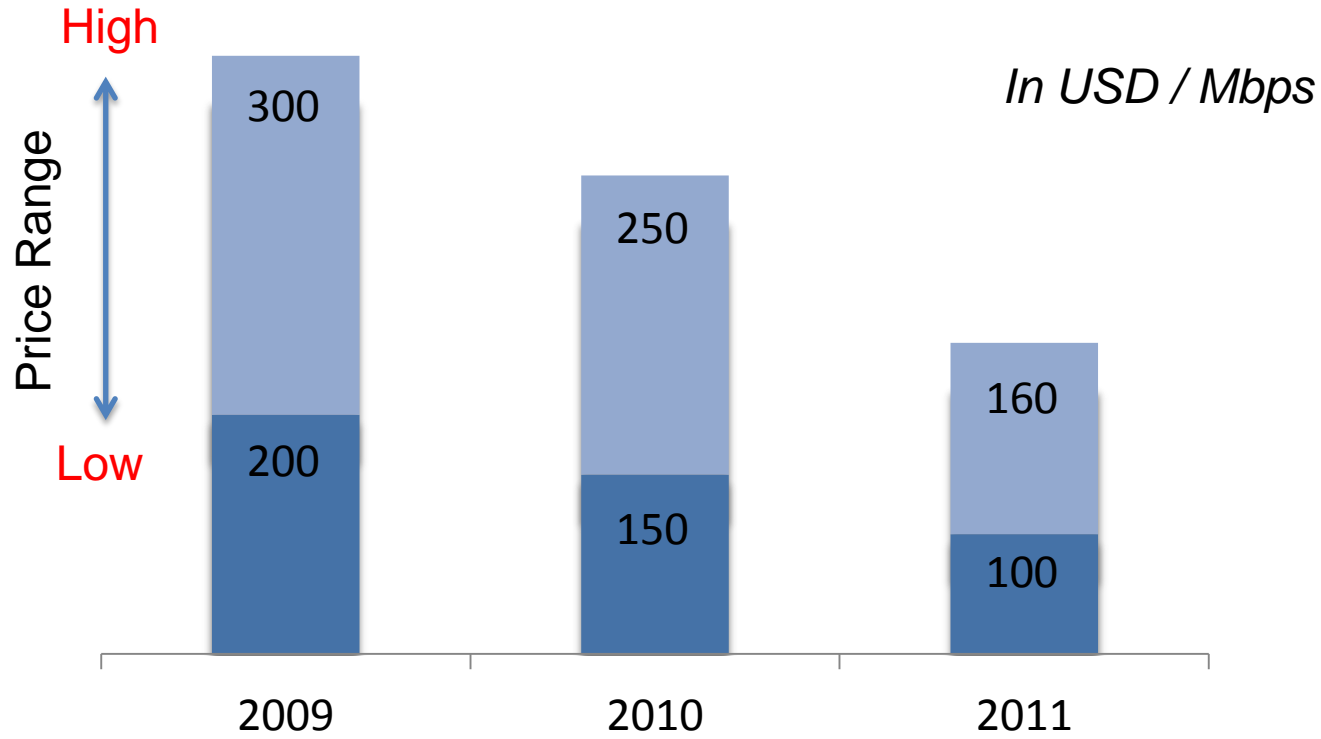
Infrastructure Development

Indonesia is lagging on the development of international cable comparing to the neighboring countries....

