
GSMA
S. ASEAN International Advocacy & Consultancy
Industry Summit, Promoting Digital Indonesia
Socio-economic Benefits of the Digital Transition and Key challenges
Thursday 6 February 2020, Jakarta

Industry Summit

Promoting Digital Indonesia

Opening Keynote

Hon. Johnny Plate

Minister of Communication and Information Indonesia

GSMA

DO WE NEED DIGITAL TRANSITION IN INDONESIA?

Dr. Ismail, M.T. | Director General of Spectrum Management and ICT Devices
Ministry of Communication and Informatics

INDONESIA LANDSCAPE

PEOPLE OF INDONESIA

POPULATION
264.1M

WORKING AGE POPULATION
179.1M

WORKING AGE POPULATION: MILLENNIAL
63.5 M

DELLOITE'S SURVEY OF MILLENNIALS (GLOBAL)

MILLENNIAL TURNOVER

WITHIN 2 YRS
43%

STAY BEYOND 5 YRS
28%

GEN Z TURNOVER

WITHIN 2 YRS
61%

STAY BEYOND 5 YRS
12%

DIGITAL

INTERNET USER
171,17M / **64.8%** PENETRATION
10.12% GROWTH

AT THE OTHER WORDS
35.2%
IS STILL NOT USING INTERNET

SMARTPHONE CONNECTIONS **270M**

UNIQUE MOBILE SUBSCRIBER **194M**
67% PENETRATION

INTERNET ECONOMY MARKET SIZE

(2015)	(2019)	(2025)
8B	**40B**	**133B**

CAGR **49%**

CAGR **32%**

Source: BPS Indonesia, Delloite, APJII, GSMA Intelligence, Google and Temasek

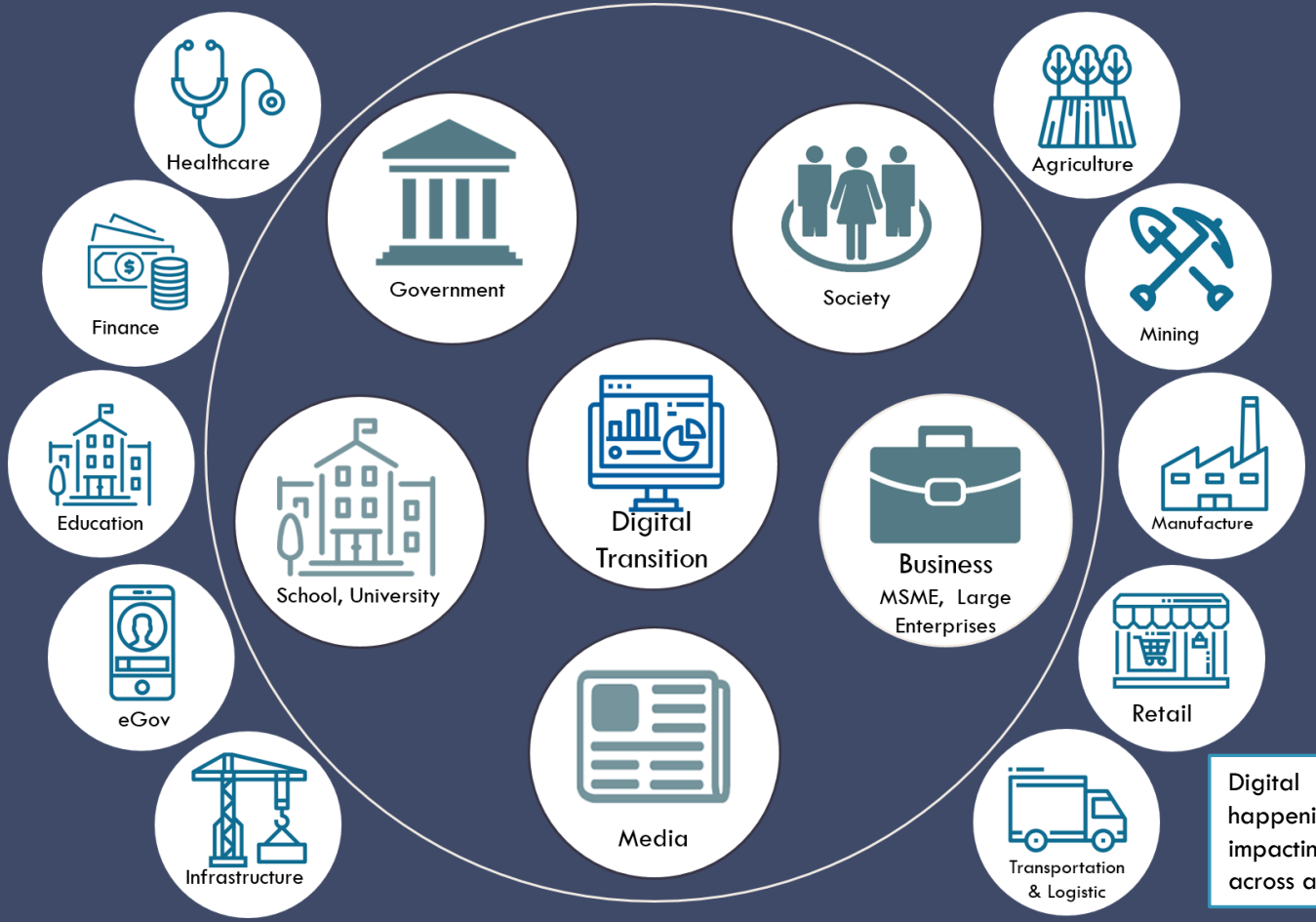
INDONESIA GOVERNMENT PRIORITY

(Based on Inauguration Speech)