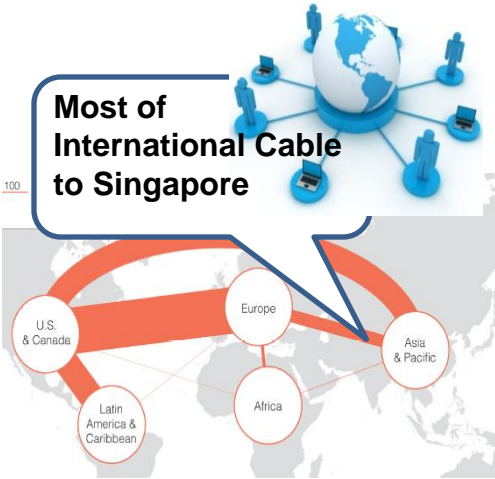
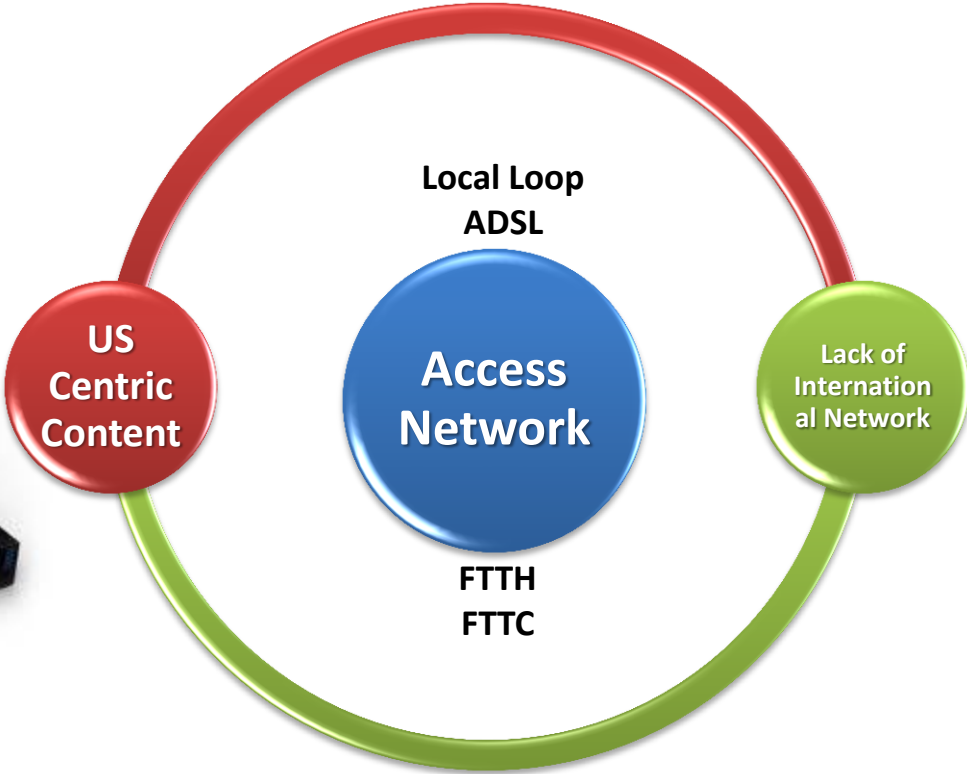


Opportunities and Key Challenges

IP Transit Cost in Jakarta is reducing...



Key Issues on the Internet Services in Indonesia



... it drives higher cost for internet access.....

Opportunities

- GDP of Indonesia of reach \$3000 in 2011
- The growth of broadband in reaches exponential growth
- Internet device become more affordable
- Easily adopted with internet device and services
- Internet penetration in Indonesia is much lower than other countries in Asia with similar economic level



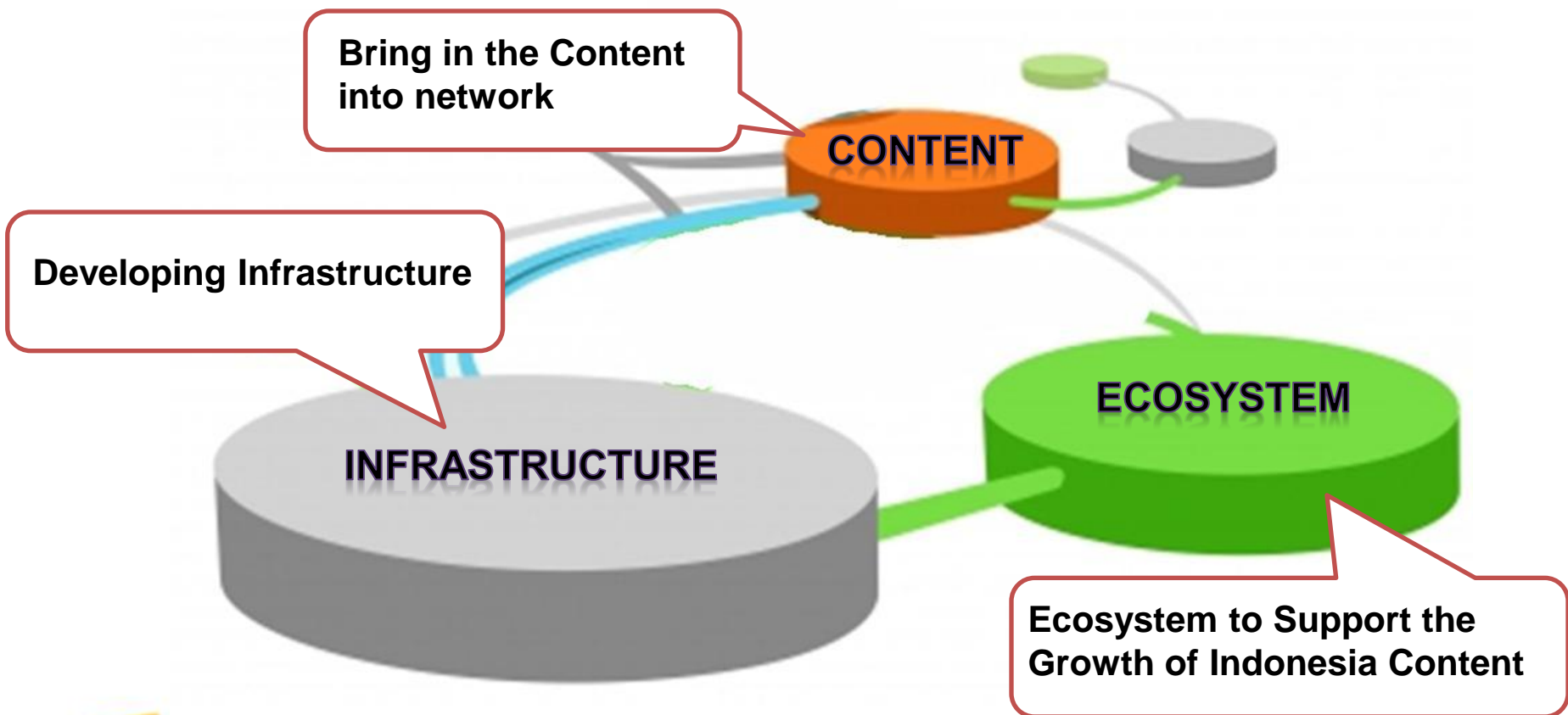
Broadband business in Indonesia

Challenges

- Indonesia is the world's largest archipelago with 17,054 islands. The people are spread out in more than 6000 islands
- Since last mile still use copper, it limits speed and quality
- Some area rely on satellite services, mostly in centre and east Indonesia
- There has been a gradual decline in bandwidth pricing

Strategic Development

Key Strategic Development



Developing Infrastructure

Availability of Network-Centric IT is Driving the Emergence of a Digital Networked Economy