To Realize The Vision, Digital Transition is A Must

1. Prioritizing Human Resources Development
2. Continuing Infrastructure Development
3. Regulation Simplification
4. Bureaucratic Efficiency
5. Economic Transformation

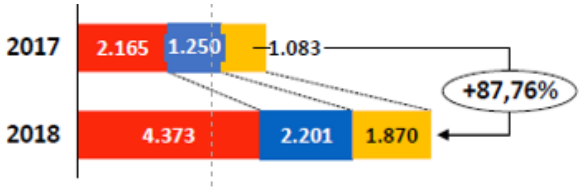
DIGITAL TRANSITION IN INDONESIA



Digital Transition is now happening in Indonesia and impacting to all stakeholders across all sectors

CELLULAR INFRASTRUCTURE IN INDONESIA

Data Traffic (PB)



Data traffic continues to grow significantly each year and the industry average is around 87%

Total Users

322.1 millions[1]

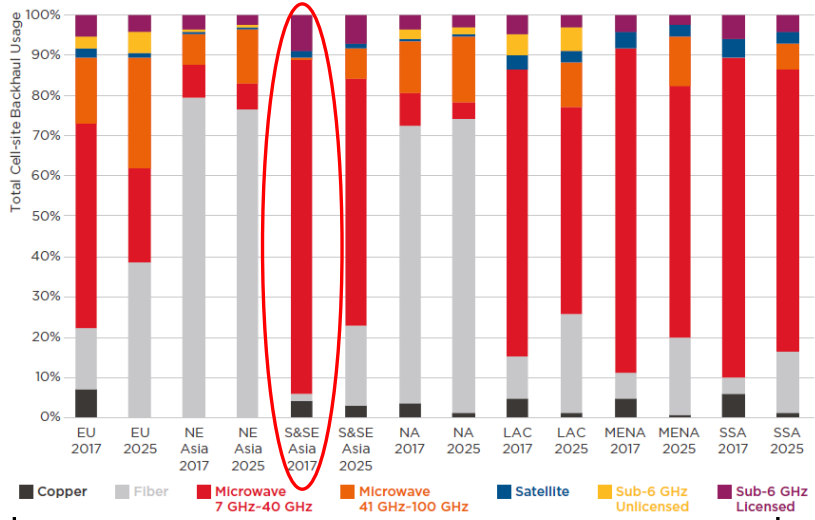
The number of Cellular users is very large and most of the users are data customers

Deployment Technology

2G GSM technology is still being used because the number of cellular subscribers using the phone feature is still large, while 3G technology is currently used to backup 4G data network

Rank	Country	Price per GB
1	India	0.26 USD
17	**Indonesia**	**1.21 USD**
47	Turki	225USD
64	Argentina	3,05 USD
146	Meksiko	7,38 USD
165	China	9,89 USD
182	US	12,37 USD
201	South Korea	15,12 USD

Total (Macrocell & Small Cell) Backhaul by Method
By Region, Historical 2017 and Forecast 2025



In South and Southeast Asia (including Indonesia), 7 GHz-40 GHz microwave links are still the majority of backhaul connections.

As a developing country, internet prices in Indonesia is affordable for the society. Thus the data traffic can continue to grow.

Overall, the demand of data connection is huge and keep growing. While, from the supply sides, there are still a few works need to be done particularly to prevent bottle necking.

Sumber: Data mengacu pada laporan tahunan Telkomsel, XL dan Indosat, Data Internal ATSI, Jun 2019, Cable UK 2019, GSMA Intelligence

DIGITAL ECOSYSTEM IN INDONESIA

From the enterprises side, ICT is still a supporting part rather than the core ones. While from government side, instead of integrated, e-government is still silo. Thus, there are many works need to be done.

Global World Digital Competitiveness Index

Indonesia is ranked

56

out of 63 countries

Knowledge

- The level of digital literacy is relatively low
- Limited human resources who mastering the digital field
- Limited funds and expenses for RnD
- The education curriculum has not yet fully included digital competencies

Rank **56**

Technology

Rank **47**

- Policy and regulations are not yet friendly to the digital ecosystem
- The adoption of digital technology in strategic sectors and regions has not been optimal
- Unfinished ICT infrastructure
- Inadequate access and reliability of ICT infrastructure to support the digital economy