Advancing international infrastructure



- Expanding International Cable Connectivity

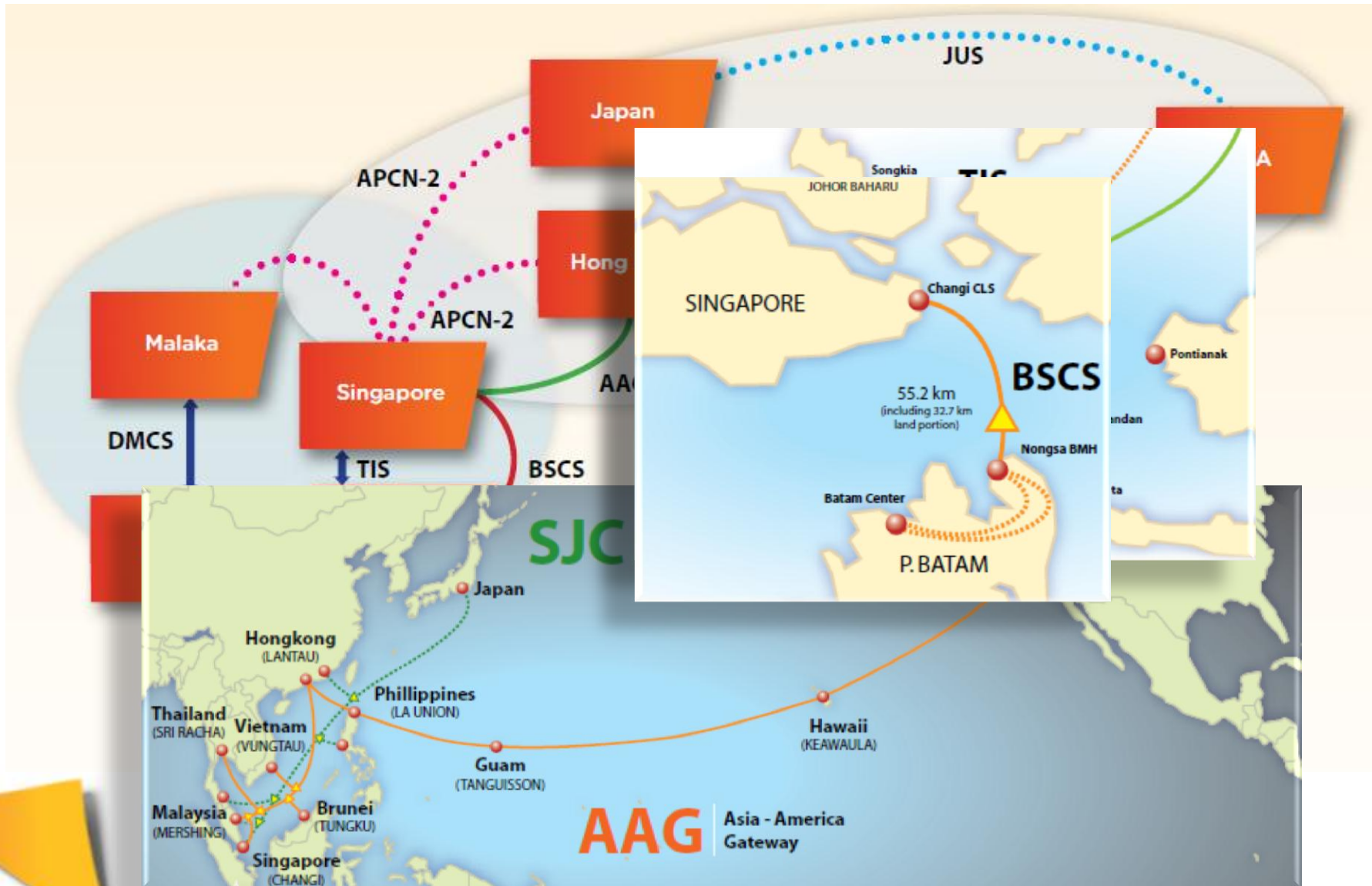
Advancing domestic infrastructure & spreading out its infrastructure covering Indonesia



- Developing Gateway from Eastern Part of Indonesia
- Fiber to the Home to improve last mile



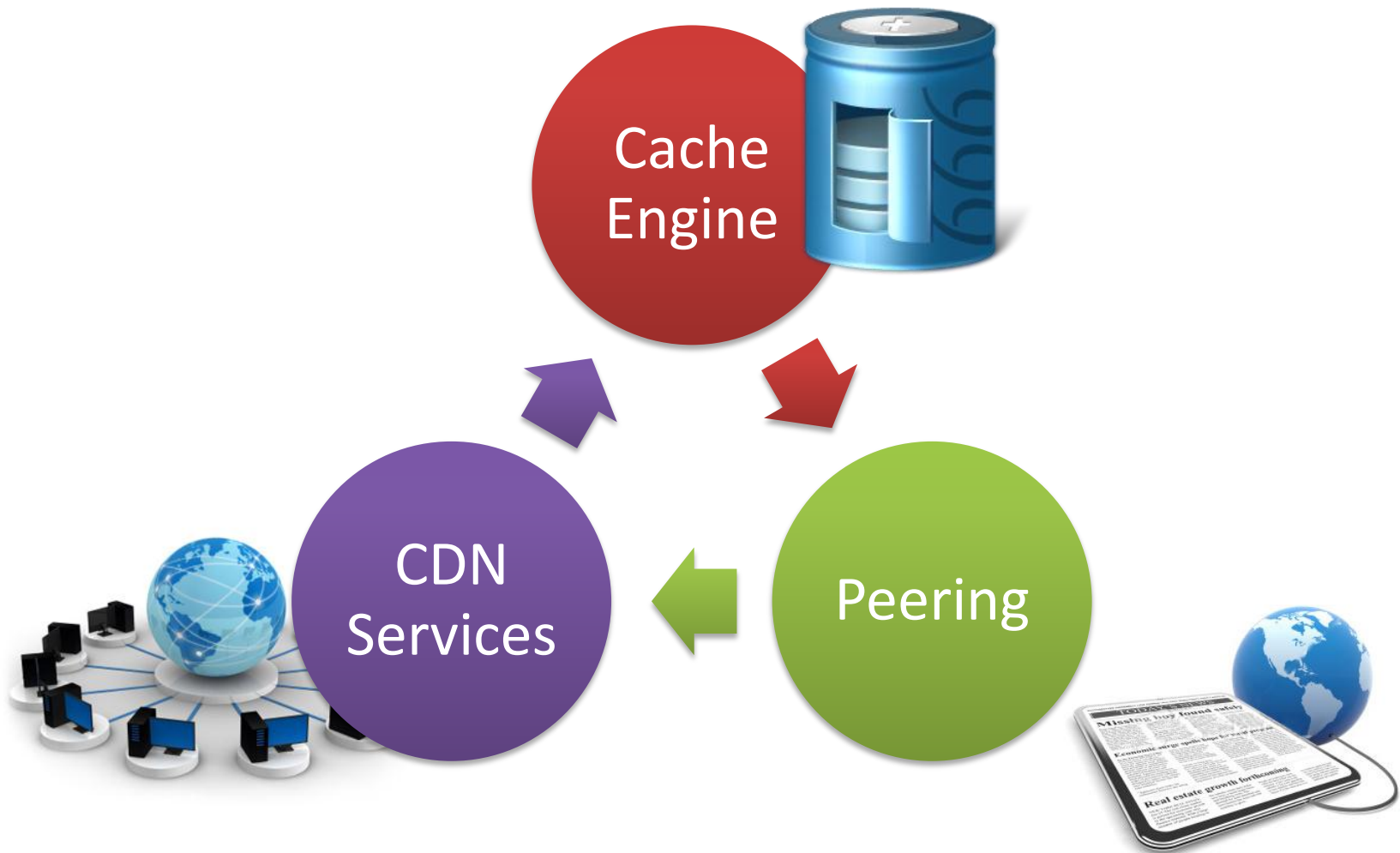
Telin is developing fully protected network to support Internet Growth in Indonesia...



Developing International Infrastructure to support eastern part of Indonesia is another challenge....