Future Readiness

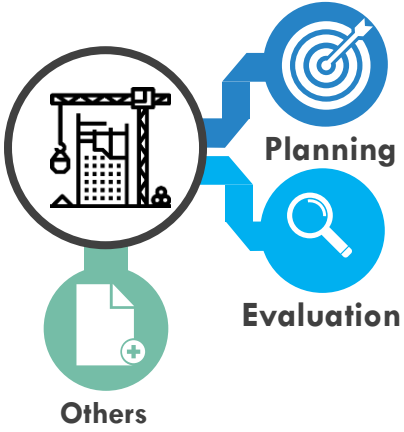
- The integration of e-government implementation in all public institutions is still low
- Digital participation of society is relatively low
- Limited funds and expenses for RnD
- The transformation of broadcasting into IPTV platforms has not been supported by adequate regulations and infrastructure

Rank **58**

Sources: IMD World Digital Competitiveness Ranking 2019

DIGITAL ECOSYSTEM IN INDONESIA – WHERE WE SHOULD GO

- Information Based Activities



Government Decision Making

To realize effective APBN (govt expenditure) and on target with significant impact

To decide where to build infrastructure

Highway Airport Port

Government Program Evaluation

MSME Loan

Social Security

Smart Indonesian Card (KIP)

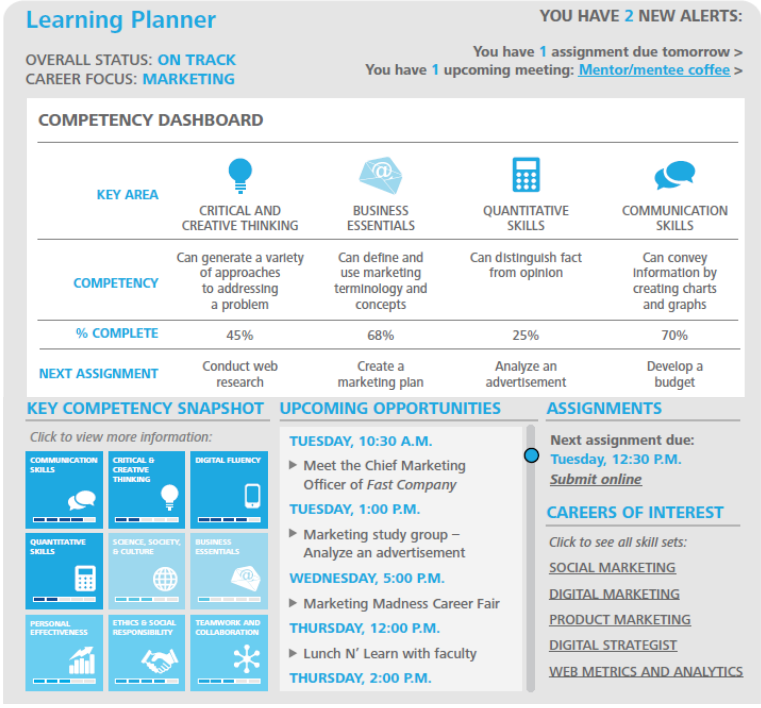
Program Planning

- KIP for College
- Pre Work Card
- Basic Food Card

- Improving quality of education and reduce inequality

Distance Learning and Online Learning with data analytics

- Customized learning
- Spaceless and timeless: accessible anytime, anywhere, anyone
- Freedom to learn anything



Source: Deloitte University press

DIGITAL ECOSYSTEM IN INDONESIA – WHERE WE SHOULD GO

- Focus on mobile broadband

Problem

Albeit in 2019 operators got positive growth, pressure from all sides still occurs. Telco industry requires large investment yet the revenue is low. Digital services, although it has grown, has not been able to replace the decreasing operators revenue.

Issue

Limited availability of spectrums especially if the operator wants to deploy 5G (digital dividend in 700 MHz)

What need to be done

Spectrum deployment in all layers (low, mid, high) if the operator wants to deploy 5G

How To

- Efficient mindset to run telco business and not being opportunistic
- Infrastructure and spectrum sharing may be considered

- Transform conventional business process accross all sectors through ABCDS (AI, Blockchain, Cloud Computing, Data Analytics, Security) prime mover

Issue

Fundamental regulation is essentially needed to create safe space for ecosystem particularly about utilisation of data.

State of Play in Indonesia

IoT - IoT Solutions are growing rapidly to solve probems. A good solution is a solution which could get rid of customer's pain point.

Smart poultry – cage monitoring sensor

Efishery – Smart feeding for fish farming

Xshrimp – environment sensor for shrimp farming

AI - AI is growing in Indonesia. Unicorns have already begun implementing it. While for conventional enteprises, the initial usecase is chatbot and video analytics.

tokopedia

Image search, demand analytics, etc.

nodeflux
Extending Vision Beyond Imagination

Video analytics for Police

Kata.ai

Chatbot for CS

GOVERNMENT'S ACTION

To overcome the obstacles and moving towards the aspirations, there are several actions that government is now doing, among them are:

01. Resolve issue of Personal Data Protection and Broadcasting

02. Govt. set up integrated govt cloud (govt data center)

03. Releasing the spectrum needed at the right time

04. Promoting local apps which customized and suitable to the needs of Indonesia

05. Promoting Digital talent to trigger the ecosystem and as a catalyst for enterprises

06. Completing Infrastructure of the remotes area

Thank You

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