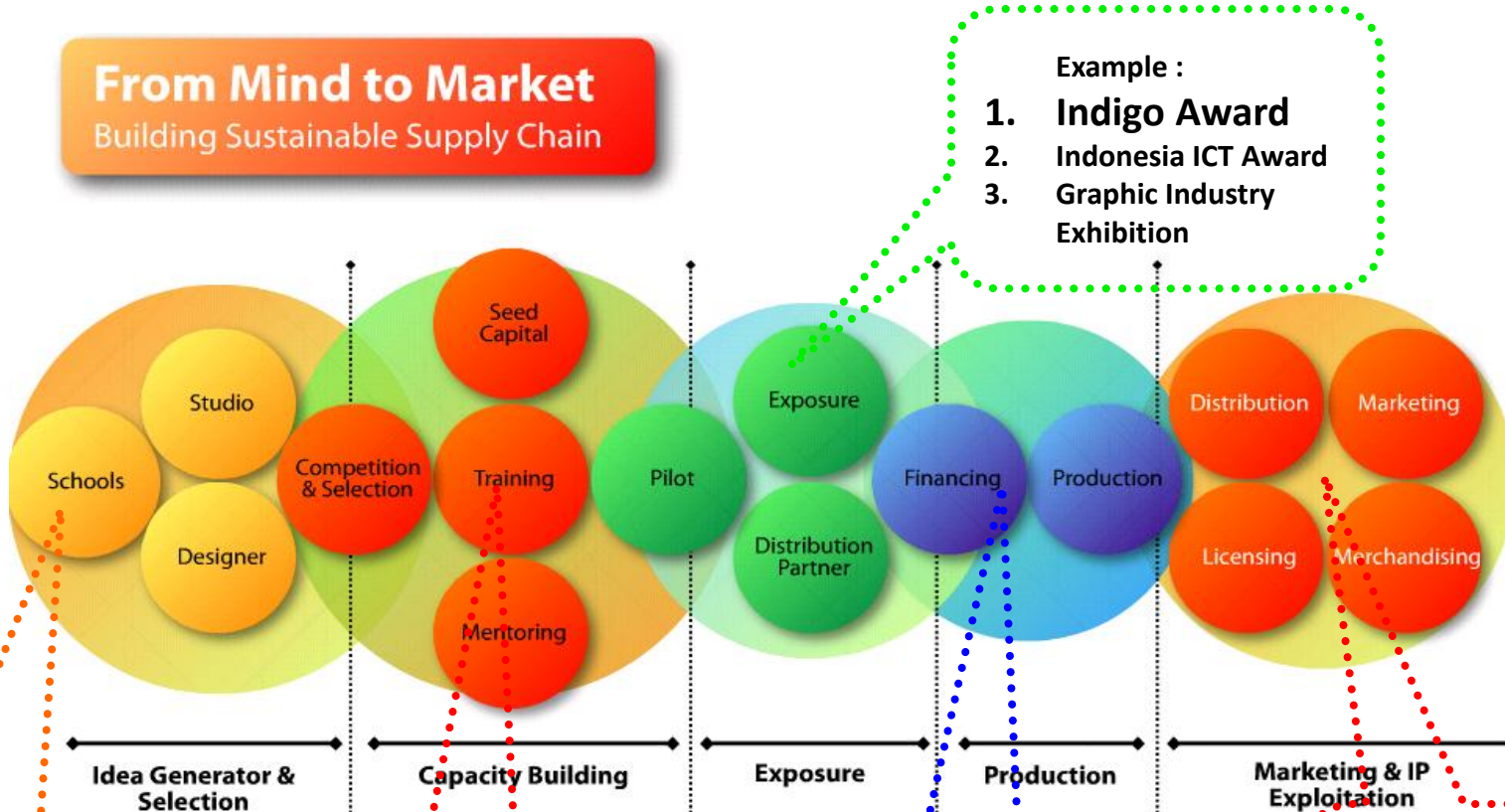


Bring in content Closest to the Network



Ecosystem to Support the growth of Indonesia Content

From Mind to Market Building Sustainable Supply Chain



Example :

1. Indigo Award
2. Indonesia ICT Award
3. Graphic Industry Exhibition

Graphic Design –
60 schools, 12.000 students
Information Technology – 900
schools, 200.000 students

Спасибо

ありがとうございました

Gracias

Japanese

நன்றி

Obrigado

Terima Kasih

감사합니다

Tamil

Brazilian Portuguese



Grazie

Italian

Merci

French

Danke

German

Thank You

شكراً

多謝

Traditional Chinese

චූචතුඹ

English

धन्यवाद

Hindi

